



## The Thyroid Wellness Newsletter

### GI Symptoms of Hyperthyroidism

Hyperthyroidism is not the only thyroid imbalance that can cause GI problems. Excess thyroid hormone in your system can also affect the functioning of the muscles of the esophagus. Hyperthyroidism can cause abdominal pain and difficulty swallowing as well. It may also alter the emptying of the stomach after food consumption. This can cause you to have nausea and even vomiting.

As in hypothyroidism excess of thyroid hormone in your system may make the stomach produce less acid and this disturbs the food digestion in the stomach.

If you have Graves Disease (the auto-immune condition that causes overactive thyroid) an immune attack on the stomach can also make the stomach produce less acid.

Another common GI symptom in Hyperthyroidism is the increased frequency in bowel movements. Hyperthyroidism can also cause diarrhea. The diarrhea may be associated with an increased content of undigested fat in the stools. Diarrhea and increased frequency of bowel movements typically resolve with treatment of the overactive thyroid. You need to know that if you are a hypothyroid patient treated with thyroid hormone pills and you become overdosed with thyroid medication you may experience symptoms such as increased frequency in bowel movements and diarrhea. It may sound paradoxical but hyperthyroidism can also cause constipation and this has to do with a significant disturbance of the contraction process of the intestines and colon.



Often not talked about is the common occurrence of lactose intolerance in patients with hyperthyroidism. Too much thyroid

hormone in your system can result in the lack of lactase, the enzyme that breaks down lactose, a common sugar found in dairy products and other foods. The lack of lactase results in lactose intolerance which will promote bloating and abdominal discomfort. Lactose intolerance caused by hyperthyroidism often resolves with the treatment of hyperthyroidism.

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### Thyroid Patients Should Pay Attention to Micronutrients (including Zinc and Selenium)

The reason I always recommend to my patients that they take a good well-balanced mix of vitamins and antioxidants, is that their thyroid health depends on these nutrients.

A normal functioning of your thyroid gland without doubt depends on the availability and intake of several micronutrients. A deficiency of micronutrients such as Iodine, Iron, Zinc, Selenium and Vitamin A can significantly disturb the function of the thyroid gland. Deficiencies of these essential micronutrients are quite common in the world population.

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**Iodine:**

Recently there has been a renewed concern that the world population has become at a high risk for Iodine Deficiency. You are likely to become Iodine deficient if you live in an area where the content of Iodine in the soil is low. Iodine is essential for the manufacture of thyroid hormones T4 and T3 and lack of Iodine may lead to low thyroid function and enlargement of the thyroid gland (i.e.: goiter). Pregnant women who are iodine deficient may have babies with significant cognitive impairment and congenital abnormalities.

**Iron:**

Iron is also important for the thyroid gland to produce normal amounts of thyroid hormones. If in addition to being Iodine deficient you have iron deficiency the impact of iodine deficiency will become more significant. Iron deficiency not only will affect cognitive functions in childhood but can also affect the immune system. People who consume plant-based diets are more likely to have iron deficiency. Lack of iron causes T4 to not convert normally to T3 as much as it should be. Research has shown that in people who have deficiency in both Iodine and Iron, Iodine supplementation alone does not fully correct the thyroid imbalance and the goiter.

**Selenium:**

Selenium is another important micronutrient that is necessary for the manufacture of the active form of thyroid hormone T3. If you are deficient in Selenium you will be suffering from the effects of low thyroid. Many areas in the world including Denmark, Finland, New Zealand, and some parts of Russia are deficient in Selenium.

**Vitamin A:**

Vitamin A Deficiency also affects thyroid function. Vitamin A plays a role in regulating thyroid gland metabolism as well as the efficiency of thyroid hormone in your body. It also affects the TSH production by the pituitary. Vitamin A deficiency causes the thyroid gland to become larger. Vitamin A deficiency impairs the uptake of iodine by the thyroid gland and impairs the manufacture of thyroid hormone. Vitamin A deficiency causes the conversion of T4 to T3 to become defective in the body. Research has shown that in areas where Vitamin A and iodine are lacking, iodine supplement in conjunction with Vitamin A supplementation helps thyroid function much more than just the supplementation with iodine alone.

**Zinc:**

Zinc is another major player for the thyroid system. Zinc affects the genes and is involved in the proper functioning of cells in the body. Zinc affects the immune system and reproduction as well. Zinc deficiency can cause physical growth to slow down in children and makes children sus-

ceptible to infections. People who consume primarily plant based diets are at high risk for Zinc deficiency. Zinc is crucial not only for having normal thyroid hormone production by the thyroid gland but also makes thyroid hormone work efficiently in cells.



These five elements are crucial for optimal health in general but are also crucial for the proper functioning of the thyroid gland and how thyroid hormone works in the cells other micronutrients are also important. It is obvious that if one has more than one deficiency in essential micronutrients, correction of only one may help, but only partially. It is vital to address all of the deficiencies as a combination supplementation to provide excellent thyroid health.

If you do not have a thyroid condition but are genetically predisposed to having one (for instance if you have one or more family members with a thyroid condition), you should make sure you are taking a proper mix of micronutrients that will protect you from thyroid imbalance.

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## Physicians in the US Tend to Prescribe More Methimazole than PTU These Days

There are 2 medications that are being used on a routine basis for the treatment of hyperthyroidism caused by Graves Disease. These 2 medications are Methimazole and Propylthiouracil (PTU). A recent research conducted at the Johns Hopkins University School of Medicine compared the prescription habits of physicians over the years from 1991 – 2008. Studies showed an apparent and obvious increase in Methimazole prescriptions vs. PTU over the years. Back in the early 90's PTU was much more prescribed than Methimazole and was holding 2/3 of the market for anti-thyroid medications. However in 1996 a shift began to appear and Methimazole started becoming more used than PTU. Now Methimazole has become much more used than PTU to treat hyperthyroidism. We physicians continue to prefer using PTU to treat pregnant women with hyperthyroidism.

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## Vitamin D and Mental Health

Lately research has been focusing on the impact of Vitamin D Deficiency on mental health including the occurrence of mood disorders (i.e.: depression) and other mental conditions such as schizophrenia and autism. Some studies have shown that Vitamin D deficiency can promote depression. Thyroid imbalance can also promote depressive symptoms and other issues with mental health, including anxiety disorders and mood swing disorders. Keeping a Vitamin D level in an excellent range, whether you have a thyroid condition or not, is crucial for so many reasons and one of these reasons is your mental health.

A recent study conducted in Sweden on a large number of Psychiatric patients followed in an outpatient practice,

who had 25-Hydroxy Vitamin D measured showed that Vitamin D Deficiency is very common among psychiatric patients. Much lower levels of Vitamin D were noted among the younger male patients. Vitamin D supplementation and correction of the Vitamin D deficiency had resulted in a significant improvement of depression and psychosis among the patients studied.

As a thyroid patient if you have a depressive syndrome related or not related to your thyroid it is important to have your Vitamin D level checked. If you have a Vitamin D Deficiency, it should be adequately corrected with Vitamin D supplementation. You also need to know that taking a serotonin reuptake inhibitor or an anti-psychotic medication may affect your bone health and can cause bone loss and obviously Vitamin D deficiency could make bone loss worse.

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