

# **THE SLEEP SOLUTION**

## ***Rest Your Brain for a Slimmer Shape and Smoother Skin***

*“Sleep plays a major role in preparing the body and brain for an alert, productive, psychologically and physiologically healthy tomorrow.” James Maas, PhD, Power Sleep*

You know how bad you look and feel after a night of poor sleep. You feel like your head is glued to the pillow, and you can barely muster the energy to get out of bed. You shuffle to the bathroom, turn on the light, and come face to face with puffy bags and dark circles under your eyes. You head outside for your usual thirty-minute jog but stop after ten minutes because you feel whipped. Then you head to work where you snap at your coworkers and customers because you are in a foul mood. It isn't a pretty picture, is it?

Good sleep is essential for optimal brain and body health. It is involved in rejuvenating all the cells in your body, gives brain cells a chance to repair themselves, and activates neuronal connections that might otherwise deteriorate due to inactivity. It is also necessary if you want to have glowing skin, high energy, a sunny mood, excellent health, and stable weight.

Unfortunately, as many as 70 million Americans have trouble sleeping. If you are one of them, your brain and body could be in trouble.

## ARE YOU GETTING ENOUGH SLEEP?

Many Americans aren't getting the sleep they need. According to the 2009 Sleep in America Poll, Americans are averaging only six hours and forty minutes of sleep on workdays and school nights. People tend to squeeze in an extra twenty-seven minutes of sleep on weekends. Even more disturbing, the percentage of people getting less than six hours of sleep has risen from 12 percent in 1998 to 20 percent in 2009 while the percentage of Americans getting a good eight hours a night has decreased from 35 percent in 1998 to 28 percent in 2009. The numbers reveal that getting a good night's sleep is becoming little more than an elusive dream for many Americans. Chronic sleep problems affect millions of us. Temporary sleep issues are even more

common and will affect almost every one of us at some point in our lifetime.

Think about your own sleep habits. When was the last time you drifted off to sleep

easily, slept soundly all night long, and woke up feeling refreshed and alert? When was the last time you hopped out of bed in the morning raring to go? When was the last time you saw sat down to watch a movie and didn't nod off? If you aren't getting adequate sleep, your brain and body are at risk.

Sleep troubles come in many varieties. Do you have trouble falling asleep? Do you go to

### **AVERAGE SLEEP REQUIREMENTS BY AGE**

<b>Age Range</b>	<b>Number of Hours of Sleep</b>
<i>1-3 years old</i>	<i>12-14 hours</i>
<i>3-5 years old</i>	<i>11-13 hours</i>
<i>5-12 years old</i>	<i>10-11 hours</i>
<i>13-19 years old</i>	<i>9 hours</i>
<i>Adults</i>	<i>7-8 hours</i>
<i>Seniors</i>	<i>7-8 hours</i>

*Sources: National Sleep Foundation, National Institute of Neurological Disorders and Stroke*

sleep easily but wake up repeatedly throughout the night? Do you find it hard to drag yourself out of bed in the morning? Do you or your significant other snore? All of these problems can lead to decreased brain function and a second-rate body. Getting less than six hours of sleep a night has been associated with lower overall brain activity, which can affect your weight, your skin, your mood, your health, and your athletic performance.

### **WHY LOSING SLEEP CAN MAKE YOU FAT**

You probably thought that your cravings for candy and cookies were just a sign of mental weakness and a lack of willpower on your part. You may be wrong. An expanding body of evidence has shown that sleep deprivation is associated with weight gain and obesity. Here's what researchers from around the nation have discovered about sleep and your weight.

According to a study from the University of Chicago, people who are sleep-deprived eat more simple carbohydrates than people who get adequate sleep. The researchers studied twelve healthy men in their twenties and found that when the men slept only four hours a night, they were more likely to choose candy, cookies, and cake over fruit, vegetables, or dairy products.

