

GET BETTER SLEEP

Using This Unique Combo

By Dr. Zoltan P. Rona, M.D., M.Sc.

Are you so stressed out that you can't fall asleep? Or, is it that you wake up every hour and can't get a restful night of sleep?

You have given up caffeine, alcohol and a high sugar intake, darkened your bedroom and turned off the WIFI but are still have trouble sleeping. If you eat only organic food and exercise religiously but still have sleep problems, there is a certain combination of natural health products that can give you a great night's sleep without the annoying side effects of prescription sleeping pills.

Using just one of the following alone will work for many people but a combination of all is more likely to be effective for optimal results. This is especially true if you suffer from a great deal of continuous stress or take prescription drugs that have adverse effects on sleep.

The following natural health products should be combined, preferably in liquid form, for best sleep and dream inducing benefits:

L-THEANINE - Green tea contains many health beneficial components. The one that gives green tea its relaxation or calming effect is the amino acid L-theanine (gamma-ethylamino-L-glutamic acid). Green tea also contains caffeine and it is L-theanine that offsets the stimulating effects of caffeine in green tea.

Between one and two percent of green tea leaves contains L-theanine. It exerts its calming effect within 30 - 40 minutes of ingestion of 50 - 200 mg of theanine by stimulating the production of alpha waves in the brain. This phenomenon has actually been measured by meticulous scientists and is an established fact. Alpha waves are present in the wakefulness state when they are associated with a relaxed and effortless alertness. Some people call this a "Zen" state but there is no specific religious significance to this.

If you benefit from meditation you are actually increasing alpha waves in the brain. While inducing a state of deep relaxation L-theanine also enhances mental alertness. For people who do not have the luxury of spending several hours a day meditating, L-theanine is an excellent alternative. Memory and learning is enhanced by L-theanine and blood pressure is lowered naturally, if elevated. I have had several patients able to reduce or eliminate their blood pressure medications just by taking L-theanine on a regular basis.

L-theanine is also being studied as a potential replacement for Ritalin, an amphetamine prescribed to children and adults for attention deficit disorder (ADHD). It is also being studied for its benefits in treating PMS (premenstrual syndrome) as well as in enhancing the immune system in conjunction with various cancer treatments.

L-theanine also gets converted in the brain into the inhibitory neurotransmitter gamma amino butyric acid (GABA). GABA, in turn, optimizes the levels of two other neurotransmitters, dopamine and serotonin, producing further relaxation effects. Many of you who are familiar with psychiatric drugs know that the most commonly prescribed tranquilizers and antidepressants work by modifying the levels of these neurotransmitters. The only difference between these drugs and the natural compounds is the fact that the drugs are loaded with side effects too numerous to list here.

The nice thing about L-theanine is that it can mitigate the effects of stress without sedation. In fact, it enhances awareness and has applications for learning disabilities and attention deficit disorders as well as various hyperactive states. It can offset the over-stimulation that can result from drinking high caffeine products such as coffee and soft drinks.

Unlike prescription anti-anxiety agents, even a massive overdose of L-theanine 100 times the recommended dose does not produce further relaxation or drowsiness. It is considered so safe that there are no limits to how much one can take before any possible toxicity occurs. Studies indicate that it crosses the blood-brain barrier quite easily. It competes for absorption in the small intestine as well as the brain with other amino acids so, to have maximal impact, L-theanine should be taken on an empty stomach away from food.

The best time to take L-theanine is at the first sign of stress at a dose of 50 - 200 mg every 4-6 hours as needed. For most adults, its effects can be appreciated in the body up to 10 hours after ingestion. The US FDA recommends a maximum dose of 1200 mg

per day but this does not appear to be based on any evidence of potential adverse effects. Its safety in pregnant women has not yet been established.

MELATONIN - The pineal gland at the center of the brain secretes the hormone melatonin, best known in humans as a regulator of biological rhythms. Melatonin exists in every plant and animal, is structurally identical in all living forms and is produced in the same circadian rhythm, with higher levels at night than during daytime. Melatonin production peaks in early childhood, declines slowly after puberty and then more rapidly in middle age. After age 60, melatonin production is negligible.

The benefits of melatonin go well beyond its sleep inducing properties. Yes, it triggers the body's nightly cycle of rest and repair allowing refreshing sleep.

