

# Thyrotain



## RECOMMENDED USE

- *Helps in the function of the thyroid gland*
- *Helps to maintain normal production of thyroid hormones*
- *Provides antioxidants that help protect cells against the oxidative effect of free radicals*

## THYROID SUPPORT

Thyrotain is a comprehensive formula designed to support thyroid health. Thyrotain includes iodine, which makes up the backbone of the thyroid hormones thyroxine (T4) and triiodothyronine (T3). The addition of zinc, selenium and vitamin A provide a source of vitamins and minerals to support biological functions, which play a key role in the maintenance of good health. Turmeric, along with the antioxidants vitamin C and E and N-acetyl cysteine (NAC), provides antioxidants that help protect cells against oxidative damage caused by free radicals.

### Overview

The thyroid gland, located in the neck below the Adam's apple, produces T4 and T3 hormones that regulate cell metabolism. In this process, thyroxine is converted into the metabolically active hormone T3. Thyroid hormones are required for mitochondrial metabolism in every cell of the body, making a deficiency in thyroid hormones a detriment to virtually all bodily functions.

Lifestyle factors, environmental toxins and nutrient deficiencies can negatively impact thyroid hormone production. A number of nutrients are required to produce thyroid hormones and to help convert T4 into T3. Heavy metals, such as mercury, lead and cadmium, as well as other chemical contaminants, can also block the conversion of T4 to T3. In addition, long-term stress can lead to increased production of the adrenal hormone cortisol. Excessive levels of cortisol can block the conversion of T4 to T3 and also increase the production of reverse T3 (RT3). RT3 is an isomer of triiodothyronine that competes with T3

at the receptor sites. Conversely, exercise positively impacts the thyroid gland by stimulating hormone secretion and increasing tissue sensitivity to thyroid hormones.<sup>1</sup>

### Vitamins and Minerals

A key component of thyroid hormones is iodine. Iodine is an essential trace mineral and is necessary for the synthesis of thyroid hormones, as it is one of the most important components of the hormones T4 and T3. The thyroid gland absorbs iodine from the blood and incorporates it into thyroid hormones.

Normal thyroid status is dependent on adequate levels of many trace minerals for the synthesis and metabolism of thyroid hormones.

### Antioxidants (Turmeric, Vitamins C and E, and N-Acetyl Cysteine)

Turmeric, along with vitamins C and E and NAC, has been shown to protect against oxidative stress.

### Recommended Dose

**Adults:** Take 4 capsules once per day with food a few hours before or after taking other medications or natural health products. For use beyond 8 weeks, consult a health care practitioner. Ensure to drink enough fluid before, during, and after exercise.

## Medicinal Ingredients (per capsule)

Vitamin C (Ascorbic acid USP).....	50 mg
Vitamin A (Vitamin A palmitate) .....	189 mcg RAE (625 IU)
Vitamin E (d-alpha Tocopheryl acid succinate USP) .....	33.5 mg AT (50 IU)
Iodine (Potassium iodide).....	50 mcg
Zinc (Albion™ Zinc bisglycinate).....	5 mg
Selenium (SelenoExcell® (High-selenium Yeast)) .....	50 mcg
N-Acetyl-L-cysteine USP .....	125 mg
L-Tyrosine (Zea mays, seed) .....	100 mg
Ashwagandha (Withania somnifera, Root) extract.....	75 mg (1.5% Withanolides, 15:1, 1125 mg Dry)
Turmeric (Curcuma longa, Rhizome) .....	25 mg (50% Curcuminoids, 25:1, 625 mg Dry)
Gugul (Commiphora wightii, Gum oleoresin) .....	37.5 mg (2.5 % Guggulsterone, 6:1, 225 mg Dry)

## Non-Medicinal Ingredients

Hypromellose, Microcrystalline cellulose, Silicon dioxide, Calcium silicate, Magnesium stearate.

## Risk Information

Consult a health care practitioner prior to use if you have a thyroid disorder, kidney stones, gallstones, a bile duct obstruction, stomach ulcers or excess stomach acid, a history of non-melanoma skin cancer, or are taking beta-blockers (e.g., propranolol) or calcium channel blockers (e.g., Diltiazem). Consult a health care practitioner if symptoms persist or worsen, or if you have coagulation disorders and/or are at risk for bleeding or are taking anticoagulant or antiplatelet medication. Avoid taking with alcohol or products that cause drowsiness. Discontinue use if gastrointestinal discomfort, headache and/or skin rash appear. Do not use this product if you are taking antibiotics or nitroglycerin or if pregnant or breastfeeding. Some people may experience drowsiness. Exercise caution if operating heavy machinery, driving a motor vehicle or involved in activities requiring mental alertness.

To be sure this product is right for you always read and follow the label.

## References

1. Pizzorno JE, Murray MT (2013). Textbook of Natural Medicine (4th edition). St. Louis: Churchill Livingstone.