For this study, which appeared in the *Annals of Internal Medicine*, researchers also looked at two hormones — leptin and ghrelin — that are regulated by sleep and involved in appetite. As discussed earlier, leptin and ghrelin work together to control feelings of hunger and satiety. Ghrelin levels rise to signal the brain that you are hungry, then leptin levels increase to tell your brain when you are full. The researchers measured the levels of leptin and ghrelin

#### ***ACTION STEP***

*Stop trying to convince yourself that you only need five hours of sleep each night. Be aware of the basic sleep requirements for your age group.*

before the study, after two nights of only four hours of sleep, and after two nights of ten hours of sleep. After four hours of sleep, the ratio of ghrelin jumped 71 percent, compared to a night when the men slept for the longer period of time. This made the men feel hungrier and drove them to consume more simple carbohydrates. As explained in an earlier chapter, eating simple carbs sends blood sugar levels skyrocketing then plummeting, which saps energy and leaves you feeling fatigued.

In a study published in the *American Journal of Clinical Nutrition*, researchers had people sleep for five and a half hours for two weeks and then eight and a half hours for another two weeks at random. Then they measured how many snacks the subjects munched during their stays in the sleep laboratory. When the people slept only five and a half hours, they consumed an average of 221 more calories in high-carbohydrate snacks than when they got eight and a half hours of sleep.

This pattern is occurring in the real world, too, not just in researchers' sleep labs. According to the 2009 Sleep in America Poll, people who are having trouble sleeping are almost twice as likely to chow down on sugary foods and simple carbs, such as potato chips, to help them make it through the day. They are also more inclined to skip breakfast or other meals, which puts your blood sugar levels on a rollercoaster ride that's bad for brain function and often leads to poor nutrition choices later in the day.

Sleeping less makes you eat more sugary junk foods rather than fruits, vegetables, and whole grains. It also makes you eat more calories overall, which increases your risk of gaining weight and becoming obese. A study from researchers at Case Western University tracked the sleeping habits and weight fluctuations of 68,183 women for sixteen years. The women were broken down into three categories — those who slept seven hours a night, those who logged six

hours of sleep, and those who got five hours or less of sleep. *They found that the women who slept five hours or less gained the most weight over time and were the most likely to become obese.* The women who slept only six hours a night were more likely to pack on extra weight than the women who got seven hours of shut-eye.

Dozens of other studies point to a connection between a lack of sleep and weight gain or obesity. For example, researchers at the University of Warwick reviewed data from more than 28,000 children and more than 15,000 adults and found that sleep deprivation almost doubles the risk of obesity for adults and children. Another study conducted by researchers at Stanford University found that people who sleep less have higher body mass index (BMI) levels.

The Stanford University study also found lower leptin levels and higher ghrelin levels in people who sleep less. The researchers examined a thousand people, measuring their sleep habits, their sleep on the night before the exam, and their leptin and ghrelin levels. They found that people who consistently slept five hours or less per night had on average 14.9 percent more ghrelin (which stimulates appetite) and 15.5 percent lower leptin (which tells your brain you are full) than people who slept eight hours a night. These studies show that when you don't get enough sleep, you feel hungrier and don't feel full regardless of how much you eat, so you eat more which makes you fat!

So, if dodging sleep can make you fat, can getting adequate sleep help you lose weight? Editors at *Glamour* magazine decided to put this notion to the test with an unscientific — yet fascinating — study. They enlisted seven female readers and gave them one simple task: sleep at least seven and a half hours each night for ten weeks. In addition,

***ACTION STEP***

*If you are trying to drop excess weight, spend more time in bed — sleeping!*

they were instructed not to make any significant changes in their diets or exercise routines during the ten weeks. The results were amazing. All seven women lost weight, with the weight loss ranging from six pounds to an astonishing fifteen pounds.

## GET MORE SLEEP FOR SKIN THAT GLOWS

We often talk about getting our “beauty sleep,” and we couldn’t be more accurate with that description. Getting adequate sleep actually does far more for your skin than a medicine cabinet filled with wrinkle creams, moisturizers, acne treatments, and anti-aging serums. With the right amount of sleep, your skin will look younger, smoother, and more refreshed. When you try to get by on little sleep, you set yourself up for premature aging of the skin, dark circles under the eyes, even acne. Here’s how sleep can benefit your skin.

