Thyroid Matrix BA

A blend of vitamins, minerals, amino acids and herbal extracts to support optimal thyroid function, aid cortisol regulation and optimize the HPA axis





- Provides the nutrients necessary to synthesize thyroid hormone, including L-tyrosine, vitamin A and iodine
- Minerals such as selenium, zinc, manganese and copper are needed to properly activate and convert thyroid hormone and improve receptor sensitivity
- All minerals are delivered in their highly stable and bioavailable amino acid chelate forms
- Bacopa monnieri and KSM-66®
 Withania somnifera, standardized to a
 potent 5% withanolide content, are
 included for their abilities to aid in
 cortisol regulation and to upregulate
 thyroid function
- Vitamin B12 is added as deficiencies in this key vitamin have been shown to be prevalent in autoimmune thyroid populations, often due to concurrent atrophic gastritis or malabsorption issues

Low thyroid function in the form of overt or subclinical hypothyroidism has become one of the most prevalent health issues in the developed world today. While there are many contributing factors, some commonly identified risk factors include poor nutrition, excess stress and polypharmacy. **Thyroid Matrix BA** is a blend of nutrients designed to address all of these factors and to improve and optimize thyroid function.

L-tyrosine is the amino acid building block for thyroid hormones. It is the same amino acid needed to produce cortisol, our anti-stress hormone, and neurotransmitters such as dopamine, norepinephrine and epinephrine. Studies show that it is capable of improving cognition during times of stress driven by sleep deprivation, cold exposure, combat training and unpleasant background noise. Including L-tyrosine in Thyroid Matrix BA is essential for the dual care of both the thyroid and the adrenal glands.

When it comes to minerals, **selenium** is crucial for the proper conversion of the less active thyroid hormone, thyroxine (T4), into the metabolically active triiodothyronine (T3). Without selenium, the metabolically inactive reverse T3 (rT3) is created





instead, putting our bodies into a disadvantageous metabolic state. Zinc, iodine, manganese and copper are also necessary for proper thyroid hormone production, while zinc is also particularly important for increasing thyroid receptor sensitivity. All of these minerals are found in highly bioavailable forms, fully chelated with glycine for optimal stability and absorption.

Regarding vitamins, vitamin A is an interesting nutrient that appears to work synergistically with iodine to regulate thyroid health, while also directly improving thyroid hormone transport and receptors on target tissues. In animals, a vitamin A deficiency leads to reduced thyroid hormone synthesis and thyroid hypertrophy as a result of decreased iodine uptake. In children with even a mild vitamin A deficiency, elevated TSH and the less active T4 hormone have been observed. Interestingly, in iodide-deficient children, supplementation with vitamin A led not only to improved iodide efficiency, but also to a reduced TSH and a lower risk of hypothyroidism. Vitamin B12 is another vitamin that is important in select patients with thyroid concerns, commonly found to be deficient in up to 55% of patients with autoimmune thyroid disease, possibly as a result of concurrent low stomach acid, malabsorption or even autoimmune gastritis.

Finally, we have herbal extracts such as *Bacopa monnieri* and KSM-66® *Withania somnifera* that may positively impact the course of thyroid dysfunction. **Bacopa** is traditionally known for its ability to improve cognition and other areas of neurological function, but animal studies have suggested that it can significantly increase T4 concentrations. Moreover, **bacopa** has been demonstrated to lower cortisol levels. Both poor cognition and imbalanced cortisol levels are associated with thyroid dysfunction. *Withania somnifera* from KSM-66® is similarly most known for

its adaptogenic properties and ability to improve performance during times of stress. However, ashwagandha is a unique adaptogenic herb in that it has a specific affinity for supporting thyroid function with various studies showing increased thyroid hormone secretion, increased concentrations of TSH and T4.

Collectively, all of these ingredients in **Thyroid Matrix BA** support the health of the thyroid gland and thyroid hormones on multiple levels, allowing for a comprehensive and effective approach to a low functioning thyroid. **Thyroid Matrix BA** with Bacopa can be considered a more robust formula when compared to Thyroid Matrix as it contains the addition of vitamins A, B12, *Bacopa monnieri* and a higher dosage of *Withania somnifera* with a greater percentage standardization of withanolides (5% and 1.5%, respectively).





Each capsule contains

L-Tyrosine	250mg
KSM-66® Ashwagandha extract	200mg
(root, Withania somnifera), 12:1, 5.0% v 2400mg*	vithanolides, DHE
Bacopa extract	100mg
(herb top, Bacopa monnieri) 50% bacos	sides
Zinc	5mg
(TRAACS™ zinc bis-glycinate chelate)**	
Copper	666.66mcg
(TRAACS™ copper bis-glycinate chelate)	**
Vitamin A 503.66mg	cg / RAE (1666.66IU)
Vitamin A 503.66mo (all-trans retinyl palmitate)	cg / RAE (1666.66IU)
	cg / RAE (1666.66IU) 500mcg
(all-trans retinyl palmitate)	500mcg
(all-trans retinyl palmitate) Manganese	500mcg
(all-trans retinyl palmitate) Manganese (TRAACS™ manganese bis-glycinate che	500mcg
(all-trans retinyl palmitate) Manganese (TRAACS™ manganese bis-glycinate che Vitamin B12	500mcg
(all-trans retinyl palmitate) Manganese (TRAACS™ manganese bis-glycinate che Vitamin B12 (methylcobalamin)	500mcg late)** 333.33mcg 133.33mcg
(all-trans retinyl palmitate) Manganese (TRAACS™ manganese bis-glycinate che Vitamin B12 (methylcobalamin) Iodine	500mcg late)** 333.33mcg 133.33mcg



* KSM-66 is a registered **Ashwagandha**® trademark of Ixoreal



**TRAACS™ is a Laboratories, Inc. U.S. Patent 7,838,042

Non-Medicinal Ingredients

Vegetable-grade magnesium stearate, microcrystalline cellulose, maltodextrin, citric acid, fumed silica, ascorbyl palmitate, vitamin E, glycine, sucrose, modified starch, brown rice flour. Capsule: hypromellose.

Recommended Use Claim

Helps to support thyroid function, cognitive health and brain function. Helps increase resistance to stress and anxiety in individuals with a history of chronic stress, thereby improving their overall quality of life.

Directions of Use

Adults - Take 1 capsule, 3 times per day with food or as directed by a healthcare professional. Take a few hours before or after taking other medications or natural health products. Ensure you drink enough fluid before, during, and after exercise.

Cautions and Warnings

Do not use if seal is broken. Consult a healthcare professional prior to use if you are pregnant or breastfeeding, if you have benign prostate hypertrophy and/or prostate cancer or if you have a history of non-melanoma skin cancer. Consult a healthcare professional prior to use if you have thyroid disease. Consult a healthcare professional if you have been diagnosed with hypoactive sexual disorder, sexual dysfunction or erectile dysfunction or if you suffer from any psychological disorder and/or condition such as frequent anxiety or depression. For Sleep Aid: Consult a healthcare professional if sleeplessness persists for more than 4 weeks (chronic insomnia). Avoid taking with alcohol or products that cause drowsiness.

Duration of Use

To promote physical performance: use for a minimum of 8 weeks to see beneficial effects.





Known Adverse Reactions

Some people may experience drowsiness. Exercise caution if operating heavy machinery, driving a

motor vehicle or involved in activities requiring mental alertness. May cause digestive problems.



