



GABA LP815[®] for Women

tension & sleep support for women



BENEFIT AREAS^{1,2}

- ◆ Tension and stress support
- ◆ Helps reduce irritability
- ◆ Supports deep, restorative sleep
- ◆ Promotes restful, temperature-balanced sleep

APPLICATIONS

Add in premenstrual and menopause support supplements focused on tension, mood, stress, and sleep. Stack with other function-specific biotics, botanicals, and hormone supporting ingredients for a robust symbiotic offering.

77%
of women experience mental health related symptoms³

65%
of women struggle with stress³

52%
of women suffer with sleeplessness/insomnia³

WOMEN'S LIFESTAGES

PMS Support | Hormonal Support | Perimenopause and Menopause Support

RECOMMENDED DOSE

5 billion CFU or 50mg per day

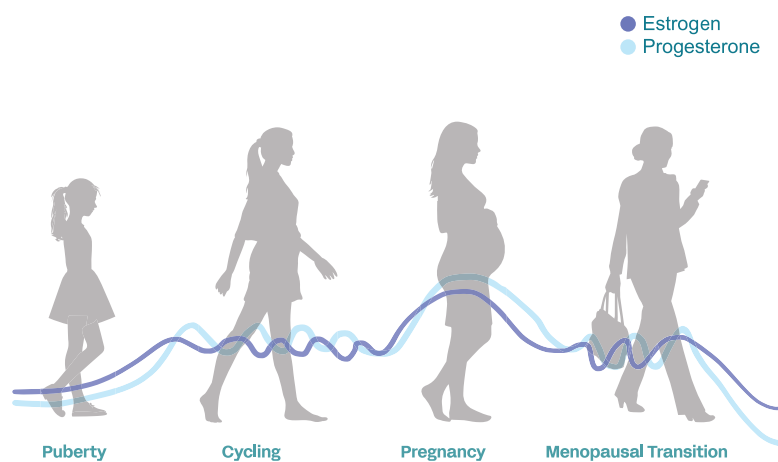


GRAS | Allergen-free | Non-GMO | Produced in USA



Navigating Hormonal Shifts: The Role of GABA Across Women's Lifestages

A woman's lifespan is marked by periods of hormonal flux during menstrual cycles, postpartum, as well as during menopausal transition. During these hormonally dynamic periods, GABA (gamma-aminobutyric acid) levels change due to actions of ovarian hormones and their metabolites.



Sustained GABA Delivery via LP815

LP815, a proprietary strain of *Lactiplantibacillus plantarum*, is uniquely capable of producing GABA directly in the gut over an extended period, enabling sustained release distinct from conventional GABA supplements. Rather than relying on bolus dosing, which often results in rapid but short-lived elevations in GABA levels, LP815 supports continuous GABA production within the gastrointestinal tract.

This prolonged time release may offer more consistent modulation of stress, mood, and sleep regulation throughout the day and night. The steady-state GABA delivery also reduces the need for frequent redosing and may align more closely with the body's natural homeostatic mechanisms.

GABA levels fluctuate as women's hormones fluctuate

Regulating the GABA system during periods of hormonal flux is necessary to maintain excitatory and inhibitory balance (E/I balance) and aid in mood stabilization, stress regulation, and sleep quality.

Pre-Menstrual Cycle

GABA levels significantly decrease from the follicular to late luteal stages of the menstrual cycle and may contribute to tension, irritability, and mood swings.⁴

Menopause

Declining hormones from perimenopause to postmenopausal transition can reduce GABA concentrations and may lead to sleep disturbances, night sweats, tension, stress, and mood dysregulation.⁵

Clinical trials

Featured in *Beneficial Microbes*¹ and *MedRxiv*².

Trial #1 Overview

The goal of the trial was to determine the effect of *Lactiplantibacillus plantarum* 815 (LP815) on stress in individuals with mild to moderate symptoms of anxiety, which included 33 women. Participants completed the GAD-7 (General Anxiety Disorder-7) questionnaire at baseline and throughout the trial and wore a heart rate monitor.

