Celiac disease is a genetic (passed from parent to child) disorder of the small intestine. The small intestine is the part of the digestive tract where nutrients, minerals, and vitamins are absorbed into the body. The surface of the small intestine is covered with tiny finger-like projections called villi where this absorption happens. In celiac disease, a protein found in certain grains, called gluten, severely damages these delicate villi.

Celiac disease is most common in people of northern European extraction, and can affect people of any age.

**Symptoms**
The most common symptoms of celiac disease include:
- Abdominal pain
- Diarrhea
- Weight loss
- Anemia, or low red blood cell count
- Joint or muscle pain
- Skin rash

**Diagnosis**
If you have any of the above symptoms, your doctor may suggest further testing to exclude celiac disease. A simple blood test is usually the first step, however, a biopsy of the small intestine lining is always required. This is done by endoscopy, a procedure where a doctor passes a thin flexible camera through the mouth to the small intestine. Small surgical instruments can used through the camera to obtain samples of the intestinal wall. The procedure is safe and painless.

**Treatment**
The treatment of celiac disease is to exclude gluten from the diet. While simple in concept, this is often quite difficult to achieve. Patients must be careful to read food labels and avoid products containing the grains wheat, rye, barley, and often oats. Safe alternatives to wheat flour include rice, potato, or soy flour. Meats, fish, poultry, fruits and vegetables do not contain gluten.

Most larger grocery stores and now many restaurants offer gluten free options. Patients with celiac disease should meet with a registered dietician to learn how to succeed with this challenging diet.

**Associated Conditions**
Celiac is a disease of the genes and immune system, and may be associated with several other conditions, including:
- Systemic lupus erythematosis, also known as lupus
- Diabetes
- Rheumatoid arthritis
- Collagen vascular disease

**Complications**
Complications from celiac disease are usually avoided by adherence to a strict gluten free diet. Untreated celiac disease can lead to several severe conditions, such as:
- Cancer of the small intestine
- Osteoporosis
- Iron deficiency
- Vitamin deficiency

Celiac disease is sometimes difficult to diagnose because of the many different symptoms that it can produce. If you feel you are at risk for celiac disease, or if a parent or sibling has been diagnosed with celiac disease, discuss your particular risk factors with your doctor.

Dr. Michael Kaczanowski is board certified in Internal Medicine, and Gastroenterology and has served the greater Manchester community for the past several years. He received his medical degree from St. George’s University School of Medicine, Grenada and completed his residency at Norwalk Hospital, Yale University teaching affiliate, Norwalk, CT. Here he held the position of Chief Medical Resident and obtained a Fellowship in Gastroenterology and Hepatology. Dr. Kaczanowski has published on the use of wireless capsule endoscopy for diagnosis of small bowel neoplasms and his area of special interest is in the detection of colon cancer, esophageal disease and swallowing disorders.