**Rejuvenate the skin:** Cell regeneration is a process during which old, dead skin cells are replaced with fresh new cells. This process goes on at all times within the body, but it happens more quickly at night so you generate more new skin cells while you sleep than at any other time. As we get older, cell replacement slows down, which makes sleep even more crucial if you want to delay the thin, saggy skin that comes with age.

**Reverse skin damage:** On a daily basis, your skin is faced with elements, including the sun’s harmful UV rays, secondhand smoke, and other environmental pollutants, that cause premature aging and damage. While you sleep, your skin repairs itself from this daily damage.

**Prevent acne:** As we sleep, the brain regulates the body’s hormones, including androgens, which stimulate the production of sebum, or oil, in glands

### ***ACTION STEP***

*Give your skin adequate time to repair itself at night.*

located in the skin. When hormones are balanced, sebum production is regulated to help keep skin looking clear and smooth. Hormonal imbalances can cause too much sebum production, which can lead to acne.

## **LOSE SLEEP AND YOU LOSE FOCUS AND WILLPOWER**

People who get less than seven hours of sleep a night have lower activity in the prefrontal cortex and temporal lobes, which are involved in memory and learning. This limits the ability to pay attention, learn, solve problems, and remember important information. These are all vital skills you need if you want to tackle a new dance routine, learn a new sport, learn to cook brain-healthy recipes, or remember to take your medications. Considering this, it is no surprise that sleep-deprived individuals struggle to maintain a healthy body.

### ***ACTION STEP***

*Improve your willpower by maintaining a regular sleep schedule seven days a week.*

## **HIT THE SACK FOR PEAK ATHLETIC PERFORMANCE**

It should come as no surprise that lack of sleep hinders athletic performance. Anyone who has ever exercised or played sports while sleep deprived knows that it is tough to be at your best on the court, on the field, or in the gym.

Research shows us that sleep deprivation impairs motor function, which makes you less coordinated and more likely to strike out at bat or shank your drive on the golf course. Reaction times are slowed so you don't get to the ball fast enough. The reduced cognitive functioning associated with lack of sleep means that you may not make the best on-court decisions or may

not remember the new steps you learned the week before in your ballroom dancing class. Plus, you tend to feel tired faster because sleep deprivation negatively affects glucose metabolism.

On the other hand, getting a good night's sleep can give your game a boost. That's according to researchers at Stanford University who looked at the relationship between sleep habits and athletic performance in six male Stanford basketball players. The researchers measured the subjects' sprint times as well as free-throw and three-point shooting percentages. For the first two weeks, the college players maintained their regular sleep habits; for the second two weeks, they were told to get as much extra sleep as possible. After the extended sleep period, the athletes were faster and more accurate shooters. The average sprint time decreased by one second, free-throw shooting improved by about 10 percent, and three-point shooting increased by more than 10 percent. The extra sleep offered another performance bonus — the test athletes reported having more energy.

A follow-up study involving students on Stanford's men's and women's swim teams showed similar improvements. They swam faster, reacted quicker off the blocks, improved turn time, and increased kick strokes after a two-week period of extended sleep.

Sleep may offer other benefits to athletes at every level — from the NBA's MVP to the weekend golfer to the company softball player. Research from Harvard Medical School suggests that after initial training — whether it is learning how to execute your NBA team's offensive plays, how to hit a chip shot, or how to swing a bat — the brain continues to learn while you sleep. This indicates that sleeping can make you a better athlete.

***ACTION STEP***

*To help you fall asleep faster, avoid exercising or playing sports too close to bedtime.*

## LACK OF SLEEP WORSENS YOUR MOOD

In a 2007 survey from the Better Sleep Council, 44 percent of workers admitted that when they are sleep deprived, they are more likely to be in an unpleasant or unfriendly mood. In general, people who are tired from lack of sleep tend to feel irritable and don't have the energy to do much of anything. Curling up on the couch to watch TV or thumbing through a magazine might be all the energy you can muster after a sleepless night.

