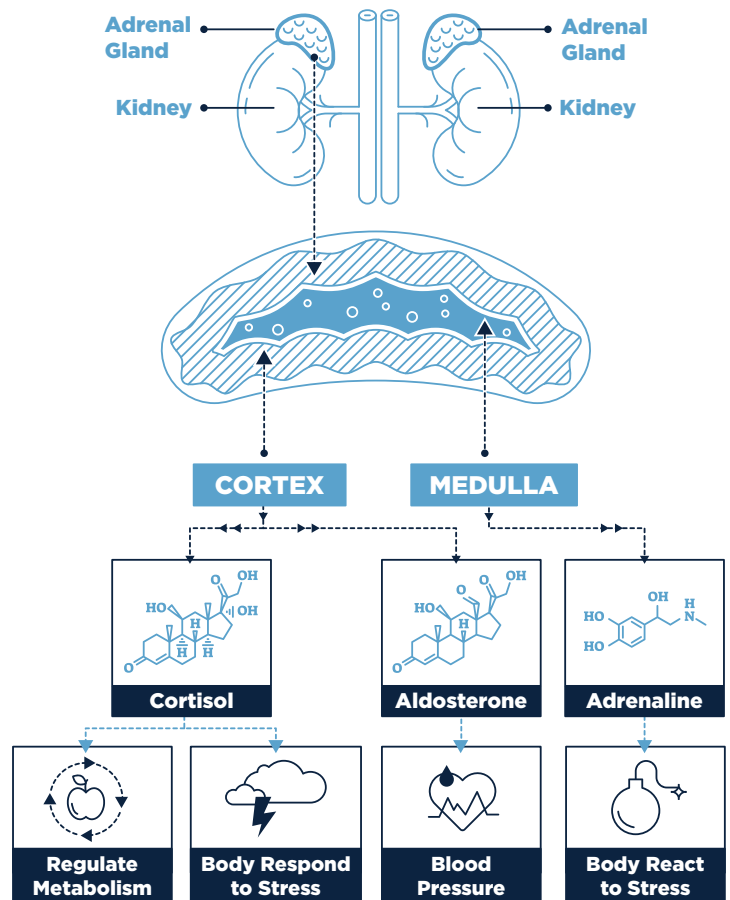


CLINICAL PROTOCOL TO SUPPORT HEALTHY ADRENAL FUNCTION*

The hypothalamic-pituitary-adrenal axis is comprised of a complex system of hormones and feedback mechanisms that coordinate physiological response to stress. In the case of hyper-responsiveness, adrenal function and hormone activity are elevated, leading to increased synthesis and release of glucocorticoids (cortisol, cortisone) and catecholamines (epinephrine, norepinephrine). Prolonged release of these compounds can lead to chronic imbalances in adrenal function and downstream effects to metabolic and neuroendocrine activity. Owing to a chronically hyperactive stress system, sequelae may include depression, anxiety, metabolic syndrome, osteoporosis, and immunosuppression.¹

To address hyper-responsiveness, clinicians may seek to mitigate external stressors through lifestyle and behavior modification, while simultaneously providing symptom relief through nutritional and dietary supplement strategies. Adaptogens are often employed to help modulate adrenal and neurotransmitter pathways.*

This clinical protocol is designed to support healthy adrenal function in the face of hyper-responsiveness through lifestyle intervention, dietary modification, adaptogenic herbs, and targeted cofactors for adrenal support.*



Diagnostic Biomarkers / Clinical Indicators in Adrenal Function

- Adrenal Stress Index
- Organic Acids Test
- [GenomicInsight® Genomic Health Profile](#) – Endocrine Report

Lifestyle Intervention

Consult patients on the following to support a healthy stress response:

- Integrating stress management techniques such as breath work, biofeedback, and heart rate variability training
- Writing down all worries/concerns and list of “to-dos” before bed to clear the mind
- Incorporating yoga or other mind-body physical practices
- Practicing Mindfulness-Based Stress Reduction (MBSR)

Therapeutic Diet and Nutrition Considerations

- Ensure adequate magnesium status and achievement of recommended intake (310-420 mg/day based on age and gender²) through supplementation or food-rich sources such as kale, spinach, Swiss chard, pumpkin seeds, almonds, cashews, black beans, and dark chocolate. Magnesium deficiency has been associated with induction of anxiety and HPA axis dysregulation.³
- Guide patients to consume foods high in adrenal-supportive nutrients such as vitamins C, B6, B12, thiamin, riboflavin, and pantothenic acid.
- Recommend patients avoid caffeine-containing products and stimulant-containing herbs especially after midday.
- Manage blood sugar levels by consuming recommended daily fiber intake, avoiding highly refined carbohydrates, and pairing protein and fat with meals.
- Reduce or avoid consumption of energy drinks and sugar-sweetened beverages.

*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.



Supplement Protocol

Primary Support:

CatecholaCalm™

Dose	3 capsules one to two times per day with lunch and/or dinner
Duration	8 weeks; retest Adrenal Salivary Index to reassess
Formula Highlights	CatecholaCalm™ is designed to support healthy catecholamine levels with adaptogenic herbs and nutrients that may help mood and promote calmness and relaxation.* This unique formulation addresses adrenal gland health, which may help people handle stress more effectively.*

Magnesium Chelate Powder

Dose	5 grams (approx. one teaspoon) of powder mixed in eight ounces of water per day
Duration	8 weeks; retest Adrenal Salivary Index to reassess
Formula Highlights	Magnesium Bisglycinate chelate is one of the best absorbed forms of magnesium. Each 5 gram (1 teaspoon) serving provides 300 mg of elemental magnesium in a great-tasting, orange flavored product. This product should not cause any of the unfavorable gastrointestinal symptoms associated with magnesium supplementation due to the very stable chelate formed between two glycine molecules and each magnesium ion via a patented process. This product is sweetened with the natural herb stevia.

NeuroCalm™

Dose	2 capsules twice per day in between meals
Duration	8 weeks; retest Adrenal Salivary Index to reassess
Formula Highlights	NeuroCalm™ is designed to promote the activity of GABA and serotonin, which may help support healthy mood, cravings, and feelings of calm, satiety, and satisfaction.* NeuroCalm™ contains PharmaGABA®, a form of GABA naturally manufactured via a fermentation process, which is considered more effective than chemically produced synthetic forms. Support for the production of calming neurotransmitters is also provided by L-theanine and taurine.*



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

<https://www.designsforhealth.com/protocol-references/protocol-adrenal-dysregulation-hyper-references.pdf>

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 around herb/nutrient-drug interactions, please refer to reliable, evidence-based resources such as Natural Medicine Database or Stargrove, M. B., Treasure, J., & McKee, D. L. (2008). *Herb, nutrient, and drug interactions: Clinical implications and therapeutic strategies*. St. Louis, Mo: Mosby Elsevier.

Well World™ and *Designs for Health* and logo are trademarks of Designs for Health, Inc. © 2020 Designs for Health, Inc. All rights reserved.

*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.