evaluation is complete so that proper identification can occur. The first step is a serological blood test for tissue transglutaminase and antiendomysial antibodies in children 18 months old or older (Paul, Johnson, and Speed, 2013). Positive serological markers should be followed by an upper GI endoscopy with biopsy. The diagnosis of celiac disease is based on a biopsy of the small intestine demonstrating the characteristic changes of mucosal inflammation, crypt hyperplasia, and villous atrophy (Paul, Johnson, and Speed, 2013).

Therapeutic Management

Treatment of celiac disease consists primarily of dietary management. Although the diet is called "gluten free," it is actually *low* in gluten because it is impossible to remove every source of this protein. Because gluten is found primarily in wheat and rye but also in smaller quantities in barley and oats, these four foods are eliminated. Corn, rice, and millet become substitute grain foods.

Children with untreated celiac disease may have lactose intolerance, especially if their mucosal lesions are extensive. Lactose intolerance usually improves as the mucosa heals with gluten withdrawal. Specific nutritional deficiencies, such as iron, folic acid, and fat-soluble vitamin deficiencies, are treated with appropriate supplements.

Prognosis

Celiac disease is regarded as a chronic disease; its severity varies greatly among children. The most severe symptoms usually occur in early childhood and again in adult life. Most children who comply with dietary management are healthy and remain free of symptoms and complications; however, children should be evaluated annually for nutritional deficiencies, impaired growth, delayed puberty, and reduced bone mineral density (Paul, Johnson, and Speed, 2013).

Nursing Care Management

The main nursing consideration is helping the child adhere to the dietary regimen. Considerable time is involved in explaining the disease process to the child and parents, the specific role of gluten