

# DID YOU KNOW GUT HEALTH IS RELATED TO THYROID HEALTH?

Kimberly Lloyd M.S.

Scientists and health practitioners know that you can't have a healthy gut without a healthy thyroid and vice versa. This is known as the healthy gut - thyroid axis. To restore proper function of the gut-thyroid axis, both areas need to be taken care of simultaneously. Let's first take a look at what the thyroid does.

## What is the thyroid gland?

Located in the front of the neck, the thyroid gland is vitally important for metabolism, growth and maturation of the human body. It helps regulate many bodily functions by releasing a steady amount of hormones into the bloodstream. When the body requires more energy, more hormones are produced—for example, during growth spurts, pregnancy or when cold.

## What happens with too much or too few hormones?

When the thyroid is overactive, it is called hyperthyroidism. Overproduction of hormones causes symptoms, which may include hotflashes, sweating, trembling, weight loss, diarrhea, hair loss, nervousness, hyperactivity, emotional instability and irritability or fatigue, insomnia and restlessness, potency problems and racing heartbeat.

When the thyroid is underactive, it is called hypothyroidism. Bodily functions slow down when not enough hormones are produced. This condition can either be genetic or develop over the course of a lifetime. An underactive thyroid in adults often develops gradually and goes unnoticed for some time. In older people, symptoms are often not recognized, as they are confused with the normal signs of aging. Possible symptoms may include general loss of energy, slowing metabolism, being overweight, fatigue, difficulty concentrating or mental slowness, constipation, sensitivity to cold, slow pulse, waxy or thickening, swelling skin (myxedema), dry skin, deep hoarse voice, brittle dry hair, loss of sexual desire and sometimes, depression.

## How does hormone production affect the gut?

The thyroid gland produces three hormones: T3, T4 and Calcitonin, which helps maintain a healthy level of calcium in the blood. T3 and T4 increase basal metabolic rate and optimize calorie burning, metabolic rate, heart rate, sexual libido, energy and mood.

Healthy gut bacteria assists in converting about 20 percent inactive T4 thyroid hormone back into the active form of T3 by producing an enzyme called intestinal sulfatase. An imbalance between harmful and beneficial bacteria in the gut, called intestinal dysbiosis, significantly reduces the conversion of precursor thyroid hormones to active T3. This is one reason people with poor gut function may have thyroid symptoms but normal lab results. Inflammation in the gut also reduces T3 by raising cortisol.

Thyroid hormones also strongly influence the tight junctions in the stomach and small intestine. These tight junctions are closely associated areas of two cells whose membranes join together to form the impermeable barrier of the gut so that the gut is not "leaky." T3 and T4 have been shown to protect gut mucosal lining from stress-induced ulcer formation.

Finally, a sluggish gall bladder interferes with proper liver detoxification and prevents hormones from being cleared from the body. Hypothyroidism impairs gall bladder function by reducing bile flow.

# DID YOU KNOW GUT HEALTH IS RELATED TO THYROID HEALTH?

Kimberly Lloyd M.S.

## How to maintain a healthy gut-thyroid axis

The first step to a healthy gut is always to figure out what is causing the dysfunction. As noted above, underactive thyroid is one possible cause. Other factors may play an even more significant role. Possibilities may include low acid production in the stomach, infections, dysbiosis, food intolerances (especially gluten) and stress.

The second step is to address these factors and remove any potential triggers. The third step is to restore the integrity of the gut barrier. Low production of thyroid hormones makes it difficult to heal the gut, and an inflamed or leaky gut contributes to just about every disease there is, including hypothyroidism. Fixing the gut is often the first and most important step to take.

## Can the gut-thyroid balance be restored?

A healthy lifestyle can help restore the gut-thyroid balance. This healthy lifestyle would entail sleeping seven to nine hours a day, reducing stress by avoiding overstimulation emotionally or physically, eating a sensible diet of lean meats or proteins, good fats, fruits and vegetables, and avoiding gluten if you are sensitive.

More specific ways to restore the delicate gut-thyroid balance are:

- Obtain adequate dietary iodine. Iodized table salt is often not enough, as it only provides 10 percent of what is required for thyroid hormone production. Eat sea kelp, ocean fish and use a quality sea salt with natural iodine.
- Read food labels and avoid consuming bromine. It is used especially in baked goods and pasta. Bromine competes with iodine to produce thyroid hormones.
- Minimize your exposure to heavy metals such as mercury and lead. Drink purified water if possible.

## DIGESTIVE+++ helps restore gut-thyroid balance

Low thyroid function can slow digestive transit time, causing constipation and an increase in inflammation, infection and malabsorption. Constipation can impair hormone clearance and cause elevations in estrogen, which in turn raises thyroid-binding reactions and decreases the amount of free thyroid hormones available to the body.

Many consumers have reported that taking DIGESTIVE+++ with its enzymes, probiotics and prebiotics has promoted bowel regularity and helped with temporary constipation.

- The probiotic *Bacillus coagulans* inhabits and reproduces in the digestive tract to ensure a predominance of beneficial bacteria. It helps with imbalance in gut flora and supports the integrity of the gut barrier function.
- The prebiotic blend helps the other beneficial flora to coexist.
- The enzyme blend helps break down dietary fats and proteins, which supports the smooth functioning of the gall bladder.

When taking DIGESTIVE+++ for the first time, please note:

- To experience the probiotic benefits, consume DIGESTIVE+++ for at least six months to give your digestive system the chance to re-establish normal gut flora and remove pathogenic flora.
- Avoid processed sugars and carbohydrates, as these feed pathogens in the gut. The probiotic will not have a chance to help your system.

# DID YOU KNOW GUT HEALTH IS RELATED TO THYROID HEALTH?

Kimberly Lloyd M.S.

- If you experience unpleasant responses after initially taking DIGESTIVE+++ , give your body a chance to adjust by decreasing your consumption. For example, you may take one soft-gel capsule every other day or every two days for several weeks or a month, and then gradually increase to the recommended amount of one soft-gel capsule before mealtimes once or twice daily.

If you feel tired, moody or “not quite yourself,” don’t reach for caffeinated energy drinks or other temporary fixes. Why not try the best digestive dietary supplement available—DIGESTIVE+++—and see if you feel an improvement?



#### References:

Stockigt, JR and Baverman LE. Update on the Sick Euthyroid Syndrome. Diseases of the Thyroid. Humana Press, Totowa, NJ, 1997, pp.49-68.