Template

Entire dispensary

Review plan (10)

< Back

Stress and Adrenal Support

▼ Template by Fullscript

Updated Nov 18th, 2024

Preview Evidence

Evidence rating

The following protocols were developed using only a,b,c-quality evidence

Learn more about our rating scale 🖸

Overview

Stress impacts adrenal function and may cause fatigue, cognitive impairment, anxiety, and depression. Burnout syndrome is a result of stress and has been receiving more attention as its impact in the medical field has been increasing. In a systematic review of 182 studies, the total estimated rate of burnout among physicians was as high 67.0%. (16) While physicians consistently have higher rates of burnout and stress than the general population, the prevalence of stress in the general population has been increasing as well. In 2020, stress prevalence in response to the global pandemic was cited at 29.6% according to a systematic review and meta-analysis of five studies. (17)

Consistent or prolonged stress to the point of burnout negatively contributes to overall health. Risk of chronic fatigue, cardiovascular disease, and mortality all increase with chronic stress. (12) Stigma around seeking help may prevent some people from react out at earlier stages. When surveyed, medical residents most commonly were concerned

about negative consequences with their career if they took a medical leave. (5) Actively looking for signs of stress, alleviating them, and preventing further adrenal damage are essential to assisting patients through hard times. Supporting adrenal gland function or modulating stress response through other physiological mechanisms is an important aspect of integrative care for this patient population.

The ingredients presented in the protocol below reflect research findings demonstrating the efficacy of herbs and supplements that might be used to support adrenal function and alleviate stress.

Ashwaghanda (Withania somnifera)

Ashwagandha (Withania somnifera)

240-300 mg, total per day, minimum 8 weeks (2)(13)

- Serum cortisol, body weight, and body mass index, Perceived Stress Scale and Food Cravings Questionnaire, Oxford Happiness Questionnaire, and Three-Factor Eating Questionnaire were all improved when given 300 mg twice per day (3)
- High-concentration full-spectrum ashwagandha root extract increased quality of life, decreased serum cortisol, and decreased stress-assessment score compared to placebo in adults with a history of chronic stress (2)
- HPA-axis function and level of stress improved as shown by decreases in Hamilton Anxiety Rating Scale (HAM-A), morning cortisol levels, and DHEA-S compared to placebo when given 240 mg once daily (<u>13</u>)
- Systematic review of three studies found *withania somnifera* effective for treatment in anxiety due to improved scores for anxiety or stress when compared to placebo (<u>15</u>)

For a more detailed review of Withania somnifera, refer to the Fullscript reference sheet.

Rhodiola (Rhodiola rosea)

Rhodiola (Rhodiola rosea)

400-576 mg, total per day, minimum 28 days (<u>6</u>)(<u>14</u>)

- Rhodiola increases mental performance including the capacity to concentrate and decreased cortisol response to awakening stress (<u>14</u>)
- Improvement in general fatigue including aspects like physical and mental fatigue, neuro-motoric tests, and overall wellbeing was shown to be significantly improved (4)(18)

 Standardized extract SHR-5 improved fatigue syndrome from stress burnout demonstrated by improved Pine's burnout scale score, post-treatment cortisol responses, and ability to concentrate compared to placebo when given 576 mg per day (14)

- Rhodiola rosea extract WS® 1375 improved stress, disability, and functional impairment as early as 3 days into treatment compared to placebo in people with life-stress symptoms (6)
- Healthy physicians working night shifts experienced improved fatigue index score when given standardized extract SHR-5 compared to placebo (4)
- During the examination period, students experienced improved general well-being, mental fatigue, neuro-motoric tests, and physical fitness with supplementation (<u>18</u>)

For a more detailed review of *Rhodiola rosea*, refer to the <u>Fullscript reference sheet.</u>

Asian ginseng (Panax ginseng)

Asian ginseng (*Panax ginseng*) 960-2000 mg, total per day, minimum 4 weeks (<u>7</u>)(<u>10</u>)

