

Michael Dworkin, P.D., M.S.
Erika Dworkin, Dip. C.N. (Pend.)



Chronic Insomnia: A Risk Factor for Disease Natural Ways to Get the Sleep You Need

Sleep is not a luxury, but rather an important component of health.

A healthy amount of sleep is crucial for a vibrant and productive lifestyle. . . Many people are unaware of the potentially grave health effects of inadequate amounts of sleep. This may be because the medical community has only recently focused on the importance of sleep in promoting good health.

~ Sergey A. Dzugan, M.D., Ph.D. (Life Extension Magazine, Dec 2006)

Do you have difficulty relaxing enough to get to sleep? Do you wake up several times during the night with your mind racing? Do you wake up at 3 a.m. and find you can't get back to sleep? Over the short term, these experiences are often mere annoyances. If you can't catch up on your sleep over the long term, however, you likely have chronic insomnia, a condition you shouldn't ignore.

The Definition, Causes & Serious Risks of Insomnia

More than 30% of Americans suffer from insomnia, a disorder characterized by non-restorative sleep or difficulty falling or staying asleep. Chronic insomnia, a risk factor for disease, is considered to occur most nights and last at least one month.

Various physical and psychological disorders, medical treatments, and environmental factors can cause insomnia. Physical ailments include candidiasis (systemic overgrowth of yeast), hormonal imbalances (such as cortisol, estrogen and progesterone in menopausal women, and testosterone in andropausal men), hyperthyroidism, heart, lung and digestive disorders, allergies, arthritis, cancer, fibromyalgia, and prostate problems. The psychological issues that can underlie chronic sleep deprivation include ADHD, depression, anxiety, and bipolar disorder. The drugs that may cause sleep problems include those prescribed for depression, hypertension, water retention (i.e., diuretics), and asthma, allergies and other upper-respiratory conditions. The contributory lifestyle factors are addressed below.

Sleep influences the function of the immune, hormonal, and nervous systems. According to Sergey Dzugan, M.D., Ph.D., a growing number of studies have linked inadequate sleep or sleeping at odd hours with increased risk of cancer, diabetes, obesity, high blood pressure, and heart disease. Insomnia has also been linked to increased mortality, hospitalizations, and prevalence of emotional and psychological problems.

Insomnia plus chronic stress, often the cause or result of long-term sleep deprivation, set the stage for disease. As a stressor, chronic insomnia can often cause the adrenal glands to produce excess levels of cortisol, resulting in functional deterioration of various organ systems as they constantly attempt to rebalance. Stress from

sleep deprivation may thus slow down thyroid function by inhibiting thyroid hormone production (TSH) or metabolism (conversion of T4 to T3).

The Conventional Approach: Prescription Sleep Aids

As Dr. Dzugan puts it, "With so many Americans suffering from chronic insomnia, prescriptions for pharmaceutical sleep aids are at an all-time high. Unfortunately, these drugs can lead to dependence and sometimes produce adverse side effects." In fact, in 2007, the FDA asked all manufacturers of sedative-hypnotic drug products (such as Ambien®, Lunesta®, and Halcion®) to strengthen their product labeling to include warnings about wets, complex sleep-related behaviors (like sleep-driving and sleep-eating), and severe, sometimes life-threatening, allergic reactions. Equally important, prescription sleep treatments often become less effective over time.

Alternative Sleep Relief

Effective management of insomnia should be directed at the condition causing it. However, certain nutritional supplements and lifestyle changes can be used safely, often with rapid results. Like those for other conditions, nutritional sleep supplements and their doses will impact individuals differently and professional guidance may be indicated in more serious cases.

Magnesium Glycinate (Mineral)

Stress and magnesium deficiency are interrelated in that either can cause the other. Magnesium deficiency can also cause insomnia, muscle spasms/tension, abnormal heart rhythms, headaches, and constipation. Any type of magnesium can promote relaxation and thus a good night's sleep. Magnesium glycinate particularly supports a deep REM sleep when a 400mg dose is taken at bedtime.

