



# STRESS-RELAX<sup>®</sup> TRANQUIL SLEEP

Helps relieve mild insomnia and calms nervousness

## HOW IMPORTANT IS SLEEP AND ARE WE GETTING ENOUGH?

Peaceful, tranquil sleep at night makes you a more peaceful and tranquil person – ready to handle calmly the many stresses each day brings.

Consider three different scenarios. First: it's 3 am and you're still awake. You anxiously watch the clock, knowing that you have to get up in three hours and you need to perform optimally in the stress-filled day ahead of you. Second: you fell asleep quickly only to be awakened by a noise at 4 am. Now you can't get back to sleep no matter what you do. Third: you're asleep but restlessly tossing and turning. When the alarm goes off you feel groggy and unrefreshed.

If any of these scenarios apply to you then you're not alone. Statistics Canada's Canadian Community Health Survey says that an estimated 3.3 million Canadians over the age of 15 suffer from insomnia. Many experiment with pharmaceutical "sleeping pills", but are disappointed. Why? Not just because most sleeping pills have addiction potential and other side-effects, but because they do not provide the peaceful and tranquil sleep needed.

There is a direct relationship between quantity and quality of sleep and health problems. Over time, sleep deprivation can lead to obesity, hypertension, cardiovascular problems and diabetes.

According to the most recent General Social Survey done by Statistics Canada, 47% of Canadians will cut back on sleep in order to add time to their days. Sleep deprivation can lead to mood problems, decreased productivity, and safety issues at home and on the job.

## THE BETTER WAY TO GET A GOOD NIGHT'S SLEEP

Natural Factors Tranquil Sleep formula provides needed peaceful and tranquil sleep. This advanced, fast-acting approach to improved sleep is not only safe, but helps you fall asleep quickly, stay asleep, sleep soundly and wake feeling refreshed. What makes this formula so different? Tranquil Sleep contains Suntheanine<sup>®</sup> (L-Theanine), 5-HTP, and melatonin. When combined, these natural supplements exert a gentle yet powerfully synergistic effect to promote restful sleep.

## L-THEANINE – THE SLEEP "TRANQUILITY" FACTOR

Both a lack of sleep and poor quality sleep can progressively increase stress. L-theanine is ideal for people who have trouble sleeping and often wake feeling unrefreshed. Researchers at the National Institute of Mental Health (NIMH) in Japan have found that taking a pure L-theanine dietary supplement (Suntheanine) before bed produces a significant improvement in sleep quality. Their findings outline the first human study showing that L-theanine, a simple amino acid from green tea, can profoundly enhance the tranquility of sleep experienced by their young subjects.

The Japanese research team first had 22 young men (12 daytime workers, average age of 28; 10 students, average age of 26) undergo a three-day acclimatization period. They then were asked to take 200 mg of Suntheanine or a placebo one hour before bedtime for six consecutive days. After subjects completed this first blind supplementation phase they were then "crossed over" to receive the opposite treatment. Their sleep performance was assessed by interviews upon awakening, self-reported questionnaires, and wrist actigraphs, which record bodily movement during sleep.

"Our clinical study strongly suggests that Suntheanine supplementation of young men can improve both the quality of sleep and the mental state of being refreshed upon awakening," offered Dr Shuichiro Shirakawa, a professor at The National Center of Neurology and Psychiatry at NIMH in Tokyo. "These results add to previous human studies showing that Suntheanine supplementation can foster a relaxed state, which may improve one's entry into, and maintenance of, sleep," he added. The entire group reported a statistically significant absence of "feeling exhausted" and a reduced need for sleep during the Suntheanine administration period, relative to placebo. Seven of the ten students showed a statistically significant improvement in sleep efficiency, an index of actual sleep time enjoyed between the time of falling asleep and the final morning awakening. These subjects also reported a superior mental state prior to falling asleep and a decreased occurrence of nightmares during the Suntheanine phase but not during the placebo phase. Notably, the total time from falling asleep to awakening was unchanged during both the placebo and Suntheanine phases.

## GET TO SLEEP AND STAY ASLEEP, WITH 5-HTP

5-Hydroxytryptophan (5-HTP) is an amino acid that is the middle step between tryptophan and the important brain chemical serotonin. Commercially available 5-HTP is isolated from the seed of an African plant (*Griffonia simplicifolia*). Several clinical studies have shown 5-HTP to produce good results in promoting and maintaining sleep in normal subjects as well as those experiencing insomnia. One of the key benefits of 5-HTP in the treatment of insomnia is its ability to decrease the time required to get to sleep and decrease nighttime awakenings, thereby improving sleep quality.

## MELATONIN FOR PROMOTING RESTFUL SLEEP

Melatonin is a hormone secreted by the pineal gland, a small pea-sized gland at the base of the brain. The exact function of melatonin is still poorly understood, but it is critically involved in regulating the natural biorhythm of hormone secretion referred to as the “circadian rhythm” as well as controlling sleep/wake cycles. Release of melatonin is stimulated by darkness and suppressed by light. The primary uses of melatonin are in the treatment of jet lag, insomnia, and as an adjunct in cancer therapy.

Melatonin plays an important role in the induction of sleep. Low melatonin secretion at night can be a cause of insomnia, particularly in the elderly. Several double-blind trials have shown melatonin supplementation to be very effective in promoting sleep, but it appears the sleep-promoting effects of melatonin are most apparent when melatonin levels are low. Low melatonin levels are thought to be an extremely common cause of insomnia in the elderly, while in younger individuals it is less of a factor.

## DOSAGE

Chew 2 tablets, 30 to 45 minutes before bedtime or as directed by a health care practitioner.

## SAFETY

Safe and non-habit forming.

*Pregnancy and lactation:* Although Tranquil Sleep is a safe formula, due to lack of studies, it should not be taken by pregnant or lactating women, or children.

*Drug interactions:* Do not use if you are taking blood pressure, immunosuppressive or sedative/hypnotic medications without consulting a health care practitioner.

Because 5-HTP is the direct precursor to serotonin, it should not be used by individuals taking antidepressant drugs unless under the direct supervision of a health care practitioner. Although 5-HTP has been used safely in combination with prescription antidepressant drugs in clinical studies, taking this combination without medical supervision could result in too much serotonin in the body. The result is a condition known as the “serotonin syndrome,” which is characterized by confusion, fever, shivering, sweating, diarrhea, and muscle spasms.

5-HTP may antagonize the effects of drugs used for migraine headaches, like methysergide and cyproheptadine, that block serotonin effects.

*Contraindications:* Consult a health care practitioner prior to use if you have a hormonal disorder, diabetes, liver or kidney disease, cerebral palsy, seizure disorders, migraines, depression, or hypertension.

It is difficult to deal with everyday stress and anxiety without the rejuvenation provided by a good night's sleep. Stress-Relax Tranquil Sleep formula supplies the solution – peaceful, tranquil sleep each night.

## KEY REFERENCES

Charite Campus Mitte-Universitätsmedizin Berlin, Germany. “Melatonin in patients with reduced REM sleep duration: two randomized controlled trials,” *J Clin Endocrinol Metab*, Jan; 89 (1): 128-34, 2004

Shirakawa S., et al., National Institute of Mental Health, Tokyo, Japan, Released at Society of Physiological Anthropology Conference, Tokyo; 2003

Soulairac A., Laminet H., “Clinical Studies of the effect of the serotonin precursor, L-5-hydroxytryptophan on sleep disorders,” *Schweiz Rundsch Med Prax*, 77: 19-23; 1998