About Celiac Disease

A document providing answers and references to the most frequently asked questions about Celiac Disease
Basics

▪ What is Celiac Disease?
Celiac Disease is an inherited autoimmune disease that is triggered by the ingestion of gluten – a protein present in most cereals. Gluten is absorbed in the small intestine and in celiac patients, it activates an autoimmune cascade with a strong inflammatory reaction. This reaction ultimately destroys totally (or partially) the intestinal structure called villi, responsible for the absorption of nutrients into the bloodstream. Therefore, the disease inhibits the absorption of important nutrients into the body.

▪ What is gluten?
Gluten is a storage protein found in three basic cereals: wheat, rye and barley.

▪ Is there gluten in oat?
No. But there is a similar protein that induces an inflammatory reaction in a minority of celiac patients. It is recommended to introduce oats with caution.

▪ Is there any gluten in other commonly eaten cereals such as rice or corn?
No. Rice and corn are safe for celiac patients, as well as others such as potatoes, quinoa, soy and millet. You can find a more comprehensive list on: www.augurix.com/patientsandfamilies.php?page=The.Gluten.free.diet

▪ Where can we find gluten?
Gluten is found in all food containing cereals or extracts of cereals. Typically, it is present in bread, cookies, pasta and most pre-cooked dishes and drinks (such as beer). It can also be found in cosmetics and personal care products.

▪ Is Celiac Disease the same as Gluten Intolerance?
Yes. Celiac Disease is also known as Gluten intolerance. Other less frequent denominations include celiac sprue, nontropical sprue and gluten-sensitive enteropathy.

▪ Is Celiac Disease the same as Wheat allergy?
No. The mechanisms behind wheat allergy and celiac disease are not the same. Wheat allergy is an IgE response with mainly respiratory and skin rash symptoms which lasts for a few hours and induces no intestinal damage.
On the contrary, celiac disease induces an autoimmune reaction with destruction of the intestine and it is a permanent condition.

▪ How many people have Celiac Disease?
Epidemiological studies have shown that at least 1% of the global population has celiac disease.
Frequently Asked Questions about Celiac Disease

- **Is celiac disease restricted to a geographical area?**
  No. Celiac disease is a worldwide concern. It affects populations on all four continents. Actually, it emerges in countries where the population gets more exposed to gluten.

**Symptoms**

- **Can we catch Celiac Disease?**
  No, you do not catch Celiac Disease. Rather, it is an inherited condition: it is estimated that about a third of all people are genetically predisposed to the disease. Celiac disease is not contagious.
  Two mandatory conditions are required to activate the disease:
  a) Ingestion of gluten
  b) Exposure to exogenous factors such as an infectious stress.

- **What are the symptoms of Celiac Disease?**
  While there are many clinical signs and symptoms of Celiac Disease, most are non-specific to the disease. Most often the symptoms do not fit a specific diagnosis and they often lead to other conditions, such as irritable bowel syndrome, infection, infertility, miscarriages, fibromyalgia, chronic fatigue syndrome or depression.

- **Does it affect anybody?**
  It only affects the genetically predisposed people that will be exposed to gluten and a triggering environmental factor. There are no restrictions related to the ethnic origin or the age.

- **At what age does celiac disease appear?**
  To develop celiac disease, you must eat food that contains gluten. Hence, a newborn cannot have celiac disease, but can be genetically pre-disposed to it. Children are at risk of developing celiac disease as soon as they start eating cereals on a regular basis, around 12-18 months old.

**Diagnosis**

- **How do I know if I have celiac disease?**
  There are several tests available to detect celiac disease. All of them require drawing blood and sending the sample to a specialized laboratory. If the test is positive, your doctor will propose you an intestinal biopsy to confirm the preliminary results.

- **What is an intestinal biopsy?**
  An intestinal biopsy is a surgical act that requires a short anesthesia. The surgeon will perform an endoscopy, i.e. go down your throat, in your esophagus, through your stomach and into your small bowel with a flexible tube in order to collect a small piece of your small intestine.
Frequently Asked Questions a Celiac Disease

- **What can you see on a biopsy?**
  The biopsy will be sent to a specialized pathology center to be analyzed. Under a microscope the pathologist will look at the structure of your small intestine. If you are celiac, the intestinal structures are completely destroyed.

- **My son/daughter has celiac disease. Do I need to test his/her brothers or sisters?**
  Yes. Many studies showed that up to 20% of siblings of a celiac patient will develop the disease themselves.

- **What about testing the parents of a celiac child?**
  Testing the parents of a celiac child is recommended. Indeed, it has been demonstrated that up to 20% of the parents have the celiac disease.

Complications

- **If I don't feel sick why would I need to search for celiac disease?**
  Left untreated, celiac disease may have dramatic consequences eventually. Because your body does not absorb enough vitamins and minerals, and as a consequence your bones will get very fragile and therefore break easily. Also you may develop a gastro-intestinal cancer.

- **What happens if a celiac patient eats bread?**
  Bread contains wheat. And in this cereal, there is a protein called gluten. Gluten is responsible for triggering in celiac patients a dramatic inflammation within the small bowel. The damaged bowel will not function correctly and absorb fewer nutrients.

Treatment

- **What is the cure to Celiac Disease?**
  There is no cure to celiac disease. Only a life long gluten-free diet will stop symptoms and complications.

- **Is there any desensitization taking place after some time under a gluten-free diet?**
  No. Celiac disease is a permanent condition.

- **How long does it take for the small bowel to heal after adopting a gluten-free diet?**
  For young children, it takes an average of 1 month. For older children and adults, it may take up to 6 months.