

HEALTH AND STRESS

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STRESS AND INSOMNIA- SURPRISING SOLUTIONS

KEYWORDS: Accidents, adverse health effects, CARDIA study, actigraphy, hypertension in African Americans, nightmares and suicide, REM sleep, creativity and problem solving, siesta, *wushui*, Metronap Energy Pods, Zeo Personal Sleep Coach, CES, LEET, "mindfulness based" and Kriya yoga meditation, cognitive-behavioral therapy

Insomnia is a \$24 billion/year industry that includes all kinds of mattress and sleeping enhancements, prescription and over-the counter drugs, herbal supplements, white noise machines, cranioelectrical stimulation, heart rate variability feedback and other devices, audio and videotapes, stress reduction, self-hypnosis programs, etc. Sleep deprivation has become such a serious and growing problem that **sales of insomnia prescription drugs are expected to increase 80 percent and bring in \$4 billion by 2012.**

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**Naps, Sleeping Pills, And Devices Are
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The National Sleep Foundation's 2009 *Sleep in America* poll reported that 20 percent of Americans sleep fewer than six hours a night, a 65 percent increase compared to eight years ago. During the same period, those able to sleep a full eight hours or more dropped from 38 percent to 28 percent. The American Psychological Association's October 2008 *Stress in America* survey reported that 52 percent complained of difficulties sleeping, up from 48 percent the year before, largely due to the current economic

A March Gallup poll of over 350,000 adults confirmed that Americans have become increasingly stressed out because of financial fears. Sales of non-prescription sleeping aids have also risen along with elevated stress levels. Both escalated as the crisis worsened, particularly on days when the Dow lost the most and/or higher unemployment rates were reported. In the four week period that ended March 22, Advil PM sales at Walmart were 33 percent higher compared with the same period a year ago.

The National Institutes of Health estimates that 50 to 70 million Americans are affected by chronic sleep complaints that can significantly impair health, alertness and safety. Lack of sleep is associated with fatigue, diminished productivity on and off the job, as well as increased risk for heart attack, hypertension, stroke, depression, diabetes, obesity and other chronic diseases. Job pressures, the leading source of stress for adults, is a major cause of death from accidents such as airline crashes due to pilot fatigue from lack of sleep. Almost 45 percent of accidents occurred in workers who spent 50 hours a week on the job, compared to only 16 percent who put in 35 hours or less. Fatigue from sleep deprivation is believed to have played a crucial role in the Chernobyl and Three Mile Island nuclear disasters, as well as the Exxon Valdez tanker oil spill catastrophe in Alaska. **Despite some \$4 billion spent on cleanup efforts over the past 20 years, pollution problems have not been fully resolved and could persist for decades.**

According to the National Highway Traffic Safety Administration, drowsy driving claims over 1,500 lives and causes many more than the documented 100,000 motor vehicle crashes each year. State highway patrol officers estimated that 10 times more sleep deprivation related crashes occur than are reported and over a dozen states do not even include drowsiness as a possible cause on accident reports. In New York State, sleepiness was a factor in more than 4 out of 5 accidents in which vehicles left the roadway. One third of rotating shift workers have reported crashes or near crashes due to drowsiness. More than half of such crashes occurred between midnight and 7 a.m., usually after driving alone for over two hours. A study of long distance truck drivers revealed that half had fallen asleep on one or more occasions while driving and when truckers are involved in fatal accidents, they take an average of 4.1 innocent victims with them. In the 2009 Sleep Foundation poll, 54 percent said they had driven when drowsy at least once in the past 12 months. Nearly 40 percent of people who regularly sleep less than six hours a night said they had experienced drowsiness while driving at least once a month during the past year. Nine out of ten reported suffering from insomnia at least three times a week in the past month that made them too tired to work efficiently, get enough exercise, or to eat properly. **One expert described sleep deprivation and disturbances as "America's largest, deadliest and costliest health problem, because everyone is ignorant about its impact."**

