



WHY CHOOSE

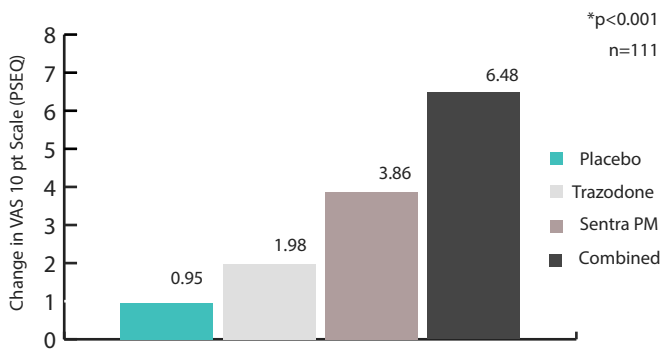
## SENTRA PM

Sentra PM is clinically proven to improve nighttime parasympathetic activity, sleep latency and restorative sleep. With over 15 years of clinical success, Sentra PM is a safe way to manage sleep dysfunction associated with chronic illness.

## Restore Nighttime Nervous System Function

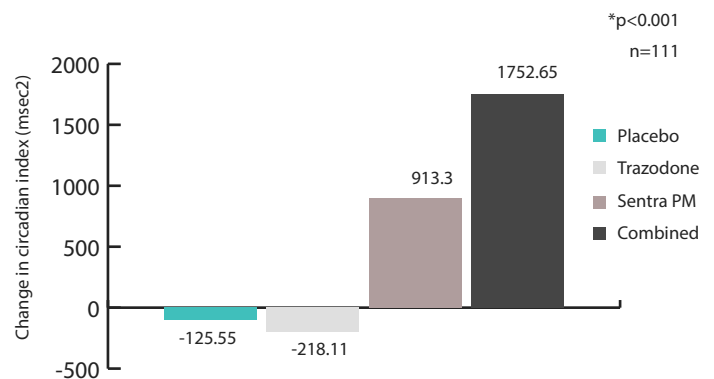
Chronic pain, stress disorders, and traumatic events can disrupt nervous system function, and impair normal patterns of sleep and waking. Sentra PM supplies a targeted dose of amino acids and nutrients in a patented formula that are utilized by the body to supply the neurotransmitters responsible for balancing autonomic nervous system function at night. Chronic illness that disrupts the circadian rhythm of the sleep-wake cycle, and impairs nervous system function can lead to increased amino acid turnover rates and poor nighttime sleep cycling. Multiple clinical studies demonstrate that addressing the increased nutritional requirements of sleep disorders associated with chronic disease with Sentra PM can improve sleep latency, sleep quality and reduce AM grogginess.

### Improvement in Sleep Quality



After a 14 day administration of Sentra PM as an adjunct to trazodone (50mg), subjects experienced a statistically significant improvement in quality of sleep compared to individual control groups.

### Parasympathetic Activity 12-5 AM



After a 14 day administration of Sentra PM or trazodone (50mg) and Sentra PM, subjects experienced a statistically significant improvement in nighttime parasympathetic nervous system activity from midnight to 5am compared to trazodone and control groups.

\*Shell WE, May LA, Bullias DH, Pavlik SL, Silver DS. Sentra PM (a Medical Food) and Trazodone in the Management of Sleep Disorders. J Cent Nerv Syst Dis. 2012 Apr 23;4:65-72. doi: 10.4137/JCNSD.S9381. PMID: 23650468; PMCID: PMC3619436.



## KEY INGREDIENTS:

### Choline Bitartrate:

Choline Bitartrate is converted to acetylcholine in the human body. Acetylcholine (Ach) has a variety of benefits for brain health, nervous system function, and moderating sleep/wake cycles. Ach is the primary neurotransmitter responsible for the propagation of signals by the autonomic nervous system and the only neurotransmitter involved in signal transmission by the parasympathetic nervous system. Ach helps regulate the body's circadian rhythm, and plays a vital role in REM sleep.

### L-Glutamic Acid:

For individuals with sleep disorders associated with fibromyalgia and depression, the requirement for glutamate is increased to maintain activity of glutamatergic neurons. Increased availability of L-Glutamic Acid improves GABA production, a very important neurotransmitter that helps initiate and maintain deep sleep. Low levels of GABA are known to interfere with deep sleep, such that people with low levels may wake easily and often throughout the night, missing out on meaningful amounts of this crucial slow-wave deep sleep.

### Acetyl L-Carnitine:

The efficiency of the metabolic response to an increased demand for acetylcholine is enhanced by acetyl-L-carnitine. Acetyl-L-carnitine promotes the synthesis of acetylcholine and influences neurotransmitter activity in the autonomic nervous system. Research suggests that L-carnitine reduces feelings of fatigue and tiredness upon waking especially in patients living with fibromyalgia and mild depression.

### Griffonia Seed:

Griffonia seed is a natural source of 5-Hydroxytryptophan, an essential amino acid that helps the body manufacture serotonin and melatonin. 5-HTP acts as an intermediate metabolite in the pathway of tryptophan conversion to serotonin, thus bypassing the rate-limiting step dependent on tryptophan availability. By facilitating production of serotonin without requiring consumption of large amounts of tryptophan, Sentra PM ensures that adequate amounts of serotonin are produced without compromising synthesis of other important compounds derived from tryptophan, thus improving metabolic efficiency.

**Dosing:** It is recommended that two capsules of Sentra PM be taken 30 minutes before bedtime.

## History

Sentra PM was developed in 2002, following extensive research into the distinct nutritional needs of Veterans struggling with Gulf War Syndrome. Sentra PM has been the subject of multiple clinical trials and has proven to be an effective standalone and as an adjunct therapy to a low dose of trazodone. Sentra PM is the only medical food proven to improve nighttime parasympathetic nervous system function.



## Medical Food

As a Medical Food, Sentra PM is specially formulated to address the distinct nutritional requirements of disease using ingredients that are Generally Recognized as Safe (GRAS).

## Physician Formulated

Sentra PM was developed by a team of physicians specializing in Cardiology, Rheumatology and Integrative Medicine.

### Safety Information

Sentra PM® is contraindicated in an extremely small number of patients with hypersensitivity to any of the nutritional components of Sentra PM.

**ADVERSE REACTIONS:** Ingestion of L-Tryptophan, L-Arginine, or Choline at high doses of up to 15 grams daily is generally well tolerated. The most common adverse reactions of higher doses – from 15 to 30 grams daily – are nausea, abdominal cramps, and diarrhea. Sentra PM contains less than 1 gram per dose of amino acids however, some patients may experience these symptoms at lower doses. The total combined amount of amino acids in each Sentra PM capsule does not exceed 500 mg.

**DRUG INTERACTIONS:** Sentra PM does not directly influence the pharmacokinetics of prescription drugs. Clinical experience has shown that administration of Sentra PM may allow for lowering the dose of co-administered drugs under physician supervision.