

Gluten-free: aisles of the grocery store are devoted to it; tables in school cafeterias are labeled for it; and celebrities swear by it. Should we all follow a gluten-free diet?

What Is Gluten, and Why Would Someone Go Gluten-Free?

Gluten is a protein in wheat that gives baked goods structure and elasticity. People with celiac disease have an autoimmune response to gluten, meaning their small intestines become inflamed and damaged when even small amounts of gluten come in contact with the lining of the intestines.¹ Symptoms of celiac disease can vary from individual to individual and can be so common, such as headaches, stomach pains or fatigue, that at first, they may be attributed to other causes.²



Some people begin cutting gluten out of their diets if they begin to suspect they have celiac disease, but the only way to know for sure is to get screened for celiac disease antibodies (via a blood test) and to undergo a biopsy of the small intestine (an endoscopic procedure).³ A positive biopsy indicates celiac disease, and a gluten-free diet is the treatment.

Non-Celiac Triggers

Some individuals who have tested negative for celiac disease but feel their digestive, mood, behavior and/or skin problems are alleviated by following a gluten-free diet are considered to have non-celiac wheat (or gluten) sensitivity (NCWS or NCGS). It is unclear if the trigger is gluten, or if it's something in wheat, or if the issue is something else entirely. There is no official test for NCWS, and there is considerable debate over the validity and prevalence of this disease.

Irritable bowel syndrome is another condition that serves as a catch-all for unexplained intestinal distress. Emerging research suggests that it may not be gluten or wheat that triggers irritable bowel syndrome (IBS), but rather the FODMAPs in foods.^{4,5} FODMAP stands for fermentable oligo-, di-, and mono-saccharides and polyols. These are carbohydrates that ferment in the gut (intestines) and cause digestive distress, so following a low-FODMAP diet may be more effective than cutting out gluten.

Unintended Consequences of Gluten-Free Diets

Following a gluten-free diet is a medical necessity, not a choice, for people diagnosed with celiac disease. People who choose to cut gluten from their diets as a weight-loss measure or for other reasons may want to consider the following:

- A gluten-free cookie is still a cookie. Simply forgoing gluten isn't a recipe for weight loss.
- Gluten-free foods have more fat, salt and sugar than their gluten-containing counterparts, according to a British study.⁶

- Going gluten-free does not protect against heart disease, according to Harvard research. In fact, because forgoing gluten means eliminating fiber-rich, heart-healthy whole grains, there could be an adverse effect of heart disease risk.⁷
- People who follow a gluten-free diet are at risk for getting inadequate amounts of fiber, B vitamins such as folate, iron and other trace minerals.⁸

References

- ¹ Celiac Disease Foundation: What Is Celiac Disease? Online at <https://celiac.org/celiac-disease/understanding-celiac-disease-2/what-is-celiac-disease/>
- ² Celiac Disease Foundation: Celiac Disease Symptoms. Online at <https://celiac.org/celiac-disease/understanding-celiac-disease-2/celiacdiseasesymptoms/>
- ³ Celiac Disease Foundation: Diagnosing Celiac Disease. Online at <https://celiac.org/celiac-disease/understanding-celiac-disease-2/diagnosing-celiac-disease/>
- ⁴ Eswaran, S. L., Chey, W. D., Han-Markey, T., Ball, S., & Jackson, K. A randomized controlled trial comparing the FODMAP diet vs. modified NICE guidelines in US adults with IBS-D. *American Journal of Gastroenterology*. 2016;111(12):1824-1832.
- ⁵ Hill P, Muir JG and Gibson PR. Controversies and recent developments of the low-FODMAP diet. *Gastroenterol Hepatol*. 2017;13(1):36-45.
- ⁶ Fry L, Madden AM and Fallaize R. An investigation into the nutritional composition and cost of gluten-free versus regular food products in the UK. *J Human Nutr Diet*. 2018;31(1):108-120.
- ⁷ Lebwohl B, Cao Y, Zong G, et. al. Long term gluten consumption in adults without celiac disease and risk of coronary heart disease: prospective cohort study. *BMJ*. 2017;357:j1892.
- ⁸ Theethira TG and Dennis M. Celiac disease and the gluten-free diet: consequences and recommendations for improvement. *Digestive Diseases*. 2015;33:175-182.