

Awakening to new opportunities with combination botanicals for menopause

Serezin™ is a synergistic blend of ayurvedic ingredients that improves restorative sleep and eases joint and musculoskeletal discomfort.

For hundreds of millions of women worldwide, the physical and emotional transitions associated with menopause bring a host of challenges, with poor sleep quality topping the list. Up to 85% of women experience hot flashes during menopause, often leading to night sweats that interrupt sleep. However, during menopause, sleep disruptions are common even among women who do not have hot flashes.¹ The risk of developing sleep apnea also increases during this period, further compromising sleep quality.²

The effects of poor sleep extend far beyond nighttime discomfort. Women who do not get enough restorative sleep often wake up feeling unrefreshed, facing daytime fatigue and excessive sleepiness. This cycle of poor sleep and daytime exhaustion can significantly affect overall quality of life, productivity and well-being. Additionally, greater than 50% of women report menopause-related joint pain, with a fifth experiencing significant discomfort that also disrupts the deep sleep patterns required to repair and restore bodily functions.³

Despite the prevalence of sleep issues among menopausal women, the problem remains largely unaddressed. A Yale University review of insurance claims, for example, revealed that while 60% of women report menopausal symptoms, three-quarters of these symptoms go untreated.⁴ This gap in care represents not only a health concern but also a substantial market opportunity for supplement brands to support this unmet need.

Better sleep with botanicals

Case in point: The menopause/perimenopause health category is experiencing remarkable growth, according to data compiled by Nutrition Business Journal (NBJ). In 2022, when much of the supplement industry faced post-pandemic declines, this category grew by 4.8% and is projected to continue its upward trajectory, NBJ reported.⁵

Enter Serezin™, a novel supplement designed to address restorative sleep and pain relief, with particular benefits for women experiencing menopausal symptoms. Serezin's formulation is on trend, drawing inspiration from ayurvedic medicine and combining extracts of *Boswellia serrata* (frankincense) and *Zingiber officinale* (ginger).

The development of Serezin began with a focus on reducing nighttime aches and pains that often prevent restful sleep. Through extensive research, including preclinical studies to



understand mechanisms of action, the synergistic complex of frankincense and ginger emerged after screening hundreds of botanicals for their potential to improve various factors impacting sleep, according to Jennifer Murphy, RD, director of innovation and clinical development at PLT Health Solutions.

“Serezin is the result of more than a decade of work by Laila Nutraceuticals, our world-class innovation partner, who identified and developed the extract combo,” she explained. “We owe the strong focus on botanical ingredients to the rich history and tradition of ayurvedic medicine and to the cutting edge techniques applied by our development partners at Laila.”

Clinical evidence

A recent four-week double-blind placebo-controlled study involving 60 healthy men and women ages 40-70 years has shed light on Serezin’s efficacy. Participants, all of whom reported disturbed sleep due to everyday aches and pains, received either a 300 mg daily dose of Serezin or a placebo. The results were striking. Within the first week, subjects taking Serezin reported waking up feeling more rested and restored. By the fourth week, the Serezin group experienced a 64% greater improvement in restorative sleep compared to the placebo group.

Pain relief was another significant benefit. Starting from day seven, the Serezin group reported notable improvements in pain scores. By day 28, they experienced a 2.6 times greater reduction in nighttime discomfort and a 75% greater reduction in daytime discomfort compared to the placebo group. Sleep quality improvements were evident by day 14, with the Serezin group reporting 85% greater ease in falling asleep and 93% better sleep quality compared to the placebo group.



61% of menopausal women have sleep problems associated with hot flashes.⁷



Market-ready menopause support formulations

With projections suggesting more than a billion women globally will be postmenopausal by 2025, innovative solutions like Serezin are likely to play an increasingly significant role. The supplement industry is responding to this opportunity with creative formulations, particularly in the realm of combination herbs, which saw a remarkable 15.9% growth within the menopause sales category in 2022.⁶

Examples of formulations that might feature the synergistic effects of Serezin for finished products targeting menopause support include:

- Serezin with well-known soy isoflavones for hormonal balance and support, along with chaste tree berry extract for a second source of estrogenic and hormonal balance and support.
- Serezin with black cohosh extract for multiple menopause symptom relief (cramps, hot flashes, night sweats) and wild yam extract for additional menopause symptom relief.
- Serezin with RhodioliLife® (a standardized extract of Rhodiola rosea, an adaptogen to support energy and mood), Earthlight® (a highly concentrated source of Vitamin D from mushrooms with a wide range of benefits including joint health) and calcium carbonate for bone health.

A win for women

Perhaps most importantly for women dealing with menopause symptoms, when sex was considered as a biological variable in the analysis, the study revealed even more promising results for menopausal women. This analysis showed that the effects of Serezin remained significant in the women-only cohort, with improvements in restorative sleep and reductions in daytime and nighttime pain observed within just seven days.

Specifically, menopausal women taking Serezin experienced:

- 84% better restorative sleep.
- 2.7 times greater reduction in nighttime aches and pains.
- 65% greater reduction in daytime aches and pains.
- 93% easier time falling asleep.
- 87% better quality of sleep.
- Twice as easy morning waking.
- Twice better morning alertness.
- 2.2 times improvement in overall mood.

These results are particularly significant given the unique sleep challenges faced by menopausal women. As we age, the amount of time spent in light sleep increases, making sleep more susceptible to disruption. For women in perimenopause or menopause, declining estrogen levels exacerbate this issue, contributing to a range of sleep disruptors.

The study also showed a decrease in the inflammatory cytokine TNF- α , which is known to increase as estrogen levels decline and is associated with disrupted sleep. This finding suggests that Serezin may be addressing some of the underlying biological factors contributing to sleep disturbances in menopausal women.

The multifaceted benefits of Serezin — improving restorative sleep, reducing joint discomfort and enhancing quality of life around menopause symptoms — position it to address multiple markets. “We heard customers asking for more sophisticated sleep solutions, and in response, we focused on the experience of sleep by targeting common sleep disruptors,” Murphy said. “The resulting innovation, Serezin, delivers on the ultimate promise of sleep — to wake feeling rested, restored and ready to face the day.”



References

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