



InterPlexus™

# Thyro-Dyne™

Thyroid Support

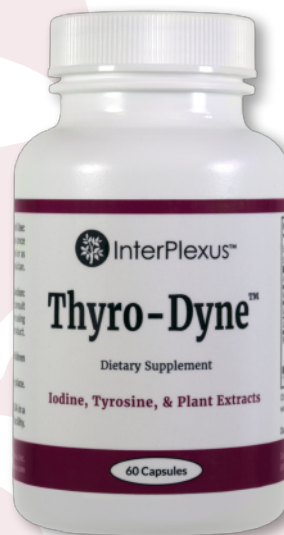
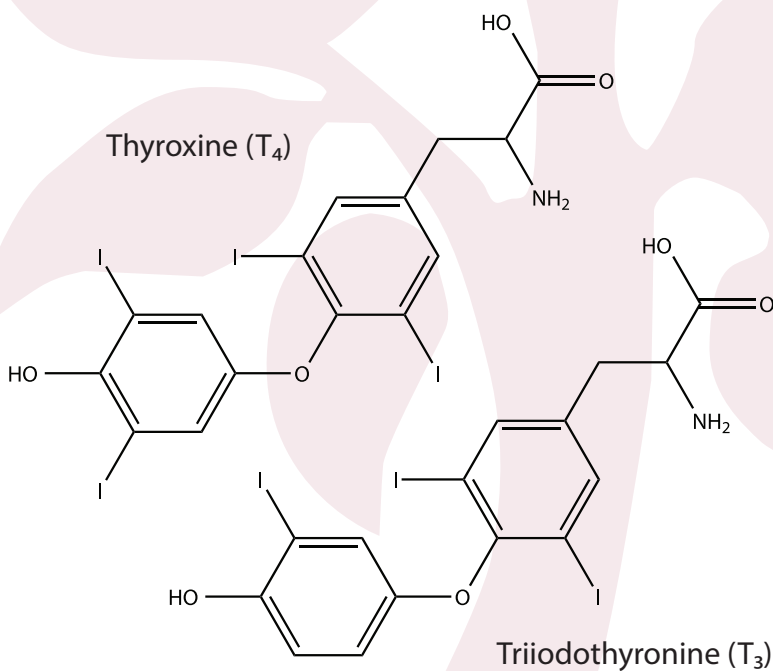
Supports healthy thyroid output and function\*

Thyro-Dyne provides iodine, targeted amino acids including L-tyrosine, and herbal extracts of ashwagandha and guggul.

This formula works by providing precursors, co-factors, and botanicals that have been shown to increase thyroid hormone levels to support thyroid hormone production and function.\*

### Supplementation with Thyro-Dyne:

- Provides precursors for the production of thyroid hormones (T4 and T3)\*
- May increase active thyroid hormone levels\*



Dairy Free



Soy Free



Egg Free



Gluten Free

\*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

For educational purposes only. Consult your physician for any health concerns.

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THYRO-DYNE™

METABOLIC SUPPORT

# Thyro-Dyne™

Thyroid Support  
Supports healthy thyroid output and function\*

Thyro-Dyne contains iodine, L-tyrosine, L-cysteine, ashwagandha, and guggul.

## What the research shows:

### Iodine

Iodine consumption appears to be decreasing in the United States, potentially putting individuals at risk for insufficiency.<sup>1,2</sup> Decreasing levels are likely due to decreased intake of iodized salt and other dietary trends. Iodine is necessary to maintain thyroid hormone levels as iodine is required to produce T3 and T4.