Studies show that decreased motivation due to poor sleep makes you more likely to skip family events, work functions, and other recreational activities. Social connections help keep the brain young, so missing out on get-togethers and events due to fatigue can

### ***ACTION STEP***

*Make sleep a priority in your life rather than an afterthought.*

dampen your mood and prematurely age your brain. This can be especially troublesome for seniors because a lack of social connections and bonding can speed up the brain's aging process.

Plus, when you are sleep deprived, you are less inclined to exercise or get intimate with your significant other, which deprives your brain and body of feel-good chemicals that boost your mood. If you want to improve your mood, improve your sleeping habits.

## SLEEP DEPRIVATION IS HAZARDOUS TO YOUR HEALTH

Skimping on sleep can affect your health in more ways than you might imagine. It can even stunt growth in young people. Growth hormones produced in the brain are typically generated as we sleep. If youngsters don't get enough sleep, they may not produce enough of the hormones to fuel growth. Chronic sleep loss is also associated with a number of poor lifestyle choices as well as brain-related conditions and disorders that put your physical and mental health at risk.

**Bad lifestyle habits:** When you don't get enough sleep, you are inclined to gulp more caffeine, smoke more, exercise less, and drink more alcohol. Studies show that sleep-deprived adolescents are also more likely to drink alcohol, smoke marijuana, and use other drugs than those who get enough sleep.

**Type 2 diabetes:** Sleep deprivation can put you at risk for this serious condition. In a sleep study with healthy volunteers, those who got only 5.5 hours of bedtime experienced insulin resistance and impaired glucose tolerance — two precursors of diabetes — after just two weeks.

**Depression:** Sleep deprivation has been linked to mood problems and depression in a number of scientific studies. One study published in the journal *Sleep* found that sleep problems are an early sign of depression and that treatment of sleep issues may protect individuals from developing the disorder. Similarly, researchers at the University of Rome who studied children between the ages of seven and eleven suffering from depression found that 82 percent of them reported having problems sleeping. Another study shows that insomnia in adolescents is a significant risk factor for depression later in life. Among the elderly, sleep deprivation may prolong bouts of depression.

**Anxiety:** Research indicates that chronic sleep problems make you more vulnerable to the development of anxiety disorders.

**ADD:** Sleep disturbances are very common in children and adults with ADD. Many have a harder time falling asleep, spend less time in the restorative rapid eye movement (REM) stage of sleep, and sleep fewer hours overall than people who don't have the disorder. Restless nights tend to worsen ADD symptoms.

**Alzheimer's disease:** Research has found that people with sleep apnea may be more likely to develop Alzheimer's disease and that sleep apnea may worsen cognitive impairment in people

with dementia. Treating sleep apnea has been shown to improve cognitive function in people with this disease.

**Parkinson's disease:** People who thrash around while sleeping — a condition called REM sleep behavior disorder — may face a higher risk of developing Parkinson's disease according to a study in the journal *Neurology*.

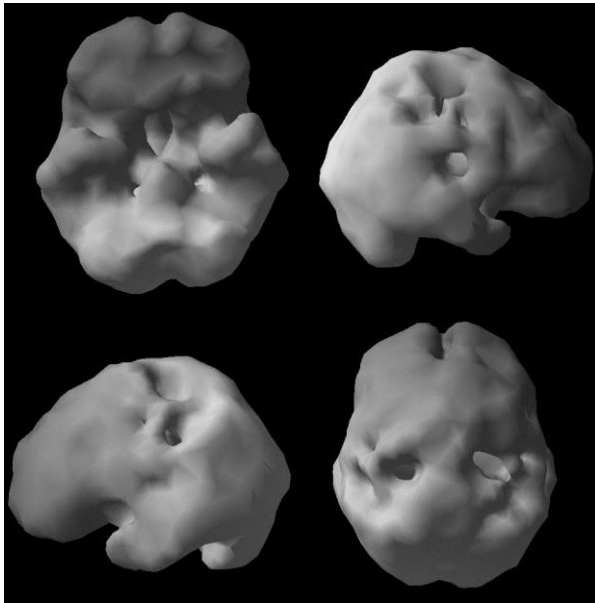
**Stroke:** Sleep apnea significantly increases the risk of stroke.

