

Level 1

## **Blood Tests in Celiac Disease**

### **KEY POINTS:**

- Blood tests can be useful to diagnose celiac disease (CD). They can give doctors an idea of how a patient with celiac disease is healing after diagnosis.

### **What blood tests are used to diagnose CD?**

There are two modern blood tests for CD:

- 1) Tissue transglutaminase IgA antibody level (commonly known as "tTG")
- 2) Deamidated Gliadin Peptide IgA/IgG antibody level (commonly known as "DGP")

The Endomysial Antibody test (EMA) is an earlier version of the tTG test.

The anti-gliadin antibodies are older, less accurate tests. They are rarely useful at all these days and in general should not be ordered. <sup>1, 2</sup>

### **Is there a blood test to detect CD in a person on a gluten-free diet (GFD)?**

No. There is no simple and accurate blood test for this situation. <sup>3</sup>

### **Can blood tests indicate if someone with CD is following a GFD?**

A drop in the tTG or DGP tests after 3-6 months on a GFD is a good way to monitor if someone is carefully following the GFD. It should go along with an improvement in symptoms. But, still today, no blood test is as good as being evaluated by an experienced dietitian. <sup>3, 4</sup>

### **Are there any other tests that may be useful to monitor a person with CD?**

Often people with CD have low vitamin and mineral levels at diagnosis. Doctors and dietitians will monitor and treat these levels to be sure they return to normal. Iron and Vitamin D are commonly low in people with CD. <sup>5, 6</sup>

Sometimes, people with CD are tested for diseases that are more common among them. For example: thyroid<sup>7</sup> and liver tests.<sup>8</sup>

## TAKE HOME POINTS:

1. tTG and DGP antibody tests are the main blood tests to diagnose and monitor CD.
2. Anti-gliadin antibodies are no longer used to diagnose CD.
3. Several blood tests are used to screen and follow people with CD for other diseases and vitamin and mineral levels.
4. There is no good blood test to confirm adherence to the GFD.

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