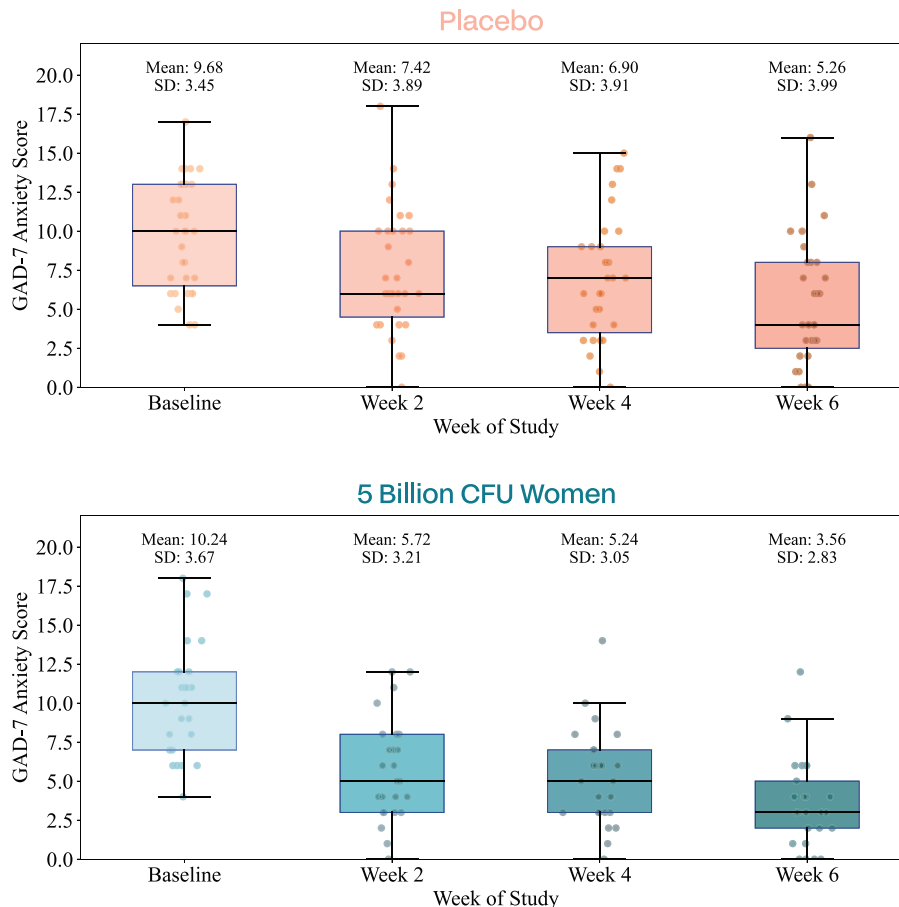
Both trials were randomized, double-blind, placebo-controlled, decentralized, wearable-device and conducted in the United States. Each trial ran for a 7-week period with one week of baseline data followed by 6 weeks of 5 billion CFU of LP815 or placebo, consumed daily in a capsule format.

Trial #2 Overview

The objective was to investigate the impact of LP815 on sleep quality in individuals with self-reported sleep disturbance, which included 71 women. The following endpoints were measured: Insomnia Severity Index (ISI) score, GAD-7 score, Daily Survey, and Oura smart ring wearable.

Clinical trial results suggest that GABA Probiotic, LP815, acts as a dual-action solution for women — **helping to reduce stress and improve sleep quality**. It not only lowers stress levels but also enhances overall sleep duration, increases both deep and light sleep, and reduces night sweats across different life stages.