### L-Tyrosine

Tyrosine, another precursor for thyroid hormones, is also vital in their production. In an animal study, diets deficient in tyrosine and phenylalanine (an amino acid precursor for tyrosine) caused significant deficits in thyroid hormone production.<sup>3</sup>

### L-Cysteine

In animal studies, diets deficient in cysteine have been shown to decrease active thyroid hormone production.<sup>4</sup>

Researchers hypothesize that aging and its associated problems may be linked to deficient cysteine intake, and current diets may be suboptimal for maintaining cysteine levels as we age.<sup>5</sup>

### Ashwagandha (*Withania somnifera*)

This herb has a long history of use in Ayurvedic medicine. Notably, one clinical study shows that ashwagandha may increase thyroid hormone production.<sup>6</sup> Similar results from an animal study found that ashwagandha increased thyroid hormone levels.<sup>7</sup>

### Guggul (*Commiphora mukul*)

Another Ayurvedic herb with potential health effects, guggul has been shown in a number of animal studies to raise thyroid hormone production as well.<sup>8,9,10</sup>

Supplement Facts		
Serving Size: 2 Capsules		
Servings per Container: 30		
	Amount Per Serving	% DV
Iodine (as Potassium Iodide)	220 mcg	147%
L-Tyrosine	200 mg	**
L-Cysteine HCl	150 mg	**
Proprietary Plant Extract Blend	900 mg	**
Ashwagandha root ( <i>Withania somnifera</i> ) 2.5% Withanolides;		
Guggul gum ( <i>Commiphora mukul</i> ) 2.5% Guggulsterones.		
** Daily Value (DV) not established.		
<b>Other ingredients:</b> Vegetarian capsule shell (hypromellose, water), microcrystalline cellulose, magnesium stearate.		
<b>Dairy, Soy, Egg &amp; Gluten Free.</b>		
<b>Suggested Use:</b> Take 2 capsules once a day with a meal or as directed by your physician.		
<b>Caution:</b> If pregnant or nursing, consult your physician before using this or any other product. Keep out of reach of children.		
<b>Store in a cool, dry place.</b>		
<b>Manufactured in the USA in a GMP compliant facility.</b>		

## References:

- 1 Stagnaro-Green A, Dogo-Isonaige E, Pearce EN, Spencer C, Gaba ND. Marginal iodine status and high rate of subclinical hypothyroidism in Washington DC women planning conception. *Thyroid*. 2015;25(10):1151-4.
- 2 Hollowell JG, Staehling NW, Hannon WH, et al. Iodine nutrition in the United States. Trends and public health implications: iodine excretion data from National Health and Nutrition Examination Surveys I and III (1971-1974 and 1988-1994). *J Clin Endocrinol Metab*. 1998;83(10):3401-8.
- 3 Elkin RG, Featherston WR, Rogler JC. Effects of dietary phenylalanine and tyrosine on circulating thyroid hormone levels and growth in the chick. *J Nutr*. 1980;110(1):132-8.
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- 5 Dröge W. Oxidative stress and ageing: is ageing a cysteine deficiency syndrome? *Philos Trans R Soc Lond, B, Biol Sci*. 2005;360(1464):2355-72.
- 6 Gannon JM, Forrest PE, Roy Chengappa KN. Subtle changes in thyroid indices during a placebo-controlled study of an extract of *Withania somnifera* in persons with bipolar disorder. *J Ayurveda Integr Med*. 2014;5(4):241-5.
- 7 Panda S, Kar A. Changes in thyroid hormone concentrations after administration of ashwagandha root extract to adult male mice. *J Pharm Pharmacol*. 1998;50(9):1065-8.
- 8 Panda S, Kar A. Guggulu (*Commiphora mukul*) potentially ameliorates hypothyroidism in female mice. *Phytother Res*. 2005;19(1):78-80.
- 9 Panda S, Kar A. Guggulu (*Commiphora mukul*) induces triiodothyronine production: possible involvement of lipid peroxidation. *Life Sci*. 1999;65(12):PL137-41.
- 10 Tripathi YB, Malhotra OP, Tripathi SN. Thyroid stimulating action of Z-guggulsterone obtained from *Commiphora mukul*. *Planta Med*. 1984;50(1):78-80.

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