**Psychosis:** People can become psychotic from lack of sleep. I noticed this when I was Chief of Community Mental Health at Fort Irwin in the Mojave Desert. Fort Irwin houses the National Training Center that teaches desert warfare to soldiers. The troops used to spend days at a time in war games without much sleep. As a result, a number of soldiers began to hear voices and become paranoid after being awake three days in a row.

Some time ago, my uncle started having problems with his memory — he couldn't remember where he parked the car and was forgetting people's names. The whole family was really concerned, so he went to the doctor and came back with a diagnosis of Alzheimer's disease. He was devastated. His brain SPECT scan showed severe decreased activity in the back half of his brain, a finding consistent with a severe memory problems, but also consistent with what we have seen with severe sleep apnea. On testing, he was diagnosed with severe sleep apnea. Treatment helped his cognitive abilities improve significantly. This story shows how critical it is to get treated for sleep problems. But most people suffering from lack of sleep neglect to seek help. They don't view it as a medical problem and choose to simply live with it. That could be a life threatening mistake.

***ACTION STEP***  
*Get treated for sleep apnea immediately.*

## 9.1 Sleep Apnea Scan



Decreased parietal lobe and temporal lobe activity

### **DANGEROUS CONSEQUENCES OF SLEEP DEPRIVATION**

Sleep deprivation slows reaction times, clouds judgment, affects vision, impairs information processing, and increases aggressive behavior. All of this adds up to danger on America's highways. According to the National Highway Traffic Safety Administration (NHTSA), drowsiness and fatigue cause more than one hundred thousands traffic accidents each year, causing 40,000 injuries and 1,550 deaths. The National Sleep Foundation estimates the numbers are much higher: 71,000 injuries and more than 5,500 deaths a year. One reason why the NHTSA's statistics may be low is because fatigue is often underreported as a contributing factor to a crash. In more than half of the reported fatigue-related crashes, young drivers are at the wheel.

Every day, millions of people hit the road while feeling drowsy. More than half of the

respondents in the 2009 Sleep in America Poll reported having driven while drowsy in the past year, and twenty-eight percent admitted to nodding off or falling asleep behind the wheel. Night shift workers, people with untreated sleep apnea, and young people — particularly men — between the ages of sixteen and twenty-nine are especially likely to drive while feeling sleepy. Fatigue has also played a role in many airplane, train, and boating crashes, some of them deadly.

## WHAT CAUSES SLEEP DEPRIVATION?

In our hectic, 24-7 society, I could just as easily ask “what doesn’t cause sleep deprivation?” There are a seemingly endless number of reasons why millions of us are missing out on a good night’s sleep. Here is a list of just a few of the many things that may cause sleep troubles.

**Medications:** Many medications including asthma medications, antihistamines, cough medicines, anticonvulsants, and many others disturb sleep.

**Caffeine:** Too much caffeine from coffee, tea, chocolate, or some herbal preparations — especially when consumed later in the day or at night — can disrupt sleep.

**Alcohol, nicotine, and marijuana:** Although these compounds initially induce sleepiness for some people, they have the reverse effect as they wear off, which is why you may wake up several hours after you go to sleep.

**Restless Legs Syndrome:** A nighttime jerking or pedaling motion of the legs that drives a person’s bed partner crazy (as well as the person who has it).

**Women’s issues:** Pregnancy, PMS, menopause, and perimenopause cause fluctuations in hormone levels that can disrupt the sleep cycle.