Women-Only GAD-7 Score by Week



67%

of women significantly reduced their GAD-7 stress scores by week 6

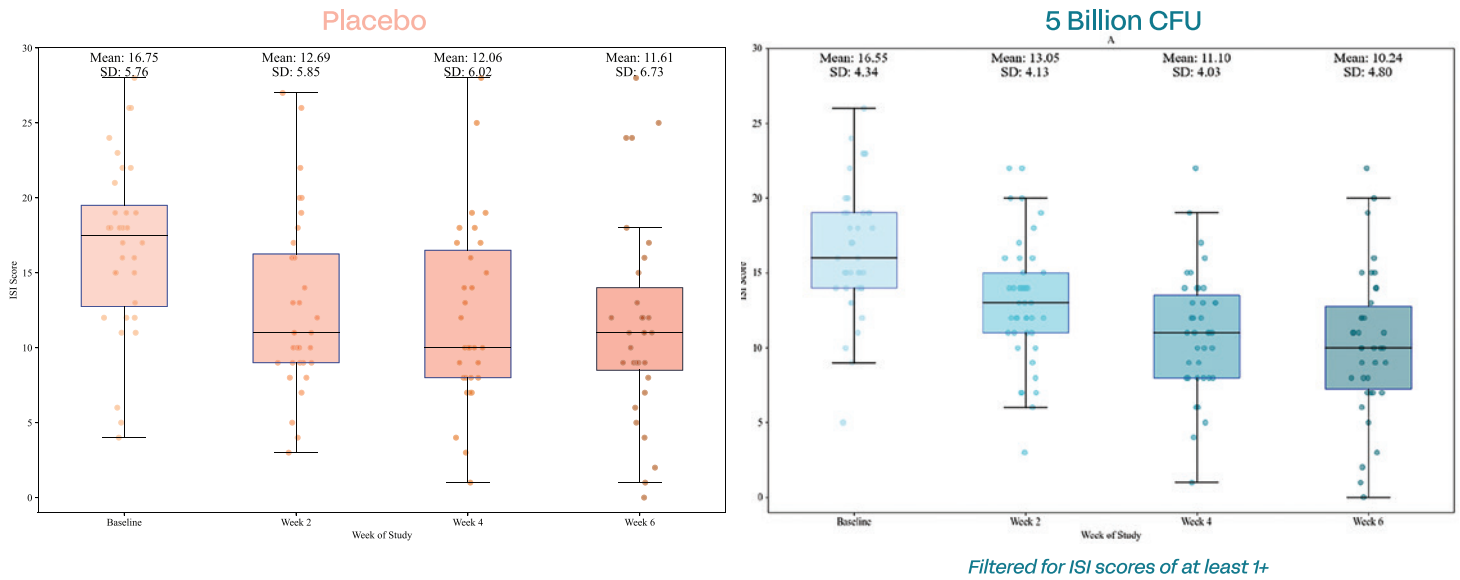
Women who took 5 billion CFU of LP815 showed a significant reduction in GAD-7 scores from baseline to week 6 ($p < 0.05$). Statistically significant improvements were observed as early as week 4 and continued through week 6, with 67% of participants improving their GAD-7 scores by 5 points or more by week 6.

● Dots represent individual participants' data

100% of women improved their sleep by week 6

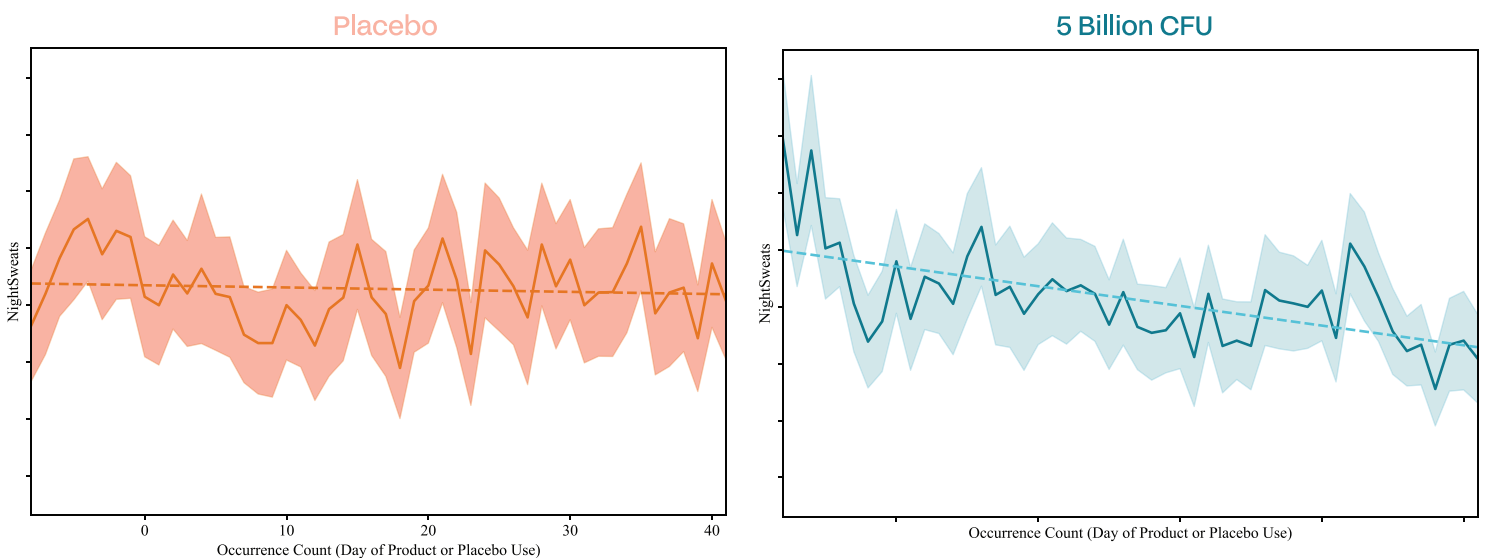
By week 6, all women taking 5 billion CFU of LP815 improved their ISI score by 4 points where only 42.9% of the placebo group improved their ISI score by the same amount (p = 0.07).