- Numerical rating scale (NRS) score, a self-assessment of fatigue severity, was improved, as well as visual analogue scale (VAS) when given 2000 mg per day (10)
- Panax has shown to reduce circulating cortisol while increasing enzymatic and nonspecific antioxidant activity in response to physical stress (<u>7</u>)
- High (960 mg) and low (160 mg) doses of GINST15, enzyme-fermented ginseng, were given and intense resistance exercise work stress was done and compared to placebo; circulating cortisol decreased while enzymatic and nonspecific antioxidant activity increased demonstrating high and low dose to be effective in treating physical stress (7)
- Systematic review of 10 studies found *panax ginseng* to be effective for the treatment of fatigue with chronic illness with low adverse risks (1)
- When given 1 or 2 g dose of ethanol extracts of panax ginseng, all subjects
 decreased ROS and MDA levels, 1 g dose improved GSH concentration and GSH-Rd
 activity, and 2 g dose decreased VAS score, and improved Mental NRS compared to
 placebo (10)

L-Theanine

L-Theanine

200-400 mg, total per day, minimum 4 weeks (8)(20)

• Alleviated stress-related ailments demonstrated by improved scores in Self-rating Depression Scale, State-Trait Anxiety Inventory-trait, and Pittsburgh Sleep Quality Index (PSQI) compared to placebo (8)

- L-theanine improved acute stress response demonstrated by a decrease in heart rate and salivary immunoglobulin A (Ig-A), when given acute doses at the start and midway through a stressful procedure compared to placebo (11)
- Systematic review of nine articles found I-theanine to be effective in reducing stress and anxiety for people exposed to stressful conditions (20)
- Decreased stress as shown by attenuation of blood-pressure increase and decrease in tension-anxiety score compared to placebo (21)

B Complex

B Complex

Variable based on ingredient and formulation, use for a minimum of 12 weeks

- Systematic review and meta-analysis of 18 articles found B vitamins to have an overall positive effect on mood or facets of mood with a particularly significant benefit to stress (22)
- Psychological strain and mood from occupational stress improved shown by decreased levels of confusion, depression, dejected mood, or feelings of strain with supplementation over a 3 month period (19)
- B complex supplementation following a natural disaster resulted in improved stress and anxiety to a greater extent than those in the single-nutrient control group (9)

References

- 1. Arring, N. M., Millstine, D., Marks, L. A., & Nail, L. M. (2018). Ginseng as a Treatment for Fatigue: A Systematic Review. *Journal of Alternative and Complementary Medicine*, 24(7), 624–633. https://pubmed.ncbi.nlm.nih.gov/29624410/ (A)
- 2. Chandrasekhar, K., Kapoor, J., & Anishetty, S. (2012). A prospective, randomized double-blind, placebo-controlled study of safety and efficacy of a high-concentration full-spectrum extract of ashwagandha root in reducing stress and anxiety in adults. *Indian Journal of Psychological Medicine*, *34*(3), 255–262. https://pubmed.ncbi.nlm.nih.gov/23439798/ (B)
- 3. Choudhary, D., Bhattacharyya, S., & Joshi, K. (2017). Body Weight Management in Adults Under Chronic Stress Through Treatment With Ashwagandha Root Extract: A Double-Blind, Randomized, Placebo-Controlled Trial. *Journal of Evidence-Based*

Complementary & Alternative Medicine, 22(1), 96–106. https://pubmed.ncbi.nlm.nih.gov/27055824/ (B)

