

### **Coeliac Disease**

Coeliac Disease (CD) is an autoimmune disorder caused by a permanent intolerance to gluten and, more specifically, to its protein fraction, called gliadin. Gluten is found in grains such as wheat, barley and rye. In genetically-predisposed people, ingesting gluten induces a severe autoimmune response which damages the lining of the small intestine. Lesions are created in the intestinal mucosa and, if left untreated, the intestinal villi become inflamed and flattened. This usually results in their destruction (villous atrophy), thus reducing the body's ability to absorb essential nutrients.

Over time, inflammation of the villi and malabsorption of vitamins and minerals can cause the symptoms and complications commonly associated with coeliac disease.

### **Symptoms:**

The symptoms of CD vary from person to person and can range from mild to severe. However, mild cases may not cause any noticeable symptoms and are often only detected during testing for other disorders. Some symptoms may also be mistaken for other conditions such as Irritable Bowel Syndrome (IBS).

Severe: diarrhoea, weight loss, stomach cramps, muscle spasms, oedema, joint and/or bone pain, anaemia, vomiting, growth problems, infertility/miscarriage, depression

Mild: abdominal/stomach pain, bloating, constipation, indigestion, loss of appetite, tingling in hands and feet, alopecia (loss of hair), dermatitis herpetiformis, mouth ulcer

### **Diagnosis:**

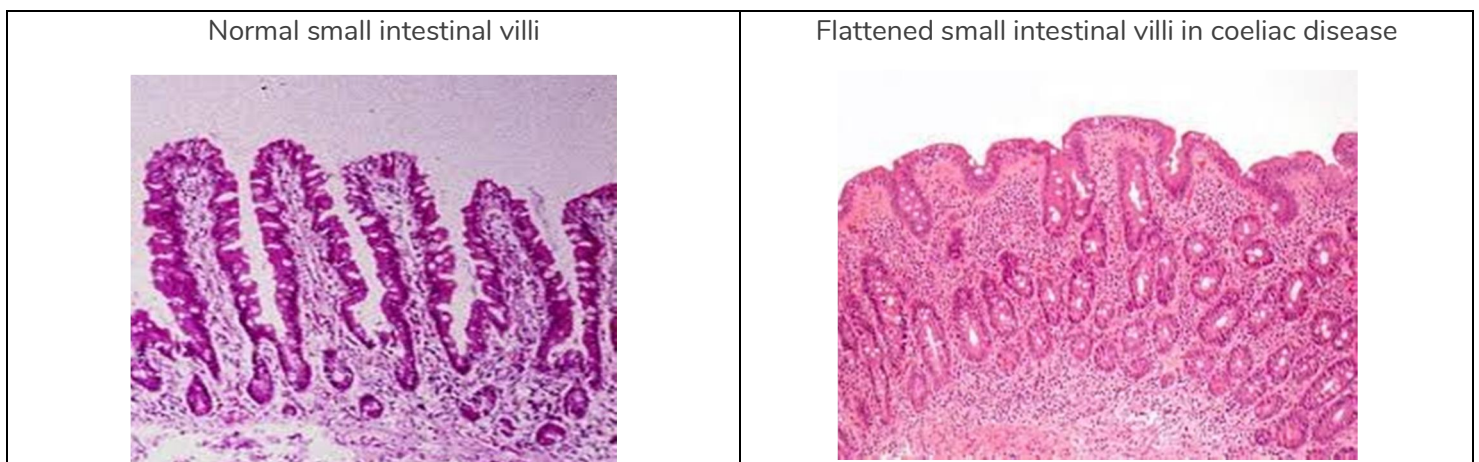
Definitive diagnosis of coeliac disease is based on the typical histological changes observed in intestinal biopsies. However, serological tests such as the detection of circulating anti-tissue transglutaminase (tTG) and anti-gliadin antibodies represent a very good first and less invasive analysis methods to detect the disease.

### **Treatment:**

Coeliac disease is not curable. It's a permanent, life-long condition and there is no medication available to treat the disease. However, damage to the small intestine is reversible, and once diagnosed, coeliac patients should follow a strict gluten-free diet in order to prevent further damage to the intestinal villi. If a gluten-free diet is strictly adhered to, the villi can recover. Coeliac patients should then experience an improvement in symptoms and be able to live a normal, healthy life.

### **Complications:**

Left undiagnosed and untreated, coeliac disease can increase susceptibility to certain conditions: osteoporosis, tooth enamel defects, impairment of mental health, reduced and/or impaired fertility, recurrent miscarriages, pancreatic disease, haemorrhages, organ alterations (liver and spleen) and lymphomas.



Source: Coeliac UK, BDA