

## LOW THYROID

Not only does the thyroid regulate how quickly our body burns calories and maintains our metabolism, it also controls the body's sensitivities to other hormones such as estradiol and cortisol. Basically, the thyroid is our metabolic thermostat. When it is low you feel sluggish, constipated, depressed, and foggy-brained. Your metabolism slows down and therefore it is nearly impossible to lose weight. When your thyroid is working properly, you feel energetic, think clearly and are upbeat. Thyroid conditions are among the most under- and misdiagnosed hormonal imbalances.

Thyroid disorders are more common in women affecting 20 per cent at some point on their life time. These disorders not only affect energy levels and weight issues but can also wreak havoc on the menstrual cycle and affect fertility.

**Low thyroid** may be caused by

- **Hashimoto's thyroiditis.** An autoimmune thyroiditis that attacks the thyroid gland causing it to burn out
- **Goiter.** A noncancerous enlargement of the thyroid gland which can be caused by iodine deficiency. Iodine has been added to table salt to combat this deficiency
- **Stress.** Production of cortisol from the adrenal glands in response to stress can lower the production of thyroid hormone and block receptors
- **Endocrine disrupters.** BPA found in plastic water bottles, flame retardants, etc. can slow thyroid function by blocking receptors
- **Genetics**
- **Goitrogens.** A compound that suppresses the thyroid by interfering with a cell's uptake of iodine. Found in soy, millet and certain vegetables such as broccoli and Brussels sprouts
- **Cancer treatment**
- **Vitamin D deficiency**
- **Celiac disease and gluten sensitivity.** Celiacs are more likely to have antibodies against the thyroid

Symptoms associated with Low Thyroid

- Fatigue
- Unexplained weight gain
- Constipation
- Poor memory
- Menstrual irregularities
- Depression

Nutraceuticals

- ☐ **Copper** 2 mg/day. The thyroid gland is sensitive to a balance of copper and zinc. An imbalance can result in hypothyroidism. Dietary sources are meat, poultry, eggs as well as nuts, seeds and grains
- ☐ **Zinc** 20 mg/day. Important for conversion of T4 (inactive) to T3 (active form). Must be taken in correct proportion with copper. Dietary sources are meat, shrimp, spinach, flax and pumpkin seeds
- ☐ **Selenium** 200 mcg /day. Important for the enzymes that protect the thyroid from free radicals. Supplementation reduces immune overactivity. Brazil nuts, grass-fed meat, tuna, halibut
- ☐ **Vitamin A** 5,000 IU/day. Beneficial impact on thyroid function
- ☐ **Iron** 50-100 mg/day. Low iron levels may affect several of the steps of thyroid hormone production
- ☐ **Vitamin D** 2,000 IU/day. Found in organ meats and oily fish

The Hormone Cure. Sara Gottfried, MD