It is a proven effective remedy for jet lag (0.5 to 3 mgs. before sleep). Melatonin boosts the immune system by increasing

VALERIAN (VALERIANA OFFICINALIS) - One of the most popular herbal remedies used to help sleep problems is valerian. Many double-blind studies show that it improves sleep quality and relieves insomnia as well as the benzodiazepine prescription drugs. Unlike the benzos, valerian does not cause daytime sleepiness, diminished concentration or impairment of physical performance.

LEMON BALM (MELISSA OFFICINALIS) - Lemon balm primarily promotes relaxation. It is a member of the mint family and has traditionally been used as a calming herb. For centuries, it has been used to offset stress, anxiety and insomnia. It's never going to knock you out like a drug but will relax you enough so that the other natural remedies discussed here will work better.

HOLY BASIL - A very common complaint is waking up frequently through the night. Interrupted sleep can often make people feel like they never had any refreshing sleep at all. This results in very low energy levels during the day and poor performance at work or the enjoyment of time off work. This is where holy basil comes in.

Holy basil is an adaptogenic herb that balances cortisol levels. Excessive stress raises the blood levels of cortisol, making restful, uninterrupted sleep difficult. Holy basil balances that negative cortisol effect. The main components of holy basil are eugenol and

MAGNESIUM BIS-GLYCINATE - Calcium is the mineral that has always had the most media attention, as well as overwhelming approval from the medical profession as a supplement that women should be taking. Never take calcium as a stand-alone supplement because that can cause hardening of the arteries, constipation and a higher risk of cardiovascular disease. When taken with an equal amount of magnesium and vitamin K2, calcium does not cause any problems of this kind.

Despite a great deal of published medical and biochemical research, there is little, if any, attention paid to calcium's neglected cousin, magnesium, and most certainly no medical pronouncements that anyone should be supplementing this mineral in any serious way. Its under-utilization in clinical medicine is nothing short of scandalous, especially regarding its use as a life-saving cardiovascular tonic.

Magnesium is well absorbed from food sources such as legumes, whole grains, vegetables (especially broccoli, squash, and green

L-theanine does not directly cause sleep but it helps anyone with a sleep disorder because it eliminates anxiety and boosts the brain levels of GABA, an inhibitory neurotransmitter.

circulating immune factors. It defends against stress, aging, viruses and bacteria partially by increasing interferon.

Melatonin protects the body against cigarettes, alcohol and pollutants through its antioxidant effects. It maintains cardiovascular health by reducing risk factors like high blood pressure. Melatonin inhibits the growth of cancers: breast, lung, cervix, prostate and skin (melanoma). This benefit occurs through its antioxidant effects and control in balancing other hormones.

Melatonin is safe, nontoxic and non-addictive in hundreds of animal and human studies. Side effects are dose dependent and reversible by reducing the dose or taking it at different times of the day. Potential side effects include vivid dreaming, daytime sedation and anxiety.

Although highly variable, the dosage for the standardized valerian extract (0.8% valerenic acid content) is 150-300 mg 45 minutes before bedtime. Unfortunately, people give up too early with it when it doesn't work the first time. One has to use it up to a full 3 weeks before concluding on its effectiveness. It will definitely work better in combination with the other natural health products discussed in this article.

In studies of people with minor sleep problems and anxiety, over 80% of those who took an herbal combination of valerian and lemon balm reported sleeping much better than those who took a placebo. Side effects of lemon balm have never been reported. One should experiment with the dose used to see how much is beneficial.

caryophyllene which help to lower cortisol levels and improve the way the body reacts and responds in times of increased stress. Aside from helping to create more restful sleep, it can improve mood and mental clarity. I have found it useful in some cases of depression that had no obvious cause.

Studies have also shown that it has beneficial effects in balancing blood sugar levels in diabetics and those suffering from hypoglycemic episodes. Along with the amino acid L-glutamine, it could help many with strong sugar cravings. Effective dosage is variable and side effects have never been reported.

leafy vegetables), seeds, and nuts (especially almonds). Magnesium is the central element of chlorophyll, the substance that gives plants their green colour. Hence, if it's green, consider the food as a potentially good magnesium source. Much of the popularity of health food supplements like spirulina, chlorella and barley green is due to the beneficial effects of the high magnesium content.

Water with a high mineral content, or "hard" water, is also a source of magnesium. So-called "soft water" (e.g. distilled or reverse osmosis water) is not only void of magnesium but may actually promote its loss from the body. Absorption of magnesium from supplements (i.e. bioavailability) varies. Magnesium bis-glycinate, a combination of magnesium and the amino acid L-glycine is the most bioavailable and the least likely to cause loose bowel movements or diarrhea. Magnesium oxide has a bioavailability only of about 4%.