- 4. Darbinyan, V., Kteyan, A., Panossian, A., Gabrielian, E., Wikman, G., & Wagner, H. (2000). Rhodiola rosea in stress induced fatigue—a double blind cross-over study of a standardized extract SHR-5 with a repeated low-dose regimen on the mental performance of healthy physicians during night duty. *Phytomedicine: International Journal of Phytotherapy and Phytopharmacology*, 7(5), 365–371. https://pubmed.ncbi.nlm.nih.gov/11081987/ (C)
- 5. Dyrbye, L. N., Leep Hunderfund, A. N., Winters, R. C., Moeschler, S. M., Vaa Stelling, B. E., Dozois, E. J., Satele, D. V., & West, C. P. (2021). The Relationship Between Burnout and Help-Seeking Behaviors, Concerns, and Attitudes of Residents. *Academic Medicine: Journal of the Association of American Medical Colleges*, *96*(5), 701–708. https://pubmed.ncbi.nlm.nih.gov/33031121/ (C)
- 6. Edwards, D., Heufelder, A., & Zimmermann, A. (2012). Therapeutic effects and safety of Rhodiola rosea extract WS® 1375 in subjects with life-stress symptoms-results of an open-label study. *Phytotherapy Research: PTR*, *26*(8), 1220–1225. https://pubmed.ncbi.nlm.nih.gov/22228617/ (C)
- 7. Flanagan, S. D., DuPont, W. H., Caldwell, L. K., Hardesty, V. H., Barnhart, E. C., Beeler, M. K., Post, E. M., Volek, J. S., & Kraemer, W. J. (2018). The Effects of a Korean Ginseng, GINST15, on Hypo-Pituitary-Adrenal and Oxidative Activity Induced by Intense Work Stress. *Journal of Medicinal Food*, *21*(1), 104–112. https://pubmed.ncbi.nlm.nih.gov/28981384/ (C)
- 8. Hidese, S., Ogawa, S., Ota, M., Ishida, I., Yasukawa, Z., Ozeki, M., & Kunugi, H. (2019). Effects of L-Theanine Administration on Stress-Related Symptoms and Cognitive Functions in Healthy Adults: A Randomized Controlled Trial. *Nutrients*, *11*(10). https://pubmed.ncbi.nlm.nih.gov/31623400/ (C)
- 9. Kaplan, B. J., Rucklidge, J. J., Romijn, A. R., & Dolph, M. (2015). A randomised trial of nutrient supplements to minimise psychological stress after a natural disaster. *Psychiatry Research*, 228(3), 373–379. https://pubmed.ncbi.nlm.nih.gov/26154816/ (C)
- 10. Kim, H.-G., Cho, J.-H., Yoo, S.-R., Lee, J.-S., Han, J.-M., Lee, N.-H., Ahn, Y.-C., & Son, C.-G. (2013). Antifatigue effects of Panax ginseng C.A. Meyer: a randomised, double-blind, placebo-controlled trial. *PloS One*, *8*(4), e61271. https://pubmed.ncbi.nlm.nih.gov/23613825/ (B)
- 11. Kimura, K., Ozeki, M., Juneja, L. R., & Ohira, H. (2007). L-Theanine reduces psychological and physiological stress responses. *Biological Psychology*, *74*(1), 39–45. https://pubmed.ncbi.nlm.nih.gov/16930802/ (C)
- 12. Lo, E.-W. V., Wei, Y.-H., & Hwang, B.-F. (2020). Association between occupational burnout and heart rate variability: A pilot study in a high-tech company in Taiwan. *Medicine*, *99*(2), e18630. https://pubmed.ncbi.nlm.nih.gov/31914045/ (C)

13. Lopresti, A. L., Smith, S. J., Malvi, H., & Kodgule, R. (2019). An investigation into the stress-relieving and pharmacological actions of an ashwagandha (Withania somnifera) extract: A randomized, double-blind, placebo-controlled study. *Medicine*, 98(37), e17186. https://pubmed.ncbi.nlm.nih.gov/31517876/ (B)