Heart Attacks, Hypertension, Stroke, Depression, Obesity, Diabetes & Death

Most people recognize that lack of sleep can cause fatigue and accidents, but, as indicated above, few are aware how much it can contribute to serious health problems. As emphasized in previous Newsletters, stress is the leading cause of insomnia and insomnia is a frequent source of stress. These intricate interrelationships often lead to a vicious repetitive and self-

perpetuating cycle that can make it difficult to determine which came first or distinguish cause from effect. This was confirmed by a recent report on over 500 adults studied in a sleep laboratory, who also completed a battery of tests to measure daytime sleepiness, fatigue and ability to function, sleep quality, trait anxiety and stress levels. Subjects with chronic increased stress had shorter sleep duration, poorer sleep quality and less ability to function the following day. Conversely, shorter sleep duration predicted an increased likelihood of higher stress levels. The combination of greater stress and more severe sleep complaints was associated with an increased incidence of cardiovascular problems, diabetes and other diseases.

To further complicate things, both stress and sleep disturbances, especially sleep apnea, increase risk for heart disease, which can also cause insomnia as well as increased stress. Most studies demonstrating the link between lack of sleep and coronary disease have focused on men, but a Harvard study that followed 122,000 women for over ten years found that **those who slept five or less hours a night were 82 percent more likely to have a heart attack compared to controls who slept eight or more hours. Even women who got six hours of sleep nightly had 30 percent higher heart attack rates.** Heart attack patients often experience insomnia prior to the event. In one survey, nearly half said they woke up frequently during the previous two weeks, compared to one out of three for other hospitalized patients and only one in four of healthy controls. Dutch researchers reported a syndrome of unusual fatigue and exhaustion in the weeks preceding a heart attack at our 1990 International Congress on Stress. This tended to occur more frequently in men with high levels of job stress, further supporting the link between job stress and heart attacks.

Quality and type of sleep are also important. Rapid eye movement (REM) sleep, which is associated with dreaming, is most frequent in the period immediately before waking up in the morning. It is accompanied by a rise in sympathetic nervous system activity and the secretion of stress related hormones like cortisol and adrenaline that increase blood pressure, heart rate, platelet clumping and clot formation. This helps to explain why most heart attacks and strokes occur in the morning shortly after waking up, and especially on Mondays. **In one report, heart attack risk was 20 percent greater for men and 15 percent higher for women on Mondays.** This has been attributed to the superimposed stress of returning to a hectic workweek after two days of relative relaxation. Cortisol levels are generally high immediately upon waking, increase over the next hour or two, and fall to much lower values at bedtime. Stress can alter this normal healthy pattern in several ways. One study showed that when older adults went to bed feeling lonely, sad or overwhelmed, they had much higher levels of cortisol than normal shortly after waking up in the morning. Lack of sleep

may also contribute to coronary disease by promoting free radical production and inflammation. Levels of C-reactive protein (CRP), a marker of inflammation that predicts coronary events more accurately than cholesterol, are significantly higher following sleep deprivation.

Several studies over the past four years confirm that long-term sleep deprivation increases the risk of hypertension. A 2006 8 to 10 year follow-up of almost 5,000 participants between the ages of 32 and 86, found that **those 59 and younger who slept less than six hours a night had more than double the risk of high blood pressure, compared to controls who slept more than six hours.** Women may actually be more sensitive than men, according to a 2007 study of over 10,000 subjects aged 35 to 55 who had been followed for five years. **Women who slept 5 or less hours a night were twice as likely to have hypertension than women who slept 7 or more hours a night.** A 2008 report showed that lack of sleep also increased complications in elderly hypertensives. Researchers monitored 1,255 patients with high blood pressure (average age 70.5) and recorded sleep duration, daytime and night time blood pressures as well as adverse events such as heart attack, stroke or sudden death. **Of the 99 cardiovascular complications that occurred during the four to five year follow-up period, 75 percent were in those who slept less than 7.5 hours.** Sleep deprivation reduces HRV (heart rate variability) and low HRV is a significant risk factor for heart attacks and a powerful predictor of sudden death in humans and animals.