**Thyroid conditions**

Congestive heart failure

Chronic pain conditions

Untreated or undertreated psychiatric conditions such as obsessive-compulsive disorder, depression, or anxiety

**Alzheimer's disease:** Dementia patients “sundown” or rev up at night and wander.

Chronic gastrointestinal problems, such as reflux

**Men's issues:** Benign prostatic hypertrophy causes many trips to the bathroom at night, which interrupts slumber.

**Snoring:** Snoring can wake you or your sleep mate, or everyone in the house if it is really loud.

**Sleep apnea:** With this condition, you stop breathing for short periods of time throughout the night, which robs you of restful sleep and leaves you feeling sluggish, inattentive, and forgetful throughout the day.

**Shift work:** Nurses, firefighters, security personnel, customer service representatives, truck drivers, airline pilots, and many others toil by night and sleep by day. Or, at least, they try to sleep. Shift workers are especially vulnerable to irregular sleep patterns, which leads to excessive sleepiness, reduced productivity, irritability, and mood problems.

**Stressful events:** The death of a loved one, divorce, a major deadline at work, or an upcoming test can cause temporary sleep loss.

**Jet lag:** International travel across time zones wreaks havoc with sleep cycles.

***ACTION STEP***  
*Take stock of the things in your life that might be causing you to toss and turn at night.*

## WHO'S AT RISK FOR POOR SLEEP?

Nobody is immune to sleep problems — they can affect anyone at any time of life. A study presented at the American Psychiatric Association's annual meeting in 2007 analyzed the sleep habits of more than 79,000 adults and revealed that about one-third of moms aren't getting adequate sleep. As a child psychiatrist, I work with a lot of troubled kids, and I notice that their moms are usually drained and exhausted. They work so hard to help their children succeed that they tend to neglect their own needs. I think moms need to do a better job of taking care of themselves, and that starts with getting a good night's sleep. It is the old saying you hear every time you travel by plane — "Put on your own oxygen mask first before assisting others."

Dads have their own problems getting enough shut-eye. According to the same study mentioned earlier, about 27 percent of married dads and more than 30 percent of unmarried dads reported getting insufficient sleep.

Sleep deprivation is rampant among teens. Researchers have found that when kids hit their teen years, their sleep cycles change, making them more inclined to go to sleep later and wake up later. That makes it especially tough for teens to be up and alert for those early 7 a.m. start times at some schools. A study from 1997 found that when a high school switched from a 7:15 a.m. start time to an 8:40 a.m. start time, students reported getting more sleep and feeling less tired during the day. They also got higher grades and were less likely to have feelings of depression. A 2009 study found that later school start times increased the number of hours teens slept during the week and decreased the number of car accidents involving teen drivers in the area by 16.5 percent.

College students are also plagued by sleep troubles. According to a study published in the *Journal of American College Health*, 33 percent of college students reported taking longer than

thirty minutes to fall asleep, and 43 percent woke up more than once a night. Since college students usually have more control over their schedules, encourage them to schedule more afternoon classes rather than early-morning classes.

Sleep disturbances are also common on the other end of the age spectrum. The notion that older people don't need as much sleep is a common misconception. Studies show that seniors need the same seven to eight hours a night as other adults. As part of the normal aging process, however, grandma and grandpa are likely to experience more unsettled sleep. As you get older, sleep patterns tend to change, and you typically find it harder to fall asleep and stay asleep. This can speed up the brain's aging process at a time when you really want to hang on to every brain cell you have.

***ACTION STEP***

*If you have trouble sleeping, keep a sleep journal and track what time you go to sleep, how long it takes to fall asleep, how often you wake up, what time you get up in the morning, how you feel upon waking, how much energy you have throughout the day, and any daytime naps. Make a copy of the following sleep journal entry and fill it in daily.*

**MY SLEEP JOURNAL**

**Day/Date** \_\_\_\_\_

**(Answer the following questions in the morning.)**

Last night, my bedtime ritual included: \_\_\_\_\_

*(List things like a warm bath, meditation, reading, etc.)*

Last night I went to bed at: \_\_\_\_\_ pm/am

Last night I fell asleep in: \_\_\_\_\_ minutes

Last night, I woke up: \_\_\_\_\_ times

During those times, I was awake for: \_\_\_\_\_ minutes

Last night, I got out of bed: \_\_\_\_\_ times

Things that disturbed my sleep: \_\_\_\_\_

*(List any physical, mental, emotional, or environmental factors that affected your sleep.)*

