







# Celiac Disease & Associated Autoimmune Diseases

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People who have celiac disease or dermatitis herpetiformis (celiac disease which manifests as a skin rash) are at greater risk than the general population for developing one or more associated autoimmune diseases. These disorders share common genetic and immunological linkages with celiac disease. The prevalence of other autoimmune conditions in people with celiac disease is estimated to be up to 15%. The prevalence of autoimmune disease in the general population is about a third to half that, affecting 5 to 8% of the population. The autoimmune conditions most associated with celiac disease are type 1 diabetes and autoimmune thyroid disease.

The tendency to develop autoimmune diseases is believed to be genetically influenced. Environmental factors may also play a role in development of autoimmune conditions. For reasons that are not completely understood, approximately 75% of individuals with autoimmune diseases are women. In an autoimmune disorder, the cells of the immune system produce antibodies and other cellular products that begin to react against normal, healthy tissue, causing inflammation and damage.

This is not a complete listing of autoimmune diseases associated with celiac disease. Anyone who has unexplained, persistent, or recurring symptoms should consult a qualified physician for an evaluation.

# Insulin Dependent Diabetes Mellitus (Type 1 Diabetes)

A disease of the pancreas. The coincidence of type 1 diabetes and celiac disease is 8 - 10%. Often the second disease to develop is silent (having few symptoms). Symptoms can include excessive thirst, hunger, weakness, frequent urination, blurred vision, trembling, confusion and weight loss.

# **Thyroid Disease**

There are two common forms of autoimmune thyroid disease commonly associated with celiac disease - Grave's disease and Hashimoto's disease.

### Grave's Disease:

An overactive thyroid. Symptoms may include weight loss, rapid pulse, protruding eyes, feeling too warm, restlessness, insomnia, diarrhea, irritability, palpitations.

#### Hashimoto's Disease:

An underactive thyroid. Symptoms may include weight gain, slow pulse, red puffy eyes, feeling too cold, difficulty concentrating, drowsiness, confusion, constipation, hair loss, enlarged thyroid gland in the neck.

## Addison's Disease

A rare disease involving insufficient functioning of the adrenal gland. Symptoms of Addison's may include increasing fatigue, lack of appetite, anemia, darkening of the skin, increased sun sensitivity, low blood sugar, low blood pressure, nausea, vomiting, diarrhea, and dehydration.

## **Autoimmune Chronic Active Hepatitis**

A disease of the liver that may be mistaken for alcoholic liver disease. Symptoms can include fatigue, abdominal discomfort, itching, nausea, vomiting, bloating, yellowing of the skin and whites of the eyes (jaundice), enlarged liver, skin rash, aching, fever, mental confusion, and cirrhosis.

## **Myasthenia Gravis**

A disease involving muscle function in which nerve impulses to the muscles are impaired. Symptoms can include rapid fatigue and muscle weakness, especially as the day progresses, voice impairment, difficulty swallowing, droopy eyelids, unsteady or waddling gait, double vision, enlarged thymus gland.

### **Pernicious Anemia**

Also often known as vitamin B-12 deficiency. In pernicious anemia the lining of the stomach is damaged, causing a deficiency of intrinsic factor. Intrinsic factor is required to absorb vitamin B-12. Symptoms can include fatigue, sore tongue, yellow skin, tingling hands and feet, depression, memory loss, difficulty with balance, shortness of breath, and occasionally heart palpitations.

## Raynaud's Phenomenon

Often seen in combination with other autoimmune diseases, such as lupus, rheumatoid arthritis, or Sjogren's. It affects the blood vessels. Symptoms may include abnormal sensitivity to the cold; hands or feet change colors from white, purple, or blue to red; and painful spasms with exposure to cold.

### Scleroderma

Scleroderma can affect the skin, GI tract, muscles, lungs, or kidneys. It causes scar tissue (fibrosis) to form in skin and organs. Symptoms may include tight, leathery skin, red and swollen fingers, severe indigestion, heartburn, constipation, diarrhea, muscle pain, weakness and

shortness of breath.

## Sjogren's Syndrome

A disease involving the mucus-secreting glands that causes a reduction of excretions. This can cause dryness of the eyes and mouth, as well as of the vagina, skin, lungs, sinuses, digestive tract, bladder, kidneys, and joints. Symptoms may include painful dry eyes, dry mouth, sores in the mouth, on the tongue or throat, gum inflammation, tooth decay, dry skin, rashes, vaginal dryness, yeast infections, abdominal pain, chronic sinusitis, fatigue, and joint or muscle pain.

## Systemic Lupus Erythematosus

Lupus can affect many organs and body systems: the skin, joints and muscles, kidneys, heart, brain, lungs, blood and blood vessels, intestines, hearing and balance. Symptoms vary depending on the organs involved, but may include fatigue, fever, anemia, rashes in sun-exposed areas, aching muscles, painful and stiff joints, confusion, seizures, inflammation around the heart or lungs, sores in the mouth, vasculitis, blood clots, and changes in the urine.

#### References

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