Sereniten Plus

Stress/Relaxant Support Formula

DESCRIPTION

Sereniten Plus is a combination of Lactium® casein decapeptide, L-Theanine and Vitamin D to support the Hypothalamic-Pituitary-Adrenal (HPA) axis and feedback loop for stress support, cortisol regulation, and weight management. Lactium® and L-Theanine have been shown to provide a calming effect and may support normal sleep that is affected by stress.[‡]

INDICATIONS

• Sereniten Plus is for individuals wanting to support occasional stress and the HPA axis. [‡]

FUNCTIONS AND MECHANISM OF ACTION

The neurochemical and hormonal reactions to stress are regulated through the Hypothalamic-Pituitary-Adrenal axis (HPA axis) designed for acute stressors that resolve rapidly. Present day chronic, low-grade stress results in the continual release of CRH (Corticotrophin Releasing Hormone) from the hypothalamus. This chronic secretion causes dysfunction in the HPA axis, desensitizing the hypothalamic and pituitary receptors to negative feedback from adrenaline, noradrenalin and particularly, cortisol. Loss of negative feedback within the neuro-hormonal system results in a multitude of health issues. It increases the production of ADH, aldosterone, and angiotensin increasing vascular vasoconstriction and sodium retention. Additionally, it directly increases LDL production as well as glucocorticoid and mineralcorticoid release. When the negative feedback loop within the HPA-axis is disrupted, chronic hormonal secretion becomes "normal" for that individual. In this state, they either fail to recognize they are stressed, or they may experience exaggerated emotional and physical response to every stressor including intolerance to noise or light, or feeling overwhelmed by simple tasks. Stress affects so many aspect of health that it is becoming crucial to rebalance the HPA-axis. **Lactium®**, a bioactive decapeptide, alpha-1 sequence isolated from milk is effective in not only decreasing glucocorticoid secretion supports the HPA pathway. Lactium® works at three areas of the HPA-axis:

 Lactium® binds specifically to the BZD site of the GABA-A receptor and does NOT bind to the PBR site of the GABA-A receptor responsible for the sedating effects seen with benzodiazepines.
Lactium® increases the sensitivity of the hypothalamus to cortisol, re-establishing receptor sensitivity feedback within the HPA-axis. It reduces the amount of CRH produced in response to stress.
Lactium® decreases the amount of cortisol released by the adrenal glands during acute and chronic stress.[‡]

Studies in humans using alpha-S1-casein decapeptide have resulted in calming effects, without side effects. Results showed a significant decrease in plasma cortisol throughout the combined stress tests and stable heart rate in the treatment group but not in the placebo group. Another study showed after 30 days of supplementation a reduction in stress related issues including digestive, cardiovascular, intellectual, emotional, and social.

L-Theanine is a unique amino acid found naturally in green tea providing relaxation support without drowsiness. L-theanine has been shown to increase alpha-wave production, an observed pattern considered to be an index of relaxation.

Vitamin D has been included for additional support of immune function that may be compromised during stress. Vitamin D has many functional roles in the body, including modulation of cell growth, neuromuscular and immune function, and bone health.[‡]

FORMULA (#201348-30X)

Each capsules contains: Casein decapeptide (milk) (Lactium®).....175 mg L-Theanine (Suntheanine®)......50 mg Vitamin D3......2.5 mcg (100 I.U) Other Ingredients: Hydroxypropyl methylcellulose (capsule), cellulose and silica.

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Non-GMO, Gluten-Free

SUGGESTED USE

Adults take 1 capsule daily without food, or as directed by your health care professional. May take during the day for stress support or at bedtime for sleep support.

WARNING: Do not use if you are pregnant, breastfeeding or allergic to milk protein. Consult a healthcare practitioner prior to use if you are taking antidepressant and/or anxiolytic medications. Excessive consumption may impair ability to drive or operate heavy machinery. Not recommended for consumption with alcoholic beverages.

SIDE EFFECTS No adverse effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

Guesdon B, et al. *Peptides*. 2006 Jun;27(6):1476-82. Miclo L, et al. *FASEB J*. 2001 Aug;15(10):1780-2. Guesdon B, et al. *Peptides*. 2006 Jun;27(6):1476-82. Kim JH, et al. *Eur J Clin Nutr*. 2007 Apr;61(4):536-41. Epub 2006 Nov 29. Messaoudi M, et al. *Eur J Nutr*. 2005 Mar;44(2):128-32. Ito K, et al. *Nippon Nogeikagaku Kaishi*, 72; (1998) 153-157. Juneja LR, Chu DC, Okubo T, Yokogoshi H. *Trends in Food Science and Technology*: 10; (1999) 199-204. Kimura K, Ozeki M, Juneja L, Ohira H. *Biological Psychology* [serial online]. January 2007;74(1):39-45. Prietl B, Treiber G, Pieber TR, Amrein K. *Nutrients*. 2013 Jul 5;5(7):2502-21. Prieto-Alhambra D, et al. *Breast Cancer Res Treat*. 2012 Jun;133(3):1159-67. Chen S, Sims GP, Chen XX, Gu YY, Chen S, Lipsky PE. *J Immunol*. 2007 Aug 1;179(3):1634-47. Adzemovic MZ, et al. *Exp Neurol*. 2013 Nov;249:39-48. Kidd PM. *Altern Med Rev*. 2010 Sep;15(3):199-222.

For more information on Sereniten Plus, visit douglaslabs.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.

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