

Science to Symptoms Introduction



- Poor sleep has been shown to increase oxidative stress markers^{9,11}
- Glutathione, ATP, cysteine, and homocysteine levels were found to be significantly reduced following one night of poor sleep⁷
- The immune system can generate free radicals and deplete antioxidants⁸
- Kavince OS formula specific study showed statistically significant improvements in sleep latency and efficiency within four days¹



- Cortisol secretion follows a marked circadian pattern, with ideal lowest cortisol secretion during the night²
- Irregular, nighttime cortisol secretion is stimulating to the system and can disrupt an optimal sleep pattern¹³
- Cortisol inhibits the secretion and action of insulin and promotes maturation of adipocytes^{14,15}
- Elevated bedtime cortisol levels are associated with increased abdominal fat¹⁶

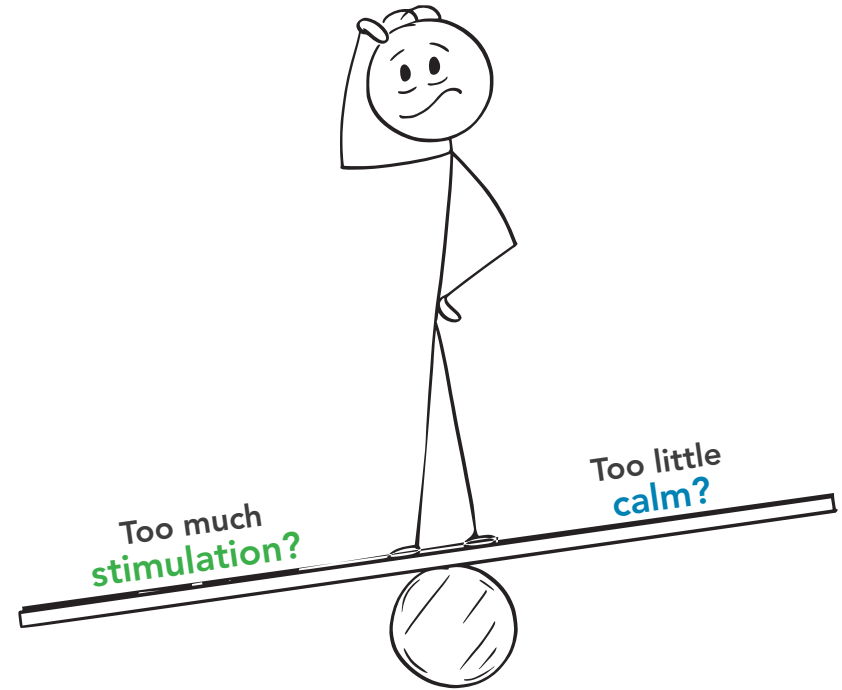


- Beta brain waves are associated with wakefulness and excitation⁵
- Alpha brain waves are naturally generated when an individual is calm and relaxed⁶
- Contains therapeutic doses of L-theanine, linked to the generation of alpha brain waves⁵
- Includes proprietary botanical micro-encapsulation and extraction technique researched to efficiently reduce uncomfortable symptoms^{22,23}



- Increased activity from hypothalamic-pituitary-adrenal (HPA) axis in response to stressors leads to a "fight or flight" effect, including increased levels of norepinephrine¹⁷
- Elevated levels of norepinephrine can exacerbate anxiousness and fatigue, perpetuating circadian rhythm disruptions that can impact sleep^{20,21}
- HPA dysregulation, including elevations in cortisol, norepinephrine, and epinephrine, can result in feelings of anxiousness and/or overstimulation^{18,19}

Sound sleep is a balancing act



Which presents in your office?

Go beyond the intro, download full product specification sheets at www.neuroscienceinc.com



*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.

1. Data on file, Kavince OS study. 2019. Neuroscience, Osceola, WI 54020.
 2. Data on file, Alpha GABA PM study. 2019. Neuroscience, Osceola, WI 54020.
 3. Data on file, Calm CP study. 2012. Neuroscience, Osceola, WI 54020.
 4. Data on file, Calm PRT study. 2006. Neuroscience, Osceola, WI 54020.
 5. Juneja L, et al. Trends Food Sci Tech. 1999;10:199-204.
 6. Kimura K, et al. Biol Psychol. 2007; 74(1):39-45.
 7. Trivedi M, et al. PLoS One. 2017;12(7):e0181978.
 8. Gulicz M, et al. Prog Neuropsychopharmacol Biol Psychiatry. 2012 Jun 1;37(2):247-51.
 9. Gulicz M, et al. Prog Neuropsychopharmacol Biol Psychiatry. 2012 Jun 1;37(2):247-51.
 10. Bryant P, et al. Nat Rev Immunol. 2004;4:457-67.
 11. Luyster FS, et al. Sleep. 2012;35(6):727-34.
 12. Elder G, et al. Sleep Med Rev. 2014;18(3):215-24.
 13. Hirotsu C, et al. Sleep Sci. 2015 Nov;8(3): 143-152.
 14. Andrews R and Walker B. Clin Sci (London). 1999;96(5):513-23-20.
 15. Peckett A, et al. Metabolism. 2011;60(11):1500-10.
 16. Abraham S, et al. Obesity (Silver Spring). 2013;21(1):E105-17.
 17. Lee D, et al. BMB Rep. 2015;48(4):209-16.
 18. Kizanova O, et al. Stress. 2016;19(4):419-28.15.
 19. Heim C, et al. CNS Spectr. 2009;14(1):13-24.16.
 20. Meerlo P, et al. Sleep Med Rev. 2008;12:197-210.17.
 21. Mehta R, et al. Neuropharm. 2016;14:28-40.
 22. Taavoni S, et al. Compl Thera Clin Pract. 2013;19:193-6.
 23. Scaglione F and Zangara A. J Sleep Disord Manag.2017;3:016.