Since magnesium is an anti-spasmodic or relaxant, one expects and sees symptoms of severe magnesium deficiency to include

convulsions, confusion, muscle weakness, abnormal muscle movements such as spasms, tremors, myoclonus, and tetany.

Magnesium is often referred to as nature's calcium channel blocker. When intracellular levels of magnesium are low, this causes an increase in intracellular calcium. In addition to contributing to insulin resistance, higher intracellular calcium levels enhance calcium-mediated vasoconstriction, and inhibit cardiac and smooth muscle relaxation. The increased vascular tone can cause increased blood pressure. The pharmaceutical industry makes use of calcium channel blocking drugs to reverse this. Practitioners in the natural health care industry use magnesium to accomplish this with fewer side effects.

Magnesium supplementation has been demonstrated to be effective in the treatment of anxiety, ADHD, chronic fatigue, fibromyalgia, muscles spasms anywhere, muscle cramps, restless legs, insomnia, migraine headaches, cluster headaches, heart beat irregularities, insulin resistance, metabolic syndrome and PMS.

Calcium supplements, when unbalanced by magnesium, can decrease the absorption of dietary magnesium, but only at very high doses (2600 mg per day). The advice here, especially for those at high risk for magnesium deficiency is to take calcium supplements at bedtime, instead of with meals, to avoid inhibiting dietary magnesium absorption. This may help explain the finding showing that people who used high doses of calcium supplements

tended to have higher rates of heart disease. Magnesium, on the other hand, does not seem to affect calcium absorption.

If you use high doses of zinc, you might also need a magnesium supplement. Supplementation with high doses of zinc, 142 mg/day, decreases magnesium absorption and magnesium balance in healthy adult males. Alcohol abuse increases the risk for magnesium deficiency because alcohol impairs the ability of the kidney to conserve magnesium.

Magnesium is just one of numerous trace minerals that are highly important both for disease prevention and treating existing illness as far ranging as asthma, osteoporosis, migraine headaches, coronary artery disease and diabetes. Before reaching for that anti-spasmodic, analgesic or anti-inflammatory drug, you might be better off considering healthy doses of magnesium. The optimal doses depend on the health situation, the current magnesium level and other biochemical individuality factors. For anxiety and insomnia, the usually effective dose for most adults is between 300 and 600 mg of magnesium bis-glycinate. If you are not sure what to do, consult a natural health care practitioner.

In my experience, magnesium is one of the commonest mineral deficiencies in clinical practice. Unless you have an excellent organic, caffeine and alcohol-free diet, you should seriously consider supplementing with this vital mineral.

CONCLUSION - These 6 remedies work best in combination with each other. One can purchase the individual ingredients and combine supplementing them. Fortunately, some companies have created this combination in liquid form so it's convenient to just take 1-2 tps. or more about 45 minutes before bedtime. Sweet dreams!

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Valerian
<https://ods.od.nih.gov/factsheets/Valerian-HealthProfessional/>

Lemon Balm
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Holy Basil
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- Helps increase the total sleep time (aspect of sleep quality) in people suffering from sleep restriction or altered sleep schedule, e.g. shift-work and jet lag.
- Helps to prevent and/or reduce the effects of jet lag (e.g. daytime fatigue, sleep disturbance) for people travelling by plane easterly across two or more time zones.
- Helps to reduce the time it takes to fall asleep (sleep onset latency aspect of sleep quality) in people with delayed sleep phase disorder.
- Helps re-set the body's sleep-wake cycle (aspect of the circadian rhythm).

Recommended dose:
(Adults) Take 5 ml 1 time per day.

Direction of use: Use the calibrated measuring cup provided to obtain an accurate dosage. Do not drink directly from the bottle. Do not drive or use machinery for 5 hours after taking melatonin. Take

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once a day at bedtime after darkness has fallen, while travelling, and at destination until adaptation to the new daily pattern.

Medicinal ingredients: Each 5 ml contains:

Melatonin	5 mg
L-Theanine	100 mg
Valerian (Valeriana officinalis, Root) (0.8% Valerianic acid, 4.5:1, OCE 112.5 mg)	.25 mg
Lemon balm (Melissa officinalis, Herb top) (5:1, OCE 125 mg)	.25 mg
Holy basil (Ocimum tenuiflorum, Leaf) (4:1, OCE 200 mg)	.50 mg
Elemental Magnesium (from magnesium bisglycinate)	.25 mg

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