I slept for a total of: \_\_\_\_\_ minutes

I got out of bed this morning at: \_\_\_\_\_ am/pm

Upon waking, I felt: \_\_refreshed \_\_groggy \_\_exhausted

**(Answer the following questions at night.)**

During the day, I fell asleep or napped: \_\_\_\_\_ times

During my naps, I slept for: \_\_\_\_\_ minutes

During the day, I felt: \_\_refreshed \_\_groggy \_\_exhausted

My caffeine consumption: \_\_\_\_\_ amount \_\_\_\_\_ time of day

Medications or sleep aids I took: \_\_\_\_\_

## **TIPS TO HELP YOU GO TO SLEEP AND STAY ASLEEP**

Here are twelve ways to make it easier to drift off to dreamland and get a good night's sleep. Remember that we are all unique individuals and what works for one person may not work for another. Keep trying new techniques until you find something that works.

1. Maintain a regular sleep schedule — going to bed at the same time each night and waking up at the same time each day, including on weekends. Get up at the same time each day regardless of sleep duration the previous night.
2. Create a soothing nighttime routine that encourages sleep. A warm bath, meditation, or massage can help you relax.

3. Some people like to read themselves to sleep. If you are reading, make sure it isn't an action-packed thriller or a horror story — they aren't likely to help you drift off to sleep.
4. Don't take naps! This is one of the biggest mistakes you can make if you have insomnia. Taking naps when you feel sleepy during the day compounds the nighttime sleep cycle disruption.
5. Sound therapy can induce a very peaceful mood and lull you to sleep. Consider soothing nature sounds, soft music, wind chimes, or even a fan.
6. Drink a mixture of warm milk, a teaspoon of vanilla (the real stuff, not imitation), and a few drops of stevia. This increases serotonin in your brain and helps you sleep.
7. Take computers, video games, and cell phones out of the bedroom and turn them off an hour or two before bedtime to allow time to “unwind.”
8. Don't eat for at least two to three hours before going to bed.
9. Regular exercise is very beneficial for insomnia, but don't do it within four hours of the time you hit the sack. Vigorous exercise late in the evening may energize you and keep you awake.
10. Don't drink any caffeinated beverages in the late afternoon or evening. Also avoid chocolate, nicotine, and alcohol — especially at night. Although alcohol can initially make you feel sleepy, it interrupts sleep.
11. If you wake up in the middle of the night, refrain from looking at the clock. Checking the time can make you feel anxious, which aggravates the problem.
12. Use the bed and bedroom only for sleep or sexual activity. Sexual activity releases many natural hormones, releases muscle tension, and boosts a sense of well-being. Adults with

healthy sex lives tend to sleep better. When you are unable to fall asleep or return to sleep easily, get up and go to another room.

## **NATURAL TREATMENTS TO HELP YOU SLEEP BETTER**

Because of our sleep problems, doctors are prescribing sleep medications that can affect your moods and memory at alarming rates. These medications are also increasingly prescribed for children of all ages. A study that appeared in a 2007 issue of *Sleep* showed that 81 percent of children who saw a medical professional for sleep-related problems were given a prescription. In my practice, my primary course of action isn't doling out a prescription. I first encourage my patients to eliminate anything that might interfere with sleep, such as caffeine, alcohol, or reading Stephen King before bedtime. I also try natural supplements and treatments. Here are some of the natural remedies I recommend.

### **Hypnosis**

As a medical student, I saw someone get hypnotized, and I found the process so fascinating that I took a whole month's training on it. As an intern at Walter Reed Army Medical Center, a military hospital with 1,200 beds, I worked with a lot of patients who were having trouble sleeping and wanted sleeping pills. It is easy to understand how people might have a tough time getting a decent night's sleep in such a huge, noisy hospital. On the nights I was on call, I would ask the patients if I could try hypnotizing them rather than give sleeping pill. Almost everybody said yes, and it worked. I prescribed considerably fewer sleeping pills than my colleagues.