A June 2009 report on 578 African American and white adults (average age 40) participating in the long term Coronary Artery Risk Development in Young Adults (CARDIA) study provided further support. Blood pressure was measured along with other clinical, demographic, and health variables that included answers to questions about total sleep time and its quality. Both were assessed using surveys as well as a sensor worn on the wrist for three consecutive nights. This actigraphy monitoring method quantifies the duration of sleep and its consistency by measuring the amount of "restlessness", and has good correlation with polysomnography results. After five years, 75 people (14 percent) had developed high blood pressure during the study. **The average amount of sleep a night was six hours and only 1 percent averaged eight or more hours.** In general, subjects with shorter sleep duration or poorer sleep quality tended to have higher blood pressures. One hour of reduction in sleep duration was associated with a 37-percent increase in the likelihood of developing hypertension over the next five years. **For every two hours of daily sleep deprivation, risk for hypertension increased to 86 percent.** Of particular interest was the observation that African American men were much more likely to get fewer hours of sleep. People of African descent have the highest rates of

hypertension of any ethnic group, with 35 percent of African Americans being affected and the disease is much more severe. **High blood pressure accounts for 20 percent of all black deaths, twice the percentage in whites, and stroke risk is 80 percent higher than the general population.** African American hypertension also tends to be more resistant to drugs and is generally attributed to a genetic trait that increases sensitivity to sodium. This study suggests that diminished sleep duration could also be a contributing factor.

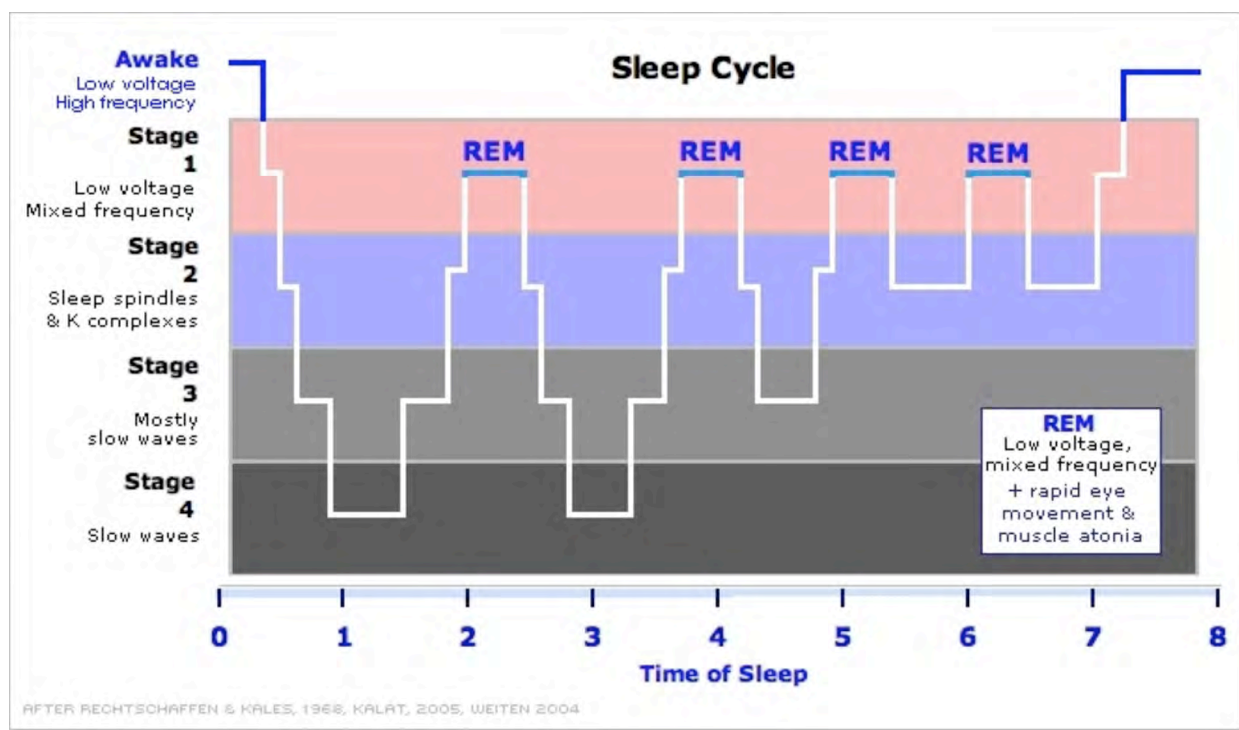
Sleep related problems are also surprisingly expensive, based on a study of 1,000 middle-aged Quebec men and women. They completed questionnaires on sleep, health, use of health-care services and products, accidents, work absences, and reduced productivity. Data were also obtained from the government administered Health Insurance Board regarding consultations and hospitalizations. Participants were categorized as suffering from insomnia, intermittent sleep complaints or good sleepers. When direct (physician, prescription and non prescription sleep aids) and indirect (absenteeism and diminished productivity) expenses were calculated, the average annual per-person cost was \$5,010 for individuals with insomnia, \$1,431 for those with intermittent symptoms, and \$421 for good sleepers. Extrapolating from this, the annual price tag for sleep related problems for the province of Quebec alone was estimated to be \$6.6 billion. Further analysis revealed that 76 percent of this was attributable to work related absences and reduced productivity, factors that are often not fully appreciated when calculating the financial toll of sleep deprivation.