Inositol + Niacinamide (B Vitamins)

Inositol and niacinamide can help induce and sustain deep sleep, especially when combined. Niacinamide penetrates the brain easily, is non-addictive, and does not produce the flush effect of the niacin form of vitamin B3. In 1979, Hoffman La Roche, the Swiss drug company that manufactured Valium, described niacinamide as "a brain constituent that has benzodiazepine-like actions." This writer has determined in clinical practice that the generally effective sleep dose of each nutrient ranges from 500-2000mg.

L-Taurine & 5-HTP (Amino Acids)

L-tryptophan and 5-HTP can be highly effective sleep aids, especially when taken together. L-tryptophan is a soothing, inhibitory neurotransmitter that plays a major role in stabilizing the heartbeat, blood pressure, and electrical activity of the nerves.

The body manufactures 5-HTP from L-tryptophan (found in turkey). Due to the conversion of 5-HTP to serotonin, a single 100 mg nighttime dose of 5-HTP has been shown in a placebo-controlled trial to improve the duration and depth of sleep.

Valerian Root (Herb)

Valerian root makes falling asleep easier and takes the body into deeper sleep cycles. One double-blind trial found that valerian extract (600mg 30 minutes before bedtime) is as efficacious as the insomnia drug Serax (oxazepam). Formulas that can also provide relief combine valerian with lemon balm (a blend shown in a small trial to be similar to Halcion, without any hangover effect), chamomile, hops, skullcap, catnip, melatonin, and/or 5HTP.

Melatonin (Natural Hormone)

The pineal gland secretes melatonin to regulate the body's circadian rhythm, the biological clock that helps manage various bodily functions. Studies show that melatonin deficiency may be an underlying cause of insomnia in the elderly, most likely because pineal tissue calcification reduces melatonin production during normal aging. Melatonin administered in human clinical trials induces sleep sooner and produces better sleep patterns compared to placebo.

The effective dose of melatonin can vary from 300 mcg to 5mg, but the safety of its use long-term is not established. Ideally, start with a lower dose and build gradually. An excessive amount can cause morning grogginess. Time-released products are available for those who not only have difficulty getting to sleep, but also tend to awaken during the night. Melatonin is indicated for any patient taking hypertensive drugs (which block its production in the body), but is contraindicated in patients taking SSRIs, such as Lexapro® and Paxil®.

Lifestyle Changes

Diet, a soothing regular bedtime regimen, and relaxation techniques can greatly reduce sleep difficulties, as can avoiding shift work, frequent flying, and excessive computer work. A sleep-promoting diet: (1) restricts dinner portions and food intake to 2-3 hours before bedtime; and (2) eliminates intake of sugar, caffeine, alcohol, spicy and fatty foods, and nicotine, especially near bedtime.

The National Sleep Foundation recommends maintaining a sleep schedule and sleeping in a room that is dark, quiet, comfortable, and cool. They also recommend developing a relaxing bedtime routine, which might include a warm bath, relaxing music, or a cup of herbal tea (see www.cthealthshop.com for more ideas).

Relaxation techniques that often enhance sleep by reducing stress include yoga, pilates, daily physical activity for at least 30 minutes (like yard work, dancing, or walking), meditation/deep breathing exercises, listening to comedy, and massage. Also try sprinkling the essential oil of lavender on a chiropractic pillow before turning in.

Conclusion

Natural remedies can be a safe, effective means of addressing moderate sleeplessness. If you already take a prescription sleep medication or have been struggling with insomnia for more than one month, it might be best to consult an expert in alternative medicine. Since chronic insomnia can be associated with or become a serious problem, seek guidance from the health care practitioner who can best treat any underlying condition you suspect may be robbing you of sleep.

Submitted by Michael Dworkin, P.D., M.S., a Registered Pharmacist and State Certified Clinical Nutritionist (CT Certification No. 232), with Erika Dworkin, Dip.C.N./Board Cert. Holistic Nutrition (pending). Owner of the Manchester Parkade Health Shoppe (860.646.8178, www.cthealthshop.com, 378 West Middle Turnpike, Manchester), Pharmacist Dworkin has been guiding patients since 1956 and is available for consultation by appointment. Erika is available to speak to groups. References are available upon request at info@cthealthshop.com. The statements in this article have not been evaluated by the U.S. Food and Drug Administration and are not intended to take the place of the advice of a physician. None of the natural remedies discussed herein are intended to diagnose, treat, cure or prevent any disease. See our ad on page 15.