

## HOME ABOUT TOPICS BLOG GRAPHS FORUM BOARD TEST YOURSELF CONTACT

## Insulin Resistance Can Trigger Hashimoto's Disease

Posted on April 10, 2013 by Kent Holtorf M.D.

















It's a double whammy. Both hypothyroidism and insulin resistance can cause weight gain and difficulty losing weight. But insulin resistance can actually be a trigger for Hashimoto's disease. With insulin resistance on the rise in the United States, there's a possibility that we will see a correlating increase in Hashimoto's thyroiditis diagnoses.

Hashimoto's disease, also known as Hashimoto's thyroiditis, is an autoimmune disorder where the thyroid is attacked by the body's immune system. Instead of protecting the body from dangers such as bacteria and viruses, the body turns on itself, developing antibodies to proteins in the thyroid, resulting in progressive destruction of the thyroid gland. Statistics show that almost 80% of hypothyroidism is caused by Hashimoto's disease, making it the primary cause of hypothyroidism.

Insulin resistance is a decreased ability of the cells to respond to insulin, a hormone produced by the pancreas. Insulin unlocks cells so that sugar in the foods we eat can be used by the cells for energy. For a patient who is insulin resistant, the body produces more and more insulin in response to food intake, but is not able to bring the blood sugar (glucose) levels back to normal. These surges in insulin cause an inflammatory cascade of cytokines to be released, causing a flare in the immune response

Insulin resistance is a precursor to Type 2 diabetes, and has been implicated in many chronic diseases, including heart disease, stroke, arthritis and Alzheimer's disease. Symptoms of insulin resistance include fatigue after meals, constant craving for sweets, weight gain in the abdominal area, frequent urination, difficulty losing weight, fatigue, and aches and pains that migrate to different areas of the body. A simple blood test can determine if a patient is insulin resistant.

The good news is that insulin resistance can be prevented and even reversed with proper diet, exercise, nutritional support, and prescription medications.

While patients with insulin resistance don't have to be on a strict diet, it is beneficial to follow an eating plan that stabilizes blood sugar, reduces inflammation and oxidative stress, and improves liver detoxification. Patients should eat a diet based on whole foods that are high in fiber, filled with colorful fruits and vegetables, and low in sugars and white flour. The diet should also include healthy omega-3 fats and olive oil, as well as beans, nuts and seeds. Studies have also shown that high-fiber rye bread or rye pasta can also protect against excess insulin and reduce the risk of type-2 diabetes. Other studies have shown that a teaspoon of cinnamon a day can have a beneficial effect on insulin resistance and can reduce the effects of oxidative stress.

Exercise is also helpful. Exercise, and movement in general, have been shown to increase sensitivity to both insulin and leptin, two critical hormones that regulate how energy is metabolized throughout the body. A moderate exercise program can improve insulin sensitivity and revere insulin resistance even without weight loss. And even a single session of exercise can increase insulin sensitivity for up to 16 hours after exercising, so it's worth it to get up and get moving as much as possible.

Nutritional support for insulin resistance includes blood sugar stabilizers and adrenal support. Supplements that may be beneficial include chromium picolinate, cinnamon, magnesium, Vitamin D, Omega-3 fatty acids, and fenugreek, among others.

Approximately 50 million Americans currently suffer from autoimmune diseases, and nearly one person out of every thousand will have Hashimoto's disease. Recognizing and dealing with contributing factors such as insulin resistance can have an important, positive effect on preventing autoimmune diseases such as Hashimoto's thyroiditis.

## Topics

Why Doesn't my Endocrinologist Know all of This?

Are we getting what we want from TSH testing?

**Deiodinases: Understanding Local** Control of Thyroid Hormones

Stress

Depression

Chronic Pain

Dieting/Weight Loss/Obesity/Insulin Resistance

Leptin

Exercise

Iron Deficiency

Inflammation Associated with Common **Conditions** 

**Toxins** 

*Testosterone* 

Growth Hormone

Individual Variations

**Thyroid Hormone Transport** 

Conditions Associated with Abnormal Thyroid Transport

Pituitary Thyroid Transport Determines TSH Levels

Stress

Dieting/Weight Loss/Obesity/Insulin Resistance

Reverse T3

Treatment

Conclusion

© 2015 National Academy of Hypothyroidism. All Rights Reserved.

The content on this site is intended to be used for educational and entertainment purposes only. It is not intended to be and should not be interpreted as medical advice or a diagnosis of any health problem, condition or disease. The National Academy of Hypothyroidism website is not a medical or healthcare provider and your use of this site does not create a doctor / patient relationship. We disclaim all responsibility for the professional qualifications and licensing of, and services provided by, any physician or other health providers posting on or otherwise referred to on this site. Never disregard the medical advice of your physician or health professional, or delay in seeking such advice, because of something you read on this site. We offer this site AS IS and without any warranties.