The problem with this and many other sleep studies is the inaccuracy of personal estimations of the severity and frequency of insomnia, and also how insomnia has been defined. The usual definition is taking longer than 30 minutes to fall asleep several nights a week for at least a month, which then interferes with daytime functioning. A report in the April 1 issue of *SLEEP* that included polysomnography data on 1,741 men and women provided more objective proof of a direct correlation between sleep deprivation and hypertension. **Those who slept less than 5 hours had a 500 percent greater risk for developing hypertension compared to controls that slept 6 or more hours over the next fourteen years. Participants who regularly slept 5 to 6 hrs were at 350 percent higher risk.** Not getting enough sleep also doubled the risk of death due to suicide according to another study of 5,692 men and women. One third of the volunteers reported at least one type of sleep disturbance over the preceding year, such as trouble falling asleep, staying asleep, or waking up at least two hours earlier than desired. Those in the last category were twice as likely to have had suicidal thoughts and were nearly three times more apt to have tried to kill themselves, even after adjusting for depression, substance abuse, age,

gender, and marital and financial status. While insomnia is a hallmark of depression, this study showed that sleep deprivation increased the likelihood of suicide in subjects without depression or any other common risk factors. Nightmares could also be a factor according to an analysis of 82 severely depressed adults who had sought emergency psychiatric evaluation. All completed symptom questionnaires that included detailed information on sleep problems, including dreams, and mood changes. The study, which was presented at the June Annual Meeting of the Associated Professional Sleep Societies (SLEEP 2009), meeting revealed that only nightmares and disturbing dreams were associated with increased suicidal symptoms. No such correlation was found with shorter total sleep times.

Suicide is the eighth leading cause of death in all adults, and is most likely to occur in people who are depressed. It has been proposed that lack of sleep might affect cognitive function leading to poorer judgment or feelings of hopelessness, and some studies support this. Serotonin could play a role, since low serotonin levels are often found in patients who have attempted suicide, and serotonin can influence the onset and maintenance of sleep. The interrelationships between depression and sleep disturbances are complex. As with stress, depression can be both a cause and consequence of insomnia, and when they coexist, there is the same chicken or egg question. One sleep survey found that over 40% of patients reported symptoms of insomnia before the development of a mood disorder. Another found that patients with persistent insomnia were 3.5 times more likely to develop depression over the next 12 months compared to controls with no sleep complaints. Those with breathing related sleeping disorders such as sleep apnea (in which breathing stops for a few seconds) were at even greater risk. Insomniacs were also five times more likely to experience strong paranoid thoughts than others without sleep complaints and were more prone to gambling and other addiction problems. These observations emphasize the importance of diagnosing and treating insomnia as early as possible, especially since insomnia has been shown to be a significant risk factor for suicide in depressed patients. There is also some evidence that the successful treatment of insomnia may help to prevent depression or reduce its severity.

The importance of quality of sleep was supported by another paper at the SLEEP meeting, which found that certain types of sleep fragmentation were associated with increased death rates. Sleep fragmentation refers to the interruption of a sleep stage by waking up, or the premature appearance of another sleep stage.



