

CELLNERGY WELLNESS POWER CREAM FOR RESTFUL SLEEP

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ABSTRACT

Getting the right amount of uninterrupted sleep at the right time of day is key to one's overall health. Insufficient sleep duration and sleep disorders such as insomnia and sleep apnea are highly prevalent. According to National Institutes of Health¹⁰, about 50 to 70 million Americans have sleep disorders, and 1 in 3 adults do not regularly get the recommended amount of uninterrupted sleep they need to protect their health. All components of sleep, including duration and quality, have been shown to impact overall health.

INTRODUCTION

Sleep Regulation

An internal clock known as the circadian rhythm regulates the natural sleep-wake cycle. Hormones play an important role in regulating the circadian rhythm, body temperature, and various physiological processes, and two key hormones involved in this regulation are melatonin and cortisol¹¹. Melatonin is often called the "sleep hormone," and it is produced by the pineal gland in the brain and released during darkness. Cortisol is a stress hormone that helps one stay alert and awake during the day. Its production is typically highest in the morning, helping us wake up and stay alert for daily activities. Disrupted circadian rhythms can cause difficulty falling asleep, staying asleep, or waking up at the appropriate time. Furthermore, circadian rhythm disruption can have a variety of adverse effects on overall health and well-being.



The Role of Inflammation in Sleep Dysregulation

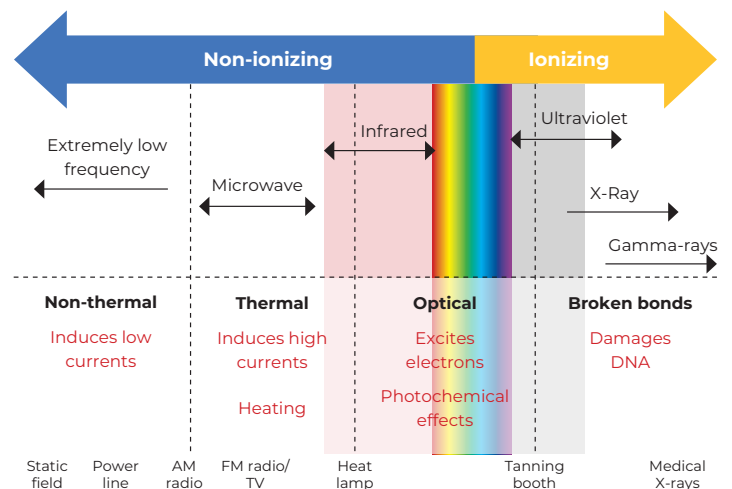
Poor sleep is associated with higher levels of inflammatory biomarkers¹⁵. Research studies in humans and animals have uncovered specific inflammatory molecules and mechanisms that regulate sleep and alter the circadian clock⁵. Biological mechanisms through which poor sleep adversely impacts health outcomes continue to be identified and include proinflammatory responses. Markers of systemic inflammation, such as C-reactive protein (CRP) and interleukin 6 (IL-6), have been linked to poor sleep, with higher levels of markers associated with poorer sleep⁹.

CELLNERGY WELLNESS POWER CREAM

The Cellnergy Wellness Power Cream contains a unique proprietary blend of ingredients designed to re-activate cellular anti-inflammatory and antioxidant properties. It pairs the ThermalWave Technology with a unique blend of compounds, offering sleep benefits.

ThermalWave Technology

A critical component of the Cellnergy Wellness Power Cream is tourmaline, which emits far-infrared (FIR) electromagnetic wave (4-14 μ m wavelengths), which match the absorption spectrum of human body hence getting absorbed by and increasing the temperature of human tissue³. This property, in turn, speeds blood flow and improves microcirculation, critical components of enhanced sleep.



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FIR textiles have been shown to promote blood circulation to body tissues and muscles due to vasodilation caused by the energy absorption and transmission in human skin¹². Improved thermoregulation, increased metabolic rate, blood oxygen level, and elimination of metabolic toxins have also been observed^{6,13}, and these functions are known to facilitate improved sleep. A randomized controlled trial by McCall and colleagues⁷ has shown that sleeping on FIR-emitting bed sheets promotes fewer insomnia symptoms. The Cellnergy Wellness Power Cream provides an added benefit stemming from direct application of FIR to the neck and shoulder area to effectively promote vasodilatation of the skin surface, warm the skin, reduce muscle tension, promote relaxation and improve sleep.

Restoration of Brain Homeostasis and Proper Sleep Regulation

Tourmaline, when milled into fine powders, emits FIR and releases air negative ions⁸. Tourmaline's characteristics of the FIR emission depend on the particle size, with decreased particle sizes exhibiting improved far infrared emission properties. Preparations containing tourmaline powder have been shown to improve blood flow when applied to the skin¹⁴. Additionally, it has been demonstrated that the non-thermal effect of FIR includes improved antioxidant and anti-inflammatory status⁴ and improved sleep². Inflammatory molecules in both the central nervous system and periphery can alter sleep¹⁵. Thus, restoring the homeostatic balance of these inflammatory molecules with the Cellnergy Wellness Power Cream can have a direct impact on the quality and length of restful sleep.



SUMMARY

Getting enough quality sleep at the right times is vital for physical health, mental health, quality of life, and safety. Poor-quality sleep can lead to headaches, low energy, inability to focus, and poor work performance. Due to the unique anti-inflammatory properties of tourmaline, in conjunction with a proprietary blend of high-quality ingredients, which synergistically serve to lower inflammation, the Cellnergy Wellness Power Cream promotes restful sleep when applied to the neck and shoulder area before bedtime.

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