VibrantWellness

Celiac Panels

Key Clinical Messages

What are the Celiac Panels?

The Celiac Panels assess for celiac disease, an autoimmune disorder characterized by a reaction to gluten, a protein found in wheat, barley, and rye.

We offer three different panels to assess for celiac and nutrition markers affected by celiac disease:

- Celiac Genetics Panel
- Celiac & Gluten Sensitivity
- Celiac & Nutrition

The Celiac Panels are serum blood tests, collected via venipuncture.

These panels differ from the Wheat Zoomer, which tests for celiac disease, non-celiac gluten sensitivity, non-gluten wheat sensitivity, wheat lectin sensitivity, and intestinal permeability.

Why Order the Celiac Panels?

All panels provide insights into the genetic risk of developing celiac disease by detecting the genetic **markers HLA-DQ2 and HLA-DQ8.** Approximately 90-95% of individuals with celiac disease have the HLA-DQ2 genetic marker. A smaller but still significant percentage (5-10%) possess the HLA-DQ8 gene.

Having the HLA-DQ2 or HLA-DQ8 genes increase the susceptibility to developing celiac disease if exposed to gluten.

The Celiac and Nutrition and Celiac and Gluten Sensitivity Panels also assess for celiac disease and gluten sensitivity. The panels measure antibodies to tissue transglutaminase (anti-tTg IgA and IgG) and antibodies to deaminated gliadin peptide (anti-DGP IgA and IgG). When a patient with celiac disease consumes gluten, their body produces antibodies that can mistakenly attack tissue transglutaminase in the intestines, leading to gastrointestinal damage.

These celiac panels are particularly beneficial for individuals who have been diagnosed with or suspect gluten sensitivity, autoimmune diseases, malnutrition, or malabsorption. It's also valuable to test those without obvious symptoms, as some people have asymptomatic celiac disease, known as "silent celiac disease."

Left undiagnosed, celiac disease can lead to severe complications such as profound malabsorption, steatorrhea, wasting, and chronic inflammation.

There are known associations between celiac disease and other conditions, including:

- Type 1 Diabetes mellitus
- Inflammatory bowel disease
- Thyroid and other autoimmune diseases[1]

These tests are powerful tools to measure a patient's risk of developing celiac disease as well as detect those with active celiac disease.

References

1. Ch'ng CL, Jones MK, Kingham JG. Celiac disease and autoimmune thyroid disease. Clin Med Res. 2007;5(3):184-192. doi:10.3121/cmr.2007.738

What Markers Are Included on the Celiac Panels?

- **The Celiac Genetics Panel** provides information solely about genetic markers.
- **The Celiac and Gluten Sensitivity Panel** provides information about celiac genes, celiac disease, and non-celiac gluten sensitivity.
- **The Celiac and Nutrition Panel** is the most comprehensive panel, providing information about celiac genetics, celiac disease, non-celiac gluten sensitivity, and multiple nutrition markers.

Celiac Genetics	Celiac & Gluten Sensitivity	Celiac & Nutrition
Celiac Genetics • HLA-DQ2 • HLA-DQ8	**Celiac Genetics** • HLA-DQ2 • HLA-DQ8 **Celiac Serology** • Anti-tTG IgA • Anti-tTG IgG • Anti-DGP IgA • Anti-DGP IgG • Total IgA	**Celiac Genetics** • HLA-DQ2 • HLA-DQ8 **Celiac Serology** • Anti-tTG IgA • Anti-tTG IgG • Anti-DGP IgA • Anti-DGP IgG • Total IgA **Anemia** • Transferrin • Ferritin • TIBC (including UIBC & Iron) **Nutrition** • Folate • Vitamin D, 25-OH • Vitamin B12

***Please note that these tests are different from the Wheat Zoomer.*

Which Tests Pair Well with the Celiac Panels?

- **Gut Zoomer:** To assess for any digestive dysfunction that may play a role in micronutrient deficiencies or insufficiencies.
- **Micronutrient or NutriPro:** To assess for micronutrient deficiencies or insufficiencies that can accompany celiac disease.

Test Prep for Microtube Blood Collection

- **Collection:** Two (2) serum tubes + one (1) EDTA tube.
- **Fasting:** Not required.
- **Diet Restrictions:** None.
- **Medication Restrictions:** None. However, steroids, immunosuppressive medications, biologic agents, or other immunomodulating medications may falsely lower or falsely increase total and specific immunoglobulin results.

Which Patients Benefit from This Test?

Conditions and symptoms which may benefit from Celiac Panel testing include:

- **Family history:** Anyone with a close family history of celiac disease
- **Autoimmunity:** Type 1 diabetes, autoimmune thyroid diseases, autoimmune adrenal failure, other autoimmune conditions
- **Musculoskeletal:** Bone loss or osteoporosis, joint pain, or bone pain, arthritis
- **Dermatological:** Dermatitis herpetiformis, dry skin, mouth ulcers
- **Gastrointestinal:** Chronic or recurrent diarrhea, abdominal pain, abdominal bloating, nausea, vomiting, constipation, steatorrhea, inflammatory bowel disease
- **Nutritional:** Iron-deficiency anemia, vitamin deficiencies, malabsorption
- **Neurological:** Peripheral neuropathy (numbness and tingling in the extremities), ataxia, seizures, migraines, anxiety, depression, cerebellar ataxia, chorea
- **Reproductive:** Infertility, recurrent miscarriages, delayed puberty, irregular menstrual periods
- **Weight loss:** Poor weight gain, unexplained weight loss, failure to thrive, poor growth
- **Other:** Fatigue, unexplained chronic hypertransaminasemia, metabolic dysfunction-associated steatotic liver disease (MASLD)

Lab Methodology

The Celiac Panels use real-time PCR to test for the genetic markers along with Electrochemiluminescence Immunoassay (ECLIA) to measure nutrient-specific markers and Immunofluorescence Assay to measure celiac antibodies.

We're proud to be a CLIA-certified and CAP-accredited lab.

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