As illustrated above, there are five sequential stages of a sleep cycle, the fifth being REM sleep. The sleep cycle progresses from stage 1 through 4 to REM and then starts all over again. Each cycle lasts from 90 to 110 minutes and most people complete 3 to 5 cycles each night, although stage 4 deep sleep may not be reached prior to awakening. In this study, 5,614 subjects underwent overnight polysomnography and sleep fragmentation was rated based on the number of sleep stage transitions per hour of sleep. Researchers reported that a shorter transition from being awake to non-REM sleep and from non-REM sleep to being awake were both associated with significantly higher mortality rates over the next eight years.

Other papers at the June SLEEP 2009 conference revealed that:

- Chronic sleep deprivation is associated with higher rates of ADHD in children, especially those with shorter REM sleep time. A study of 280 seven and eight-year-olds found that those who slept fewer than 7.7 hours a night were more prone to hyperactivity, restlessness, impulsiveness and lack of concentration. Children in this age group require 9 to 11 hours of sleep/day.
- Sleep deprivation increases risk for diabetes, obesity and impaired immune system function. Some 25 percent of obese children suffer from increased snoring and interrupted or shortened sleep duration. Adolescents whose parents let them stay up after midnight on weeknights are 42 percent more likely to be depressed compared to those whose parents enforce a 10 p.m. or earlier bedtime. And teens

who were allowed to stay up late were 30 percent more likely to have had suicidal thoughts during the previous 12 months. Adolescents also require 9 or more hours of sleep/day.

- Sleep disturbances are more likely to occur in people who watch TV before retiring. Seven out of 10 Americans spend their last two waking hours looking at programs that dictate when they go to bed rather than their level of drowsiness or the need for a full night's sleep. These frequently portray violence or other stimulating activities that can make it difficult to fall asleep or lead to disturbing dreams that cause an abrupt premature awakening. Although technologies allow many people to record and view a program at another time, they just wait until it ends. Studies show that those living in the Mountain and Central time zones who watch such shows an hour or two earlier, get more sleep than those who live in the Eastern time zone.
- Increasing total sleep time can improve mood, emotional responses, concentration, and memory, scholastic and athletic performance.
- Women with stable marriages or new partners enjoy better sleep.
- A possible genetic link has been found between insomnia, anxiety and depression.
- REM sleep enhances creativity and problem solving.
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Is REM And Quality Of Sleep As Important As Total Sleep Time?

The adverse health effects of sleep fragmentation are believed to be due to the observation that it usually results in diminished stage 4 deep sleep and stage 5 REM sleep, rather than loss of total sleep time. As previously noted, REM sleep improves cognitive function and creativity and is also when we are likely to have more vivid dreams. Mary Shelley developed the story of *Frankenstein* from a dream and Edgar Allen Poe's *Lady Ligea* was inspired by a dream that featured large luminous eyes. Dreams were also responsible for the creation of compositions by Beethoven, Paul McCartney, Billy Joel and other musicians, in which some heard musical arrangements while others heard lyrics. The German chemist Friedrich Kekulé struggled for years to determine the structure of the benzene molecule until he had a dream in which he saw snakes making circles with their tails in their mouths. He suddenly realized that unlike all other known organic compounds that had linear structures, benzene consisted of a circular six-member ring of carbon atoms with alternating single and double bonds that held them together. Elias Howe, the inventor of the modern sewing machine, had also spent years searching for some way in which a needle could be used, until he had a dream in which he was surrounded by native tribesmen with spears that had a hole in the point. His needle with an eye at the tip allowed him to obtain a patent for "a process that used thread from two different sources" that revolutionized machine sewing. Jack Nicklaus credited much of his

success to a dream in which he found a new way to hold his golf club that rapidly resulted in marked improvement.

These individuals were fortunate, since in most cases they were so stimulated that they woke up with a clear recollection of their experience. **Five minutes after the end of a dream, we can only remember 50 percent of its content and after ten minutes we have forgotten 90 percent.** The average dream lasts for 5 to 20 minutes and everyone dreams several times a night, even though most people are apt to forget them the following day. Freud suggested that dreams were the secret window into our unconscious frustrated desires and we forget them because they contain repressed thoughts and hopes we don't want to remember. However, it seems more likely that after we wake up, other thoughts replace them. In addition, we learn and remember by association and repetition. For example, if someone uses a word or phrase you don't recall ever having heard, you might need to have them repeat it in order to remember or even understand it. Since we can't go back to our dreams to experience something novel again, it's not surprising that we no longer remember them.