Women-Only Insomnia Index Score By Week



Women reported improved nighttime temperature comfort

Women regardless of age or ethnicity showed a significant decrease in elevated nighttime body heat over time when taking 5 billion CFU of LP815 (p < 0.05).

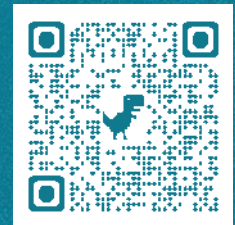




Let's Talk!

Partner with us to innovate and disrupt with differentiated, targeted biotic ingredients.

Scan the code or email us at sales@verbbiotics.com to talk to our sales team.



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Sources

1. Grant, A.D., Erfe, M.C.B., Delebecque, C.J., Keller, D., Zimmerman, N.P., Oliver, P.L., Youssef, B., Moos, J., Luna, V., & Craft, N. (2025). Lactiplantibacillus plantarum Lp815 decreases anxiety in people with mild to moderate anxiety: a direct-to-consumer, randomised, double-blind, placebo-controlled study. *Beneficial Microbes* (published online ahead of print 2025). <https://doi.org/10.1163/18762891-bja00073>
2. Grant, A.D., Erfe, M.C.B., Delebecque, C.J., Keller, D., Zimmerman, N.P., Kazaryan, Amy, Oliver, P.L., Moos, J., Luna, V., & Craft, N., (2025). GABA Probiotic Lactiplantibacillus plantarum Lp815 improves sleep, anxiety and increases urinary GABA: a randomized, double-blind, placebo-controlled study. *GABA Probiotic Lactiplantibacillus plantarum Lp815 Improves Sleep, Anxiety and Increases Urinary GABA: a Randomized, Double-Blind, Placebo-Controlled Study*
3. Verb Biotics Consumer Health Survey, July 2024, N=2,018
4. Epperson CN, Haga K, Mason GF, Sellers E, Gueorguieva R, Zhang W, Weiss E, Rothman DL, Krystal JH. Cortical gamma-aminobutyric acid levels across the menstrual cycle in healthy women and those with premenstrual dysphoric disorder: a proton magnetic resonance spectroscopy study. *Arch Gen Psychiatry*. 2002 Sep;59(9):851-8. doi: 10.1001/archpsyc.59.9.851. PMID: 12215085.
5. Wang, D., Wang, X., Luo, M., Wang, H., & Li, Y. (2019). Gamma-Aminobutyric Acid Levels in the Anterior Cingulate Cortex of Perimenopausal Women With Depression: A Magnetic Resonance Spectroscopy Study. *Frontiers in Neuroscience*, 13, 447833. <https://doi.org/10.3389/fnins.2019.00785>

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Improving health through microbiome innovation

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