

## Celiac Disease Characteristics

Celiac disease is characterized by symptoms of dermatitis herpetiformis, steatorrhea, decreased bone density, failure to thrive, anemia and weight loss. There is a strong association of this disease with HLA-DQ8 and HLA-DQ2, and it has a higher prevalence in patients of northern European descent.



PLAY PICMONIC

### Epidemiology

#### European Descent

[European](#)

This disease is seen more commonly in patients of northern European descent.

#### HLA-DQ2

[HLA-DQ \(2\) Tutu](#)

Celiac Disease is strongly associated with specific HLA class II genes, one of which is known as HLA-DQ2, located on chromosome 6p21.

#### HLA-DQ8

[HLA-DQ \(8\) Skate](#)

Celiac disease is also strongly associated with HLA-DQ8, a specific HLA class II, located on chromosome 6p21.

### Pathophysiology

#### Autoimmune-mediated Intolerance of Gliadin

[Auto-in-moon drive-thru with Intolerance of Gluten-dinner](#)

This disorder is caused by an autoimmune-mediated intolerance to gliadin, which are a component of gluten.

### Symptoms

#### Dermatitis Herpetiformis

[Herb-head with rash](#)

Dermatitis herpetiformis is an itchy cutaneous condition, which is linked to celiac disease. This symptom is characterised by blisters filled with a watery fluid, and despite its name, is not associated with herpes.

#### Weight Loss

[Skinny with Baggy-pants](#)

Due to the autoimmune damage to intestinal tissue, patients often have malabsorption of nutrients, leading to weight loss.

## **Failure to Thrive**

### **Very Skinny Baby**

Children with undiagnosed celiac disease may have malabsorption which can present as failure to thrive. Patients may appear underweight and may be below growth curves appropriate for their age.

## **Decreased Bone Density**

### **Down-arrow Bone**

The malabsorption caused by autoimmune intestinal disease in Celiac's also causes decreased mineral absorption. Patients who have not made lifestyle modifications for this disorder can present with decreased bone density.

## **Steatorrhea**

### **Steak-diarrhea**

In celiac disease, patients can have malabsorption and improper absorption of fats and nutrients. This often presents as steatorrhea, or excess, foul-smelling fat in the feces.

## **Anemia**

### **Anemone**

The malabsorption associated with celiac disease can also manifest as anemia in patients. This is often one of the first lab tests seen in patients, which may instigate a further workup, leading to a diagnosis of celiac disease in patients.