REM sleep is also important for learning physical skills. That is thought to explain why infants and toddlers experience much more REM sleep than adults. In addition to rapid eye movement, other physiological changes also take place during REM sleep. Heart and respiratory rate as well as blood pressure increase, and alpha brain wave activity rises to the same level as when we are awake or even higher. However, the rest of the body is essentially paralyzed due to the release of glycine from the brain that inactivates motor nerve cells. Since REM is the sleep stage at which most dreaming takes place, this paralysis could be nature's way of making sure you don't act out your dreams. Otherwise, if you're sleeping next to someone who is dreaming about playing soccer, you might be awakened repeatedly, which sometimes happens during very vivid dreams. Elephants stand up during non-REM sleep, since it is easier for them to escape if they detect a predator, but they lie down when REM sleep takes over. The only other time they lie down is if they feel tired or perfectly safe. Elephants only sleep for two to four hours a day, usually in naps rather than one uninterrupted segment. An adult elephant will actually die if it lies down for more than a few hours, as the weight of the gut pressing against the diaphragm eventually puts too much strain on the lungs, and they suffocate.

People often assume that if they get under the covers at 11 and get out of bed at 7 that they sleep for 8 hours. However, we rarely go to sleep immediately, often spend time in bed after waking up, and few can accurately recall how often they wake up during the night or how long it takes to go back to sleep. The average time actually spent sleeping is 6 hrs

and 40 minutes, and although this may not seem alarming, small daily deficiencies can add up. It's very much like periodically having to put a certain amount of money in your bank account to satisfy your financial obligations. Unfortunately, we don't receive monthly statements informing us of the status of our sleep account, and may be unaware of dangerous deficiencies because they are camouflaged by various forms of stimulation that keep us awake. The first indication of bankruptcy may be when you doze off unexpectedly, which could be disastrous if you happen to be driving.

One early warning sign may be excessive daytime drowsiness, which is apt to occur in the late morning and/or early afternoon. Short naps of 15 to 30 minutes have been shown to be effective in improving alertness as well as productivity and several Japanese companies have special napping rooms for employees to use, especially during lunch hours or following overtime work. Such "power naps" also improve performance in non-depressed workers, especially prior to a midnight to 8 work shift. Leonardo da Vinci, Thomas Edison, Albert Einstein and Winston Churchill all took naps regularly and sometimes more than once a day. A six-year study of Greek men found that those who napped at least three times a week had a 37 percent lower risk of death from heart disease. Children and the elderly frequently take afternoon naps and in many parts of the world, especially in hot climates, stores and businesses shut down to take an afternoon *siesta*. *Siesta* is a Spanish word derived from the Latin *hora sexta*, or "sixth hour", which is noon if you count down from dawn. That's when the sun is at its height and cattle and sheep sought relief by lying down in the shade. Those who tended them took naps since the unbearable heat dramatically reduced work productivity. But even in parts of Spain and Chile where the climate is similar to Canada and Northern Europe, afternoon naps are common, especially in farming areas, where lunch is usually the largest meal. Napping after the midday meal is also common in China, where it is called *wushui*. Almost all schools in Mainland China and Taiwan have a half-hour nap period right after lunch, during which all lights are out and only rest or sleep are permitted. In Bali and New Guinea, people tend to sleep only when they feel the need to, nap frequently during the day, and tend to get up more at night.

Naps, Sleeping Pills, And Devices Are Not As Effective As Stress Reduction

France's health minister recently announced plans to encourage companies to allow employees to take paid "power naps." He noted that more than half of workers complain that lack of sleep affects their job performance and that sleepiness caused 20 percent to 30 percent of highway accidents. Part of this may be due to the large lunches with liberal amounts of wine that contribute to afternoon sleepiness and the state run health insurer is spending \$9 million on an educational campaign. More American companies are also allowing naps at work, and New Yorkers can now take advantage of the

