

# GLUTENOUS MAXIMUS

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Gluten seems to be the latest dietary “evil”, after trans fats and sodium. While celiac disease was once thought to only affect European populations, nowadays everybody seems to know somebody who has gone “G-Free”, and many local restaurants are offering gluten-free options for diners.

## **What is gluten, anyway?**

Gluten is a type of protein found in some grains, including wheat, rye and barley. In baking, gluten is what gives dough its elasticity and stretchiness, and helps give bread and other baked goods their distinctive chewy texture.

## **What is celiac disease?**

Celiac disease is an autoimmune disorder affecting the small intestine. It is estimated to affect about 1 in 133 people in North America. When a person with celiac disease eats gluten, it triggers an inflammatory response that causes the microscopic, finger-like extensions (villi) on the membrane of the small intestine to flatten. This decreases the surface area available to absorb nutrients, leading to symptoms like abdominal pain, gas, bloating, diarrhoea and constipation. It can also lead to anaemia and other nutrient deficiencies. Because celiac disease is an autoimmune disorder, it has also been linked to dermatitis herpetiformis (a type of rash), type 1 diabetes, thyroid disorders and arthritis.

## **Wait a minute... if less than one percent of people have celiac disease, why am I seeing gluten-free products everywhere?**

Although only a small percentage of the population has celiac disease, there are some who experience symptoms when they eat gluten, but when tested for celiac, their intestines appear normal. These people with non-celiac gluten intolerance make up about 5% of the population.

Still, that doesn't explain the rapid growth of the multi-billion dollar gluten-free industry. Many people who choose a gluten-free diet actually don't experience any symptoms, but are

instead hoping that cutting it out from their diet will help them lose weight, feel more energized, or achieve better health.

It's hard not to ignore all the publicity surrounding going gluten-free – Tennis player Novak Djokovic saw himself climb the ranks after he removed gluten from his diet. Elisabeth Hasselbeck of *The View*, who has celiac disease, states in her book *The G-Free Diet* that “even people with no health issues have a great deal to gain by giving up gluten.”

## **What's so “bad” about gluten anyway?**

There are some who believe that gluten is difficult for everyone to digest and therefore causes inflammation in everyone, but only people with more sensitive immune systems display the symptoms associated with gluten intolerance and celiac disease. Others may only experience vague symptoms, like weight gain, sinus issues, skin breakouts or fatigue.

It is true that gluten is difficult to digest – it contains certain amino acids that are harder for our enzymes to break down – but that does not make it harmful. Fibre is something our bodies cannot digest, yet that is the reason why we are encouraged to eat more of it – it keeps the digestive system working and help keep us regular.

On the other hand, there is less evidence that gluten causes inflammation in everyone, or leads to improved energy, clearer skin, or weight loss – nearly all of the studies on gluten and the gluten-free diet have been done with subjects with an existing condition, like celiac disease, Crohn's disease, colitis, inflammatory bowel syndrome (IBS), autism, etc. The results from these studies cannot be extrapolated to the general population – it's like saying,

“Some people have nut allergies, therefore nuts are bad for everyone”, which we know is not the case.

Of course, there are people who report that they do feel more energized and lose weight on a gluten-free diet. Breads, pastas and cereals are staples in our diet, and gluten finds its way in many processed and packaged products. For many, cutting out gluten means cutting out a lot of junk food, cooking more from scratch, choosing more fruits and vegetables and eating less overall. In other words, they feel better not because they have removed the gluten from their diet, but because they are generally eating healthier. There is also the potential for some placebo effect – these people feel better just because they are making a change, regardless of whether it's because of the actual diet.

There is also the small chance that they may have undiagnosed celiac disease. Despite the increasing awareness, celiac disease is still under-diagnosed – a 2007 survey among members of the Canadian Celiac Association found that it took an average of almost 12 years to be properly diagnosed. One of the main reasons is that there is no “classic” presentation of the disease – while some people have obvious GI symptoms, others may have general symptoms like dermatitis herpetiformis, migraines or fatigue. Still others experience no symptoms at all.

### **But it doesn't hurt to just cut out gluten, right?**

Going gluten-free is becoming a lot easier, thanks to the many gluten-free products on the market and delicious gluten-free items available at our favourite restaurants! Vegetables, fruits, dairy, meats, legumes and nuts are all allowed on the diet, while gluten-free grains and pseudo-grains like quinoa, buckwheat and amaranth are becoming more popular and accessible. While gluten-free breads and cereals do not fall under the same jurisdiction as regular breads and cereals and are often not fortified with thiamine, niacin, riboflavin, folic acid and iron, it is possible to get adequate amounts of these nutrients from other foods in the diet.

However, simply replacing breads, pastas and pizzas with their gluten-free counterparts can do more harm than good. Some people see the “gluten-free” label as a license to overindulge on these products when they don't really provide any special benefit. In fact, many gluten-free products are higher in calories than the gluten-containing version. Manufacturers often add different starches, thickeners and fat to compensate for the change in texture in gluten-free baked goods. Many products are often lower in fibre, as there are few whole grain gluten-free products available.

A gluten-free diet can also be harmful to your wallet – a 2008 study from Dalhousie University in

Halifax found that gluten-free foods cost almost 2.5 times that of gluten-containing items.

Most importantly, if you suspect that you might have celiac disease, do not start on a gluten-free diet until you have a diagnosis; following a gluten-free diet renders the screening and diagnostic tests useless. Instead, go to your family doctor and ask to have a celiac disease screen – a simple blood test. If the results are positive, then your doctor may ask you to go to a gastroenterologist for an intestinal biopsy to confirm the diagnosis. Having a confirmed diagnosis means you no longer have to run around trying to figure out what the problem is, and people with celiac disease can also get a tax break on the gluten-free foods they purchase.

If the results are negative, then it doesn't hurt to give the gluten-free diet a try for a few weeks in case you might have gluten intolerance. Unfortunately, there is no objective test to diagnose a gluten sensitivity. It is up to you to subjectively decide whether you are feeling better because you have eliminated gluten, or because you are eating healthier overall.

Whether you choose to or have to go gluten-free, there are lots of resources available to help you figure out which foods contain gluten, and to make sure you have all your nutritional needs covered. The Canadian Celiac Association ([www.celiac.ca](http://www.celiac.ca)) has a lot of great resources online available to browse, while *The Gluten-Free Diet* by Regina-based dietician Shelley Case is the book on gluten-free foods and nutrition. If you are looking for a more personal touch, make an appointment with a registered dietician who has experience working with celiac disease and gluten intolerance.

Going on a gluten-free diet can be difficult and time-consuming, and may provide minimal benefit if you don't have celiac disease or gluten intolerance. However, it doesn't hurt to try gluten-free foods – I will often try gluten-free items just because I am curious about what they taste like! Many people with celiac disease have said that following a gluten-free diet has helped them expand their cooking and eating horizons, opening their world to lots of different foods, flours and flavours.

