

## PheniTropics Natural Sleep Aids

*"Biotics has developed a suite of proprietary formulas designed to support the overall relaxation response & the circadian rhythms related to sleep."*

The CDC is calling the lack of sleep "a significant national health problem which has reached epidemic proportions." Studies show how sleep deprivation is linked to a host of physiologic dysfunctions, including cognitive performance, increased risk of heart disease, diabetes, hormonal imbalances, immune system dysfunctions, obesity, depression, anxiety and vitamin D deficiency.



In one study, deep sleep is shown to be a requirement for maintaining suitable learning efficiency. Repair and recovery on all levels occur faster with restorative sleep whereas inflammation or any other health challenge will be accelerated with disrupted sleep.

Knowing that, I wonder if we are asking enough questions about the quality of sleep our patients are getting. So asking questions like: How many hours do you sleep each night? Do you currently take sleep aids? Prescription or nonprescription? Are you refreshed when you wake up? Do you remember your dreams? Do you wake up in the middle of the night and

find it difficult to get back to sleep? How long does it take you to get to sleep when you lay down? Does your pre-sleep ritual increase or decrease your excitement (cortisol) level? What is your sleep environment like? Temperature? Degree of darkness? EMF exposure? Television, Cell Phone, tablets?

Knowing this, Biotics Research Corporation has developed a suite of proprietary formulas called PheniTropics, designed to support the overall relaxation response and the circadian rhythms as they relate to sleep. PheniTropics supply healthy levels of GABA, enhance the relaxa-

tion response and support the sleep/wake cycle by optimizing neurotransmitter health.

Let's take a look at the three products: PheniTropic, PheniTropic PM, and PheniTropic Ultra PM.

PheniTropic: each capsule contains 300 mg of Phenibut (4-amino-3-phenylbutyric acid), a GABA derivative that easily crosses the blood/brain barrier, and helps increase GABA levels. Consider two capsules one hour before bed.

Phenibut also helps inhibit the excitatory neurotransmitters Glutamate and PEA (phenylethylamine). GABA is inhibi-

tory or "turns off" receptors. When GABA is deficient, the brain naturally becomes over excited resulting in over stimulation. Low GABA levels may cause your patients to experience panic or anxiety, feelings of dread, being overwhelmed for no reason, disorganized attention, inner tension and excessive tendency to worry about things that don't come to pass. It's almost like having sufficient GABA allows us to have a sense of inner peace.

PheniTropic PM: formulated to support quality sleep and a natural relaxation response. Two capsules supply 1000 mg of a proprietary blend of Phenibut, taurine and 3.4 mg of B6 in the P-5-P form. Consider two capsules one hour before bed.

We've talked about the calming effects of Phenibut. Let's look at taurine and B6. First let's recognize that as we age there is an increase in brain excitation and inflammation. Taurine supports brain health via multiple mechanisms: by facilitating mitochondrial health, inhibiting microglial activation, acting as an antioxidant, inhibiting inflammatory prostaglandins and excess nitric oxide, reducing brain swelling, protecting the blood brain barrier, and increasing brain anti-oxidant enzymes like glutathione. Taurine protects the brain from damage from hypoxia and excess ammonia. Studies have also shown that taurine may be able to stimulate GABA activity by encouraging synthesis and protecting the brain from GABA breakdown.

Taurine lowers the excitatory neurotransmitter glutamate and so protects the brain from excess excitation. Taurine readily crosses the blood brain barrier; after GABA, it's the second most important inhibitory neurotransmitter in the brain. GABA is naturally synthesized from glutamate by the enzyme glutamic acid decarboxylase (GAD), but it needs B6 as a cofactor.

PheniTropic Ultra PM: focusing on neurotransmitter and hormonal pathways, this blend provides the extra support for deeper sleep. Each capsule contains a 650 mg blend of Phenibut, 5-HTP, passiflora as well as 3 mg of melatonin,

and 5 mg of B6 as P-5-P. One capsule one hour before bed should be sufficient.

Note\* For patients currently taking an SSRI or patients who have a negative reaction to one capsule, PheniTropic Ultra PM should be used with caution.

Since PheniTropic Ultra PM contains the added 5-HTP, passiflora and melatonin, let's look at these ingredients.

5-HTP can be used as a serotonin precursor, which helps raise levels of endogenous serotonin. In addition to the production of serotonin, 5-HTP works synergistically with GABA by modulating both GABAergic and serotonergic signaling.

Passiflora inhibits monoamine oxidase (MAO) activity to reduce depression, stress, anxiety, sleep disorders and restlessness. Passiflora is also sedative and reduces anxiety and insomnia through stimulating the GABA system.

Melatonin is famous for its role as a sleep aid, regulating our body's natural circadian rhythm, but it also buffers cortisol and can inhibit ACTH-stimulated cortisol production. New research suggests melatonin protects against viral and bacterial infections, reduces oxidant stress and inflammation, slows aging, improves menopausal symptoms and improves brain function as you age. Data from the Nurses' Health Study recently showed that "high levels of melatonin secretion can cut your risk of type 2 diabetes in half."

We know restorative sleep is the great equalizer. Hopefully I've given you some ideas to help you communicate that the quality of sleep is essential for optimal health. Sleep is so much more than just being unconscious. Restorative sleep will repair and restore optimal physiology and that's our goal.

Thanks for reading this week's Tuesday Minute edition. I'll see you next Tuesday.