## What is Coeliac Disease?

Coeliac disease (pronounced seel-ee-ak) is an immune disease caused by gluten, a protein in wheat, rye, barley and oats. When people with coeliac disease eat gluten, an inappropriate immune reaction causes inflammation and damage to the small bowel (intestine). Untreated, coeliac disease can cause a range of symptoms and health problems. Treatment involves lifelong and strict avoidance of gluten in the diet and leads to healing of the bowel and better health.

The lining of the small bowel is covered with tiny, finger-like projections called villi, which aid the digestion and absorption of nutrients from food. In people with untreated coeliac disease, the villi become inflamed and flattened. This is called "villous atrophy". Villous atrophy reduces the surface area of the bowel available for nutrient absorption, which can lead to nutrient deficiencies. Inflammation also results in problems that can affect the bones, joints, skin and other organs, such as the liver and brain.

## Who gets coeliac disease?

People are born with a genetic predisposition to develop coeliac disease. The most important genes associated with coeliac disease are "HLA DQ2" and "HLA DQ8". One or both of these genes are present in virtually every person with coeliac disease. Other genes and various environmental factors play an important role in triggering or "unmasking" coeliac disease. It can develop at any stage in life, from infancy to old age.

## **Symptoms**

The symptoms of coeliac disease vary considerably. Common complaints include gastrointestinal upset (such as abdominal pain, bloating, flatulence, nausea, vomiting, diarrhoea, and/or constipation), lethargy, mouth ulcers and weight loss. Some people suffer severe symptoms, while others are symptom free. Further investigation for coeliac disease should occur if one or more high risk features are present. These include:

- Iron deficiency anaemia or other nutrient deficiencies
- Gastrointestinal symptoms
- Osteoporosis (thinning of the bones, which increases fracture risk)
- Autoimmune disease (such as type 1 diabetes or autoimmune thyroid disease)
- Weight loss
- Unexplained infertility or recurrent miscarriage
- A family history of coeliac disease.

Untreated, coeliac disease can lead to chronic poor health, osteoporosis, infertility, miscarriage, depression, liver disease, poor dentition, and an increased risk of autoimmune disease and some forms of cancer. Importantly, appropriate treatment with a strict gluten free diet leads to small bowel healing, resolution of symptoms, and a reduction in the risk of complications.

Although symptoms can vary considerably, everybody with coeliac disease is at risk of complications if they do not adhere strictly to a gluten free diet. Since bowel damage can occur in coeliac disease even when symptoms are absent, everybody with coeliac disease, regardless of symptom severity, needs to adhere strictly to a gluten free diet.

If you think you may have coeliac disease, please consult your GP for a proper diagnosis.

For further information 1300 GLUTEN www.sickandtired.com.au



