

Your innovation partner for the management of hypothyroidism

Bioiberica is a global leader and world reference in animal-derived APIs, with more than 40 years' expertise in the identification and extraction of complex molecules from animal sources. With an extensive portfolio of APIs and ingredients – including Thyroid API – from a European manufacturer that guarantees reliable supply and extensive product support, Bioiberica is your preferred partner for innovation in the pharmaceutical and compounding hypothyroidism markets.



About Bioiberica

Bioiberica is a global Life Science company specialised in the identification, extraction and development of biomolecules of high biological and therapeutic value for the pharmaceutical and nutraceutical industries. This specialisation has positioned Bioiberica among the leading Heparin API manufacturers and a world reference in the research, production and sale of other biologically-derived APIs and ingredients, such as chondroitin sulphate, glucosamine, hyaluronic acid, native type II collagen and thyroid.

But, Bioiberica does not stop there. With a business model based on circular economy principles, the organisation advocates zero waste and has designed its products and materials with lifecycles that are safe for human health and the planet.

To support hypothyroid patients using Bioiberica's Thyroid API, contact us today.

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References

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THYROID API

A safe, effective treatment option for hypothyroidism

Understanding normal thyroid function

- 1

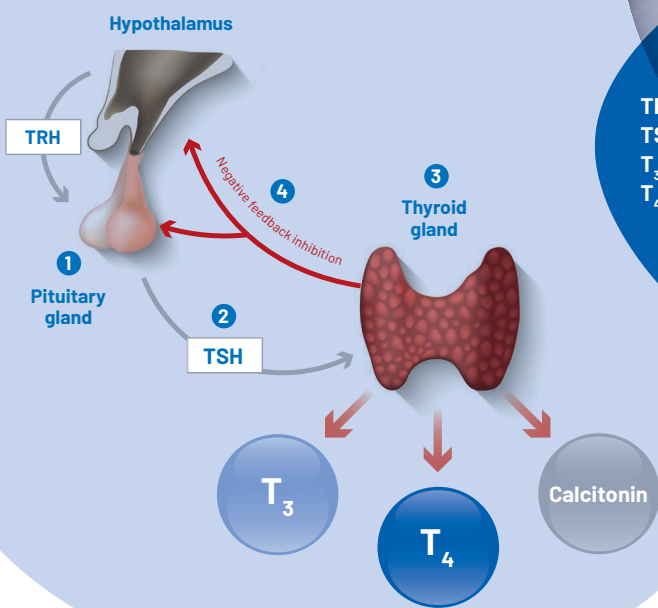
The pituitary gland regulates the amount of thyroid hormone in the blood by releasing TSH
- 2

TSH then promotes the thyroid gland's production of the hormones T4 and T3
- 3

T4 is the main hormone secreted by the thyroid gland. T3 is the active hormone but it is secreted in much smaller amounts as T4 is converted to its active form (T3) in tissues and organs
- 4

Increased levels of thyroid hormones then inhibit synthesis of TSH by the pituitary, keeping levels balanced

