

Target TS II is a specially designed supplement to help stimulate thyroid function. It contains herbs rich in iodine, a nutrient vital to the thyroid gland. It also contains a mixture of amino acid chelates which have been shown to stimulate the production of hormones from the hypothalamus and pituitary which stimulate thyroid function. The formula is useful for diagnosed cases of low thyroid and symptoms of low thyroid such as obesity, low body temperature, and dry skin.

The amino acid chelates provide the primary benefits of this formula. To understand how these chelates work, it is necessary to understand a little bit about thyroid function. When a need for the thyroid hormones is detected, the hypothalamus produces the thyroid releasing hormone (TRH). TRH travels to the pituitary which stimulates the production of the thyroid stimulating hormone (TSH or thyrotrophin). TSH travels through the blood stream to receptor sites in the thyroid gland. As TSH binds to these receptor sites, it stimulates the production of thyroxin (T4) and tri-iodotyrosine (T3).

TRH from the hypothalamus starts the whole cascade of hormone production, so increasing production of TRH will result in an increase in TSH and ultimately T3 and T4. Three amino acids are found in TRH. They are proline, histidine, and glutamic acid. In this formula, zinc and manganese, two trace minerals critical to the production of TRH, are chelated (or bound) to these three amino acids. This creates a targeted mineral supplement, meaning the amino acids will tend to carry the minerals directly to the hypothalamus.

This concept was verified in scientific studies using rats. These studies used radioactive tagging to trace the path of a manganese chloride supplement compared to the path of a manganese supplement chelated to proline, histidine, and glutamic acid. Rats given the amino acid chelate had twice the level of manganese in the hypothalamus as rats given the manganese chloride. This increase was observed during the first hour. During the second hour, levels of the amino acid chelated manganese fell in the hypothalamus, but rose in the pituitary and thyroid glands. This shows that the chelated supplement was moving through the normal cascade of hormones to produce more T4 and T3 in the thyroid. No such change was observed in the rats given the manganese chloride.

Studies with both rats and pigs also demonstrated that this amino acid chelate of manganese resulted in a reduction of body fat. One of the primary jobs of the thyroid hormone is to burn fat. This study proves this amino acid chelate was able to increase the activity of fat-burning thyroid hormones.

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This special thyroid enhancing amino acid chelate is mixed in a base of herbs which also support thyroid function. The purposes of these complementry herbs are as follows:

Irish Moss grows off the coasts of the North Atlantic, France and Ireland. This herb contains iodine, which is essential for proper thyroid function. Irish moss contains mucilage with large amounts of sulfur which helps in detoxification and the elimination process. It is considered a good remedy for intestinal and respiratory problems.

Kelp can be found on submerged rocks on both coasts of North America, and in Europe north of the Mediterranean. It too contains large amounts of iodine which helps maintain proper thyroid function. Kelp is particularly valuable for nourishing the thyroid gland because it contains di-iodotyrosine, a precursor to the thyroid hormone. An enzyme in the thyroid (thyroid peroxidase) attaches two molecules of di-iodotryrosine to produce thyroxin or T4. So kelp makes the synthesis of thyroid hormones easier. Like Irish moss, it is also helpful for removing toxins from the intestinal tract. Both of these sea vegetables are good sources of trace minerals.

Hops is a nervine. It is included in this formula because nervous system problems and thyroid problems are often related. Hops helps the body relax, which may help to relieve stress on the thyroid gland.

Parsley is rich in sodium and potassium (and other mineral electrolytes) which are essential for proper regulation of bodily fluids. It is a diuretic which helps relieve high blood pressure and the promotion of proper kidney function.

Capsicum is a stimulant that speeds up the circulatory system which in turn helps with digestion, blood flow, elimination and the promotion of sweating. It's been called a "cure-all" by many herbalists due to its ability to aid in tissue repair.

Use and Dosage

To support thyroid function, use two capsules of Target TS II 2-3 times daily. As an aid to weight loss, use two capsules at breakfast and one capsule at lunch. This formula should not be used by persons with hyperactive thyroid disorders such as Grave's disease.

Selected References

Minerals: Right on Target by Steven N. Harvey
Nutritional Herbology by Mark Pedersen
Botanicals for Thyroid Function and Dysfunction by Ryan Drum, Medicines from the Earth: Official Proceedings, 2000.

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