

# Thyroid & Gut Health

The relationship between the gut microbiome and thyroid function is complex and is commonly referred to as the gut-thyroid axis. The gut microbiome plays a key role in thyroid hormone conversion, nutrient balance, and immune regulation.



**The thyroid gland is essential for regulating metabolism, energy, and overall health. Emerging research indicates that thyroid function is closely linked to gut health.**

## The Gut-Thyroid Connection

- **The Gut Microbiome and Thyroid Hormone Conversion:** The gut microbiome is important for converting T4 (inactive thyroid hormone) into T3 (active thyroid hormone). Certain gut bacteria, such as Bifidobacterium and Lactobacillus, help in this conversion. An imbalance in these bacteria can reduce the amount of active T3, leading to hypothyroid symptoms.
- **Immune System Regulation:** 70% of the immune system is located in the gut, making it a key player in autoimmune thyroid diseases. Gut microbiome imbalance and intestinal permeability can trigger an immune response that may attack the thyroid gland in conditions like Hashimoto's thyroiditis and Graves' disease.
- **Nutrient Balance:** Gut health is crucial for absorbing thyroid-supporting nutrients, including iodine, selenium, zinc, and iron. Poor gut health can impair the absorption of these nutrients, leading to thyroid imbalances.
- **Gut Inflammation:** Chronic gut inflammation, often caused by food sensitivities, infections, or stress, can exacerbate thyroid dysfunction. Inflammation can inhibit thyroid hormone production and lead to symptoms of thyroid disease.

### Risk Factors

**Different factors can contribute to poor gut health and thyroid dysfunction**

- Chronic stress – impacts gut barrier integrity and hormone balance.
- Gut dysbiosis – an imbalance in gut bacteria can affect thyroid hormone conversion.
- Food intolerances – certain foods may exacerbate gut inflammation and immune responses.
- Infections and toxins – gut infections (such as H. pylori) and environmental toxins can affect thyroid function.

### Diet & Nutrition

Diet can play an important role in optimising gut and thyroid health. BANT nutrition practitioners assess and identify potential nutritional imbalances to understand how these may contribute to an individual's symptoms and health concerns. Practitioners consider each individual to be unique and recommend personalised nutrition and lifestyle programmes rather than a 'one size fits all' approach.