MetroNaps EnergyPods located in the Empire State Building. These fiberglass enclosures have a contoured bed surface insuring that the knees are raised slightly above the heart to take the weight off the lower back, while Bose noise-canceling headphones emit melodiously soothing tunes to aid drifting off. A built in alarm is set and once naptime is over, lights and vibration serve as a gentle wake up call. Members pay \$65 a month for an unlimited napping and non-members pay \$14 for 20 minutes. Instead of "No Sleeping on the Job" signs, many companies are leasing or purchasing this "self-contained productivity device" since it can be placed anywhere and avoids having workers sleep at their desks, a conference table, bathroom or car. However, napping will not make up for lost sleep time and especially REM sleep. If you are sleep deprived, the body tries to correct this by extending the next night's total and REM sleep time. Naps can interfere with this if it is done after 4 p.m or lasts longer than an hour and are not recommended for patients suffering from insomnia or depression.

As emphasized in a prior Newsletter, prescription sleeping pills should be avoided because they are addictive and can have significant gastrointestinal, neurological and psychological side effects. They are also associated with a 44% higher risk of developing sinusitis, pharyngitis, upper respiratory tract infections, influenza, herpes and other viral infections. Non-prescription sleeping aids like Sominex, Advil PM, Tylenol PM and Excedrin PM all contain diphenhydramine, the antihistamine in Benadryl. However, the reason that combination analgesic products are so popular is that insomnia is most common in older individuals who are also much more likely to suffer from arthritis and other painful disorders. There are numerous supplements such as valerian, chamomile tea, tryptophan, rhodiola, ginseng and combinations of these, but save for melatonin in people with a deficiency, none have any scientific support and any benefits are likely placebo effects. Soothing music, aromatherapy, self-hypnosis and other audio and videotapes that are widely promoted have scant scientific support for their claims, save for Medical Resonance Music Therapy. Certain cranioelectrical stimulation and heart rate variability feedback devices do have supportive studies published in peer-reviewed journals and LEET (low energy emission therapy) has been shown to be very effective in double blind sleep laboratory studies. It has no side effects and is not habit forming, but is not yet available in the U.S.

There are various practical tips, like: avoiding nicotine, caffeine, eating or drinking too much; stimulating or violent TV programs, or strenuous exercise for three hours before retiring; follow a consistent bedtime routine and also try to get up the same time each day; keep your bedroom quiet, dark and away from distractions like pets and use it only for sleep or sex. A daily diary of what you did before retiring and how well you slept may help to identify what might be causing problems. You can obtain a more accurate appraisal

with the Zeo Personal Sleep Coach that uses a soft headband with sensors that monitor your brain waves. Wireless signals are sent to a device that looks like a sleek clock radio and **displays whether you are awake or in light sleep, deep sleep, or REM sleep in real time.** The information is retained on a memory card you can upload to a Web site that stores and displays your sleep patterns and sends coaching tips for getting better sleep. To track progress, this \$399 personal sleep lab sends a "ZQ" score each morning based on the quantity and quality of that night's sleep. This makes it easier to identify and avoid those factors most likely to contribute to your personal sleep problems by checking with your daily diary. Zeo results confirm that increased stress is the most common culprit. **The \$64 question is "What is the most effective way to reduce stressful thoughts and feelings that interfere with getting a good night's sleep?"**

Prior studies have demonstrated that meditation can be helpful, and this was confirmed at the 2009 SLEEP meeting for "mindfulness based" and Kriya yoga meditative practices. But the clear winner was cognitive behavioral therapy (CBT), which was again shown to be more effective than drugs for the treatment of insomnia. CBT is an umbrella term for a variety of psychological techniques that emphasize the important role of thinking in how we feel and what we do. It is based on the idea that our thoughts cause our feelings and behaviors, rather than external things like unpleasant people and events. Therefore, once we learn to change the way we think, we will feel and act better, even if the stressful situation persists. In Great Britain, the government also recommends CBT as the treatment of choice for PTSD, depression, bulimia and obsessive-compulsive disorder. However, CBT approaches vary considerably with respect to their emphasis on cognitive vs. behavioral components and individual or group sessions. Some are offered on line or via CDs that do not require direct interaction with a trained therapist, which was previously considered to be crucial. Finding a program that best fits your needs can be difficult — stay tuned to find out how!

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