

If you are reading this book, it is likely that you or a loved one has been diagnosed with celiac disease, dermatitis herpetiformis, or non-celiac gluten sensitivity (NCGS). Learning what foods to avoid and what to eat is a key part of your treatment.

This book focuses on the gluten-free diet used to manage celiac disease. However, the nutrition advice can also help people with dermatitis herpetiformis or NCGS. Before we discuss the details of the gluten-free diet, let's start by learning the basics about gluten and each of these conditions.

**Note:** If you have **not** already been diagnosed with celiac disease, dermatitis herpetiformis, or NCGS, see your doctor before you start a gluten-free diet. The diagnosis of celiac disease is based on blood tests and a biopsy of the small intestine. If you start a gluten-free diet before testing, the test results may not lead to an accurate diagnosis.

## What Is Gluten?

**Gluten** is the common name for the proteins (**prolamins** and **glutelins**) in wheat, barley, and rye that must not be eaten on a gluten-free diet. Strictly speaking, however, gluten is a protein found only in wheat.

**Note:** The word “gluten” is sometimes used as a general term to describe prolamins found in many grains, including corn. This is why you may see or hear the term “corn gluten.” Corn gluten is fine for you to eat.

## What Are Prolamins?

Wheat prolamins are called **gliadin**. Barley prolamins are **hordein**. Rye prolamins are **secalin**. These three types of prolamins are harmful to people with celiac disease.

Prolamins from other grains do not harm people with celiac disease. For example, orzenin (the prolamin in rice) and zein (the prolamin in corn) are safe for people with celiac disease to eat.

## What Are Glutelins?

**Glutelins** are another type of protein found in grains. The glutelins of wheat, barley, and rye are also harmful to people with celiac disease.

## What Is Celiac Disease?

**Celiac disease** is a type of autoimmune disease that is genetically inherited. An **autoimmune disease** is a condition where the immune system damages the body in response to something it views as harmful.

With celiac disease, your immune system views gluten as harmful. When you eat gluten, your immune system causes inflammation and damages your small intestine.

Because of this damage, the small intestine cannot fully absorb nutrients, including carbohydrates, proteins, fats, vitamins, and minerals. The side effects can include:

- Weight loss
- Tiredness
- Vitamin and mineral deficiencies (for example, deficiencies of iron, folate, calcium, or fat-soluble vitamins)
- Iron-deficiency anemia
- Bone disease
- Gastrointestinal symptoms, including diarrhea, constipation, bloating, and excess gas

**Note:** Not everyone with celiac disease will experience gastrointestinal symptoms.

## What Is Dermatitis Herpetiformis?

**Dermatitis herpetiformis** is a type of celiac disease that affects the skin. When people with dermatitis herpetiformis eat gluten, they get a