Kavinace® OS

Target cellular implications of sleeplessness with a proven formula^{1*}

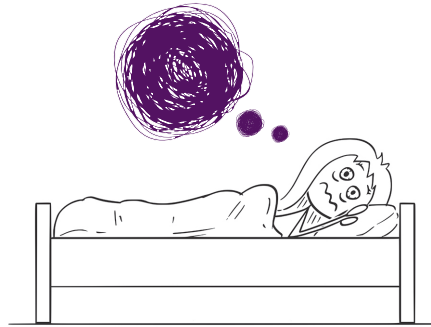


Toxic lifestyle habits

- Active immune system
- Requires quick relief from sleeplessness

Alpha GABA PM

Features high-dose L-theanine (400 mg)**

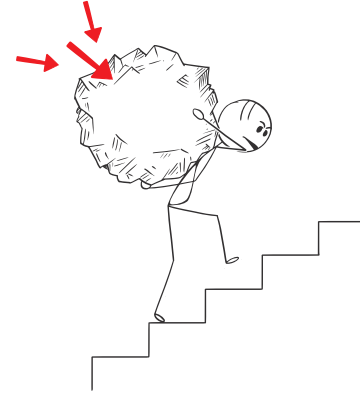


Can't turn off the mind ...

- Ruminating thoughts of what's happened and what's to come
- Need to mentally 'downshift'

Calm CP

Contains the highest corosolic acid (Banaba extract) on the market (>10 mg)**



Relatively sustained stress ↓

- Consistently interrupted sleep
- New or increasing abdominal fat accumulation

Calm PRT

The most active rosavins of any Rhodiola product on the market (112.5 mg)**



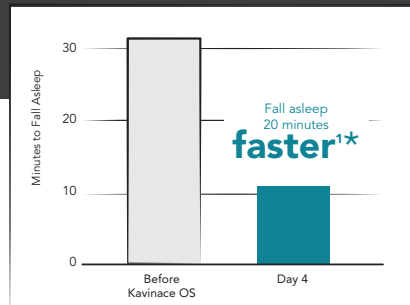
Tired but wired

- Can't wake up in the morning
- Can't sleep at night

Symptom depictions (above) represent a possible presentation; please see back page for referenced scientific claims

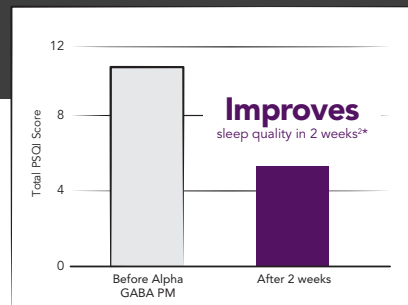
** Per serving, based on meta-analysis of public formulas

Proven results: Neuroscience formula specific studies

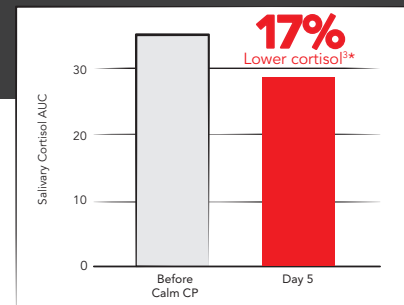


Targeted pathways

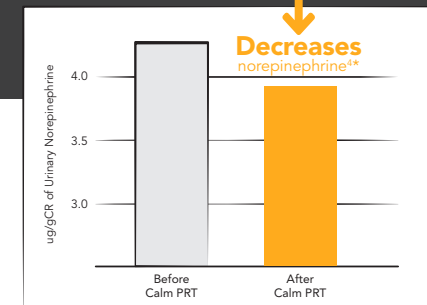
- Glutamate
- Melatonin



- Glutamate
- Melatonin
- GABA
- Serotonin



- Cortisol



- Cortisol
- Epinephrine
- Norepinephrine

Find the balance

Calming support (left 2 columns) can be combined with dampening stimulation (right 2 columns)

*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.