Hypnosis is a very powerful technique. I worked with one veteran who was a World War II hero. He had helped smuggle Jewish people out of Germany to safety. In his later years, he developed Parkinson's disease and found it difficult to sleep at night. The night I was on call he wanted a sleeping pill. I asked him if I could try to hypnotize him instead. He agreed and when I put him in a trance, his tremor stopped. Parkinsonian tremors usually stop when a person falls asleep, but his tremor stopped before he actually went to sleep.

When I told my attending neurologist, Bahman Jabbari, about it the next morning he rolled his eyes and looked at me as if I were the dumbest person on the planet. Later, I repeated the exercise in front of him and it worked.

He was so amazed that we filmed our patient going into a hypnotic trance and co-authored a paper on it. That became one of my first professional papers.

Hypnosis can even help people with posttraumatic stress disorder (PTSD) get better sleep. People with PTSD often have trouble sleeping. In a study from Israel, one group of fifteen patients were given a daily prescription sleeping pill while the second group of seventeen patients underwent hypnotherapy twice a week. After two weeks, the hypnosis group showed improvement in sleep quality. The improvements were still evident a full month later, too, showing that hypnosis has lasting benefits.

At one point during my internship, I was having trouble sleeping myself. Many of my patients were dealing with very serious medical conditions and some even died. Coping with that level of responsibility was hard for me. I care very deeply about what happens to my patients, and it was making me anxious and keep me up at night. That's when I started doing self-

***ACTION STEP***

*Before you reach for the sleeping pills, try hypnosis. It has been proven to work and has no side effects.*

hypnosis to help me sleep. I figured if it works for my patients, it should work for me too. It did work and with time, I became so proficient at it that I could put myself to sleep in under one minute. To help others, I created a hypnosis CD specifically for sleep disorders that can be ordered through the Amen Clinics website ([www.amenclinics.com](http://www.amenclinics.com)).

### **Bright Light Therapy**

Bright light therapy is a technique that promotes better sleep in people who suffer from seasonal affective disorder (SAD), more commonly known as “winter blues.” We see a lot of people with this condition in our clinic in Tacoma, Washington. It is also very common in Alaska and Canada where some regions get only a few hours of daily sunlight during the winter, and the lack of light can cause sleep disturbances. Bright light therapy, in which a person sits in front of a strong light that has the same wavelengths as the sun for thirty minutes, can reset sleep patterns. In my experience, I have found that bright light therapy works best in the morning.

### **Natural Supplements for More Restful Sleep**

When sleep deprivation isn’t relieved by other methods, I prescribe natural supplements, such as L-tryptophan, 5HTP, valerian, kava kava, magnesium, and melatonin. Some of these natural interventions may also be helpful during periods of temporary insomnia due to stress, jet lag, trying to sleep in a new environment, or doing shift work. See Appendix C The Supplement Solution for more information.

## **The Sleep Solution**

### **Sleep Robbers**

Any brain problems

Brain trauma

Low blood sugar

Caffeine

Poor diet

Alcohol, drug abuse

ADD

Some forms of depression

Anxiety

Negative thinking

Alzheimer's disease

Sleep apnea

Hormonal fluctuations

Thyroid conditions

Chronic pain

Chronic stress

Too much TV, video games,  
computers

### **Sleep Enhancers**

Brain health

Focus on brain protection

Frequent small meals with at least some protein  
to maintain healthy blood sugar

Eliminate caffeine

Enriched diet

Freedom from alcohol and drugs

Effective treatment for ADD

Journaling when sad or anxious, treatment

Meditation or self-hypnosis for relaxation

Kill the ANTs (automatic negative thoughts)

Sleep aids, especially melatonin

Treatment for sleep apnea

Balance hormones

Treatment for thyroid conditions

Exercise

Stress-reduction plan

Turn off technology a few hours before bedtime

Soothing sounds

Bright light therapy

Supplements such as melatonin, l-tryptophan, 5-HTP,  
valerian, kava kava and magnesium