- 14. Olsson, E. M., von Schéele, B., & Panossian, A. G. (2009). A randomised, double-blind, placebo-controlled, parallel-group study of the standardised extract shr-5 of the roots of Rhodiola rosea in the treatment of subjects with stress-related fatigue. *Planta Medica*, 75(2), 105–112. https://pubmed.ncbi.nlm.nih.gov/19016404/ (B)
- 15. Pratte, M. A., Nanavati, K. B., Young, V., & Morley, C. P. (2014). An alternative treatment for anxiety: a systematic review of human trial results reported for the Ayurvedic herb ashwagandha (Withania somnifera). *Journal of Alternative and Complementary Medicine*, 20(12), 901–908. https://pubmed.ncbi.nlm.nih.gov/25405876/ (A)
- 16. Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata, D. A. (2018). Prevalence of Burnout Among Physicians: A Systematic Review. *JAMA: The Journal of the American Medical Association*, 320(11), 1131–1150. https://pubmed.ncbi.nlm.nih.gov/30326495/ (A)
- 17. Salari, N., Hosseinian-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S., & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. *Globalization and Health*, *16*(1), 57. https://pubmed.ncbi.nlm.nih.gov/32631403/ (A)
- 18. Spasov, A. A., Wikman, G. K., Mandrikov, V. B., Mironova, I. A., & Neumoin, V. V. (2000). A double-blind, placebo-controlled pilot study of the stimulating and adaptogenic effect of Rhodiola rosea SHR-5 extract on the fatigue of students caused by stress during an examination period with a repeated low-dose regimen. *Phytomedicine: International Journal of Phytotherapy and Phytopharmacology, 7*(2), 85–89. https://pubmed.ncbi.nlm.nih.gov/10839209/ (C)
- 19. Stough, C., Scholey, A., Lloyd, J., Spong, J., Myers, S., & Downey, L. A. (2011). The effect of 90 day administration of a high dose vitamin B-complex on work stress. *Human Psychopharmacology*, *26*(7), 470–476. https://pubmed.ncbi.nlm.nih.gov/21905094/ (B)
- 20. Williams, J. L., Everett, J. M., D'Cunha, N. M., Sergi, D., Georgousopoulou, E. N., Keegan, R. J., McKune, A. J., Mellor, D. D., Anstice, N., & Naumovski, N. (2020). The Effects of Green Tea Amino Acid L-Theanine Consumption on the Ability to Manage Stress and Anxiety Levels: a Systematic Review. *Plant Foods for Human Nutrition*, *75*(1), 12–23. https://pubmed.ncbi.nlm.nih.gov/31758301/ (A)
- 21. Yoto, A., Motoki, M., Murao, S., & Yokogoshi, H. (2012). Effects of L-theanine or caffeine intake on changes in blood pressure under physical and psychological stresses. Journal of Physiological Anthropology, 31, 28. https://pubmed.ncbi.nlm.nih.gov/23107346/ (C)

22. Young, L. M., Pipingas, A., White, D. J., Gauci, S., & Scholey, A. (2019). A Systematic Review and Meta-Analysis of B Vitamin Supplementation on Depressive Symptoms, Anxiety, and Stress: Effects on Healthy and "At-Risk" Individuals. *Nutrients*, *11*(9). https://pubmed.ncbi.nlm.nih.gov/31527485/ (A)

Disclaimer: Protocols are intended solely as an informational reference tool for practicing health care professionals. The content provided is not intended to be for medical diagnosis or treatment, is not a substitute for your professional judgment, and is not meant to provide you medical or professional advice. You should evaluate and independently confirm the appropriateness of the content provided, including verifying uses, dosages, warnings and contraindications on product labels, and rely on your experience and judgment and other available resources when applying the provided content to an actual client care situation. While content has been obtained from sources believed to be reliable. we cannot and do not guarantee the accuracy, validity, timeliness or completeness of the content. We make no representation or warranty, express or implied, including, without limitation, any warranty of merchantability or of fitness for a particular purpose, and you assume full responsibility for the use of the content and products, and agree that Fullscript and its content providers are not responsible or liable for any claim, loss, injury or damage arising from your use of the information. Statements regarding dietary and other health care supplements have not been evaluated by the FDA, and are not intended to diagnose, treat, cure, or prevent any disease.

Template

Total starts at \$144.75

Add to plan

① We won't overwrite any existing dosage information.

^{*}These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

[†]Claims based on traditional homeopathic practice, not accepted medical evidence. Not FDA evaluated.



© Fullscript 2025. All rights reserved.

Terms of Service Privacy Statement Privacy Rights Notice

Help and Support