Celiac disease (gluten intolerance) is an autoimmune disorder triggered by dietary gluten. It is a common disease and affects about 1% of the general population. Celiac disease has increasingly become considered as a multi-organ disorder and has been linked to a number of diseases including autoimmune disorders. This doctoral thesis explores the risk of possible associated disorders in celiac disease through Swedish population-based registers. The findings indicate that celiac disease is associated with an increased risk of liver disease, Addison’s disease, thyroid disease and lymphoma. However, no association was found between celiac disease and autoimmune heart disease or leukemia.