

# Q&A: Is gluten-free the way to be? A dive into the science

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In the past decade, products bearing "gluten-free" labels have taken grocery store shelves by storm. But for generations of people who learned about food groups from visuals of pyramids with "breads and cereals" as their base, these products may prompt the question: Are there benefits to eating a gluten-free diet?

Individuals with conditions such as [celiac disease](#) would answer this question with a resounding "yes." According to the Celiac Disease Foundation, the autoimmune condition—which causes damage to the small intestine when [gluten](#) is ingested—affects approximately 1 in 100 people. Today (Sept. 13) marks Celiac Awareness Day, a date the National Celiac Association marks to honor the birth of Samuel Gee, the British physician who published the first paper explaining celiac disease in 1888.

But individuals with celiac disease represent just a fraction of the estimated 3.1 million Americans known to follow gluten-free diets. So as the [global market](#) for these products continues to grow—to an expected \$43.65 billion value by 2027—it begs the question: Should even more people embrace the gluten-free lifestyle?

To better understand the possible risks and benefits of consuming gluten, The Daily turned to Jeffrey Katz, professor in the Department of Medicine and a gastroenterologist at University Hospitals. Katz also supports the work of Case Western Reserve University School of Medicine's Digestive Health Research Institute, home to interdisciplinary research efforts that seek to ensure better futures for patients suffering from digestive diseases.

## 1. For those who aren't familiar, what is gluten?

Katz: Gluten is a protein found in wheat and other grains, including rye and barley. It's one of the proteins that gives bread its pleasant chewiness.

## 2. How would you explain celiac disease?

Celiac disease is a complex disease that results from an abnormal immune response to gluten. It damages the intestinal lining and can cause a wide variety of gastrointestinal (GI) and non-GI symptoms, with the most common GI symptoms being abdominal bloating, gas, cramping, [weight loss](#), and diarrhea, and the most common non-GI symptoms being [iron deficiency anemia](#) with low blood counts, joint discomfort, abnormal liver blood tests, and a specific rash with small blisters.

The diagnosis of celiac disease can be made through blood tests and is confirmed with a biopsy of the small intestine. Although it is not a curable illness, its treatment is straightforward: Avoid all gluten in the diet and symptoms will resolve and intestinal damage will heal.

## 3. Who is most likely to experience celiac disease?

Celiac disease is genetically determined, so not everyone can get it, yet it affects approximately 1% of the U.S. population. It is seen more in people whose ancestors came from northern Europe, but can be seen in just about anyone. It is more common in people with Type 1 diabetes and in family members of people with celiac disease.

## 4. How does celiac disease compare to gluten sensitivity?

Celiac disease is an illness that can be definitively diagnosed and is associated with damage to the intestinal tract that improves and heals with avoidance of gluten. Gluten sensitivity is a collection of symptoms bothering people that seem to improve by avoiding gluten in the diet; however, when investigated, these patients show no specific lab abnormality or evidence of intestinal damage.

By definition, patients with celiac disease are sensitive to gluten, however, the overwhelming majority of patients with [gluten sensitivity](#) do not have celiac disease. As a syndrome, our understanding of gluten sensitivity is continuing to evolve. It may relate to reactions to other components of grains; it does not cause any distinct pathologic or lab abnormality.

## **5. Are there other factors that influence gut health more so than gluten intake for the average person?**

"Gut health" is an incredibly complex topic that we do not yet fully understand. In general, too much of any one thing can be detrimental to gut health, and sensibly balancing what you put in your body helps maintain optimal health.

Most experts agree that a diet that is lower in processed foods, high in [fresh vegetables](#), whole grains, fruits, and lean proteins, and lower in animal fats helps promote a healthy balance of gut bacteria that have beneficial health effects.

In addition, taking too many non-steroidal anti-inflammatory medications (like ibuprofen or aspirin) can injure the intestinal lining and cause illness or ulceration. Likewise, heavy drinking of alcohol damages the intestine and eventually can also damage the liver.

## **6. For individuals who do not have celiac disease or gluten sensitivity, are there any health benefits associated with a gluten-free diet? What about any benefits of consuming gluten?**

The simple answer is NO. However, there are a lot of people who have neither celiac disease or gluten sensitivity, yet feel better when they avoid gluten. These people certainly can remain healthy on a gluten-restricted diet, but they do not typically need to as strictly avoid all gluten as patients with celiac disease.

There are no health benefits to gluten. Patients with celiac disease who strictly avoid all gluten are healthy and live a normal life as long as they avoid all gluten in the diet.

## **7. What's your take on the sharp rise of gluten-free products in the marketplace? Is gluten intolerance really that more common these days, or is it a trend?**

The rise of gluten free-products on the market has been a great advance for patients with celiac disease, making living their lives that much easier. As society and culture change, so does our health in ways that we do not fully understand. Although the rise in gluten sensitivity may in part be due to an increased awareness of celiac disease and gluten sensitivity, it may, at least in some part, reflect a change in how our bodies deal with changes in food processing, food additives, chemicals, microparticles, etc. We just don't know.

So if, after some [careful attention](#), a person is convinced they feel worse when they eat gluten, I would trust their assessment. Because there is no health consequence of eating gluten-free food, it is fine for them to do

so, and the availability of gluten-free products makes it that much easier (though a bit more expensive).

Provided by Case Western Reserve University

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