

Graves' Disease Support Protocol

Clinical Protocol to Support Thyroid Function and Immune Health*



The Pathophysiology of Graves' Disease

Graves' disease (GD) is an autoimmune thyroid condition, and it is the most prevalent form of hyperthyroidism.¹ GD involves the formation of activating thyrotropin-receptor antibodies that induce thyroid hormone overproduction.¹ Common symptoms of GD include hyperthyroidism, goiter, heart palpitations, tremor, orbitopathy, and other extrathyroidal symptoms.¹

The pathophysiology of GD has been associated with chronic inflammation, oxidative stress, and DNA damage.¹⁻³ Contributing factors to GD may include genetic polymorphisms and environmental factors, such as excess dietary iodine, infection, emotional stress, and exposure to tobacco smoke.¹ The thyroid gland can be particularly vulnerable to oxidative damage.⁴

The thyroid gland plays a critical role in energy metabolism and the function of many body systems. Research indicates that certain nutrients may support thyroid cell function, a healthy immune response, and balanced hormones.* This clinical protocol is designed to support patients who have GD and includes evidence-based lifestyle and dietary interventions known to support immune health and a healthy thyroid.*

Diagnostic Biomarkers and Clinical Indicators of Graves' Disease

Clinical evaluation includes a thorough history and physical. Depending on initial signs and symptoms, evaluation may include the following¹

- Serum thyroid hormone levels
 - Thyroid-stimulating hormone (TSH)
 - Free thyroxine and total or free triiodothyronine
 - Thyrotropin receptor antibody (TRAb) or thyroid-stimulating immunoglobulin
- Additional testing may include the following (if warranted)
 - Radioactive iodine uptake
 - Graves' orbitopathy scoring

Therapeutic Diet and Nutritional Considerations

- Address nutritional deficiencies and consider supplementation targeted to support antioxidative status and immune health.* Decreased levels of vitamin D and selenium have been associated with the incidence of GD.⁴⁻⁸
- Advise consumption of diets rich in fruits and vegetables, particularly those high in polyphenols and myo-inositol. These compounds have been shown to support healthy thyroid hormonal balance, immune health, antioxidative status, and a normal response to inflammation.^{2,8,9}
- Consider probiotic-rich foods or supplementation with probiotics. Gut microbiome compositional changes have been associated with GD.¹⁰

Lifestyle Interventions

- Provide resources for smoking cessation. Cigarette smoking is associated with GD.¹
- Recommend stress management techniques such as meditation, yoga, or similar mindfulness practices, as psychological stress may be a risk factor.¹



Supplement Protocol

Primary Support:



ImmunoMod-A™

Dose	2 capsules twice per day with meals
Duration	Ongoing
Formula Highlights	ImmunoMod-A™ has been formulated to help balance a healthy inflammatory response, which is necessary to help maintain optimal immune function in the body.* It features ParActin®, an extract of <i>Andrographis paniculata</i> , which has been shown to help modulate immune, inflammatory, and oxidative pathways.* This product also contains the monosaccharide N-acetyl-D-glucosamine, along with curcumin, a polyphenolic compound extract from the turmeric spice. Together, the ingredients in ImmunoMod-A™ work to support the proper expression of nuclear factor-kappa B and its related downstream cytokines to help maintain a healthy, balanced immune response.*

Thyrommune™

Dose	1 capsule per day with a meal
Duration	Ongoing
Formula Highlights	Thyrommune™ is uniquely formulated to support optimal thyroid function, healthy hormone balance, and a healthy immune system.* Thyrommune™ contains a targeted blend of myo-inositol and selenium as selenomethionine that possesses complementary actions in the human body.* Each 1-capsule serving provides 600 mg of myo-inositol and 83 mcg of selenomethionine, which was formulated based on clinically researched amounts of selenomethionine and myo-inositol.

Vitamin D Supreme

Dose	1 to 2 capsules daily based on lab values to achieve 50 ng/mL to 70 ng/mL
Duration	Ongoing
Formula Highlights	Vitamin D Supreme provides clinically useful amounts of vitamin D3 and vitamin K (both K1 and K2 [as MK-4]), along with geranylgeraniol (GG), a substance produced naturally in the body, to promote optimal bone and arterial health and to maintain the immune system in proper balance.* The amount of vitamins D and K in this formula may be beneficial for those who do not receive adequate sun exposure and/or dietary sources of these vitamins.* Vitamins D and K work synergistically, thus, increasing vitamin D increases the need for vitamin K.*

OmegAvail™ Hi-Po

Dose	1 to 2 capsules daily based on lab values to achieve 50 ng/mL to 70 ng/mL
Duration	Ongoing
Formula Highlights	OmegAvail™ Hi-Po is our highest potency omega-3 product, providing 1600 mg (800 mg each) of eicosapentaenoic acid (EPA) and docosahexapentaenoic acid (DHA) per 2-softgel serving. Omega-3 fatty acids also promote a healthy inflammatory response and proper cell membrane integrity.*

Adjunct Support:

IgGI Shield™

Dose	1 scoop daily with a meal
Duration	Ongoing
Formula Highlights	IgGI Shield™ combines ImmunoLin® with N-acetyl-D-glucosamine to support the structure of the cells of the intestinal lining and to promote a healthy inflammatory response in the cells of the gastrointestinal tract.* These ingredients work together to provide support to the intestinal barrier and to support gut immune health.* ImmunoLin®, a serum-derived bovine immunoglobulin concentrate (SBI), is the only purified, dairy-free source of immunoglobulin G (IgG) available as a dietary supplement. Immunoglobulins play an integral role in the support of healthy immune function at the gut and systemic levels.* N-acetyl-D-glucosamine promotes healthy immune function by promoting a balanced immune response.*

For a list of references cited in this document, please visit:

<https://www.designsforhealth.com/api/library-assets/literature-reference---graves-disease-support-protocol-references>

ImmunoLin® ImmunoLin® is a registered trademark of Entera Health, LLC.

ParActin® is a registered trademark of HP Ingredients protected by US Patent No. 8,084,495 B2.

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Health-care practitioners are encouraged to use clinical judgement with case-specific dosing based on intended goals, subject body weight, medical history, and concomitant medication and supplement usage. Any product containing botanical substances has the potential for causing individual sensitivities, appropriate monitoring, including liver function tests (LFT) is recommended.

For considerations regarding herb-drug and nutrient-drug interactions, please refer to reliable, evidence-based resources such as the Natural Medicine Database or Stargrove MB, Treasure J, McKee DL. *Herb, Nutrient, and Drug Interactions: Clinical Implications and Therapeutic Strategies*. St. Louis, MO: Mosby-Elsevier; 2008.

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