Thyroid hormones

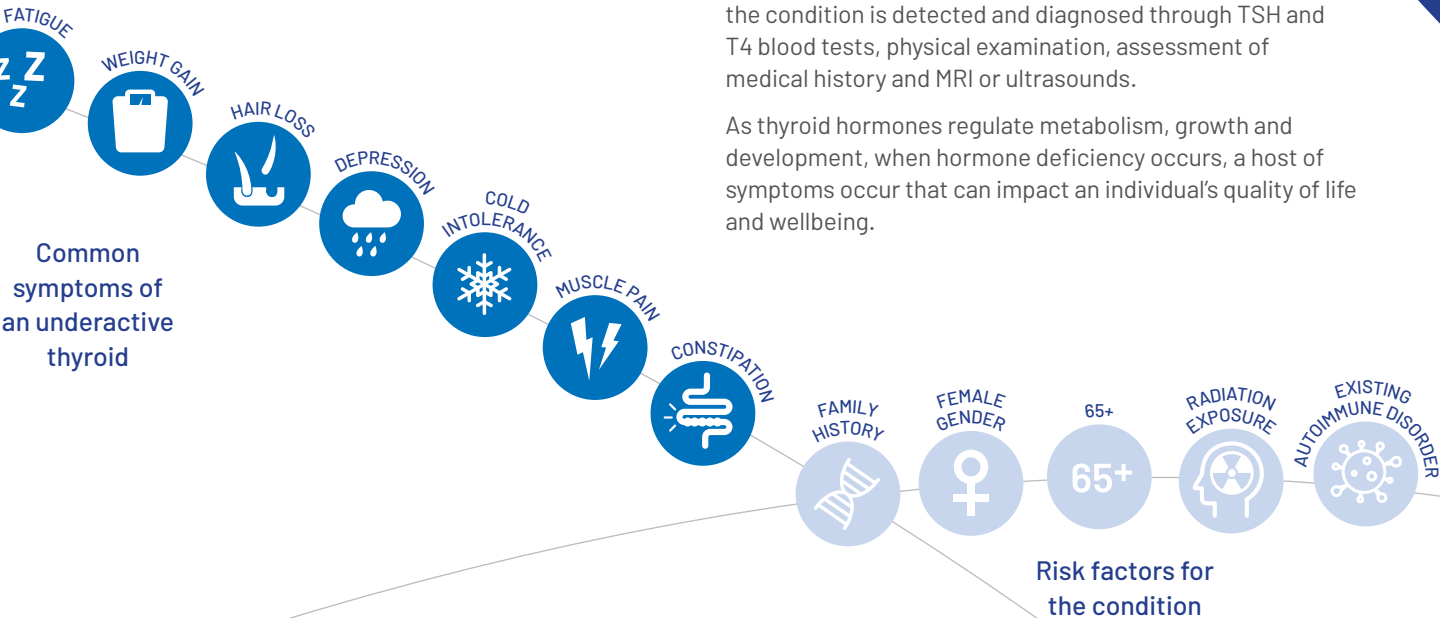


TRH Thyroid releasing hormone
TSH Thyroid stimulating hormone
T₃ Triiodothyronine hormone
T₄ Thyroxine hormone

Hypothyroidism

Hypothyroidism is a widespread endocrine condition where insufficient levels of thyroid hormones are produced by the thyroid gland in the body. Thought to affect up to **5% of the population** in Western countries¹, the condition is detected and diagnosed through TSH and T4 blood tests, physical examination, assessment of medical history and MRI or ultrasounds.

As thyroid hormones regulate metabolism, growth and development, when hormone deficiency occurs, a host of symptoms occur that can impact an individual's quality of life and wellbeing.



Natural pharmacological therapy

Overcoming barriers to synthetic treatment for hypothyroidism

The global hypothyroidism market is worth **US \$3,457 million**² where synthetic levothyroxine (L-T4) is the standard treatment option. Synthetic treatments are estimated to make up 92% of the total hypothyroidism market.² But between **5-10% of individuals** receiving therapeutic and stable doses of levothyroxine still report hypothyroidism-related symptoms¹, driving demand for proven alternatives.

Natural Desiccated Thyroid (NDT) is a safe and effective treatment option for hypothyroidism.³ Moreover, 97% of the total NDT market (worth US \$266 million) is focused in the US region.² So, as well as demand from patients for natural and effective hypothyroidism therapies, there is a significant opportunity to treat more patients with NDT worldwide.

Bioiberica's Thyroid API: the natural choice for hypothyroidism

Bioiberica's NDT (known as Thyroid API) provides patients with T4 and T3 at a fixed ratio of 4:1. It is a key ingredient for the pharmaceutical and compounding markets, offering:

- 1 A natural origin thyroid hormone replacement therapy for patients with hypothyroidism
- 2 An alternative treatment for the 5-10% of patients who still experience symptoms despite being treated with standard synthetic levothyroxine
- 3 The opportunity to develop personalised therapies to meet individual and complex patient needs, including specific dosage requirements
- 4 Innovation opportunities and competitive advantage through the launch of new natural thyroid hormone therapies

Bioiberica offers 1XUSP and 3XUSP specifications of Thyroid API.

50%
of patients
preferred
NDT

Inspired by patient data

In a randomised, double-blind crossover trial, almost **50%** of patients preferred NDT to the standard synthetic therapy⁴

Higher treatment satisfaction with NDT according to a survey of more than **11,000** participants⁵