

# Celiac Disease and Type 1

---

## The Link Between Celiac Disease and Type 1 Diabetes

People with Type 1 diabetes are 7 times more likely to develop celiac disease compared to the general public. It is recommended that anyone diagnosed with Type 1 Diabetes undergo screening for celiac disease. A blood test is the first step in the screening process but a biopsy of the small intestine is currently the gold standard to diagnose the condition.

## What Is Celiac Disease

Celiac disease is an autoimmune condition that is characterized by inflammation of the small intestine when gluten is present in the diet. Gluten is a protein found in wheat, rye, barley, and often oats due to contamination. When a person with celiac disease consumes foods containing gluten, their immune system responds by producing antibodies that damage the lining of the small intestine which then interfere with the absorption of certain nutrients. Some of the symptoms of celiac disease include diarrhea, weight loss, vomiting, constipation, abdominal pain, malnutrition, and bloating. However more than half of people of people checked have no symptoms at the time of diagnosis.

## Issues of Treating Celiac Disease As A Type 1 Diabetic

Currently the only treatment for celiac disease is a gluten-free diet. This requires removal of most grain products from the diet often leading to a lower total carbohydrate intake compared to that of the general public. This may become a problem when a person with diabetes is trying to balance their insulin to carbohydrate intake. Gluten free diets rely on grains such as rice, quinoa, amaranth, millet, or buckwheat to obtain an adequate amount of carbohydrates as well as other nutrients rich in grain products, such as B vitamins and fiber. Naturally gluten-free foods include fruit, legumes, and (most) dairy products. Be wary of processed dairy products such as sweetened yogurts and ice cream. Always check the labels on them to be safe!

## Other Considerations

The carbohydrate content of gluten-free foods may be different than that of gluten-containing foods. Gluten-free foods are often higher in carbohydrates so don't assume that one slice of gluten-free bread is equivalent to the standard 15 grams of carbohydrate. Gluten-free foods often have a higher glycemic index compared to gluten-containing foods. Your dietitian can help you create a diet plan that works for both your diabetes and celiac disease.