

[IMAGE]

# You Need Your SLEEP

## Here's How to Get It

By Dr. David Ryan

In theory, the average person spends one-third of their life sleeping. In reality, millions of people suffer from inadequate and/or poor sleep, which can have a variety of short- and long-term consequences on their health and well-being. Lack of sleep contributes to depression, cardiovascular disease, digestive problems, gastric reflux, muscle aches, headaches, allergies, irritability, lack of mental ability, loss of lean muscle mass and loss of appetite, among other unpleasant health conditions. (And by the way, going without sleep longer than 19 days straight can literally kill you!)

We often screw up our chances of getting a good night's sleep at the *beginning* of the day. We eat things that don't agree with us, or things we shouldn't be eating that make us feel guilty. And many of us create poor sleep conditions, such as leaving a TV, radio or light(s) on (the entire night), and lots of other distractions that prevent the body from going into its normal sleep cycle.

All of these things can keep people from getting to sleep or staying asleep. Not getting a good night's sleep will restrict your body from producing human growth hormone (HGH) and other natural hormones, like thyroxin, which is important for energy, weight loss and pain tolerance. In short, the consequences of inadequate or poor sleep are profound.

### Sleeping Basics 101: Sleep Cycles

Baby sleeping - Copyright â Stock Photo / Register Mark Your body completes a sleep cycle approximately every 90 minutes. That means technically, you should try to sleep through at least three cycles (4.5 hours minimum) but preferably 6, 7.5 or 9 hours at a time (easier said than done, right?). When you just start to fall asleep, your mind is conscious, but as you begin to fall asleep it progressively falls into a subconscious state. This is necessary because the brain is going to be very active doing other things. It is similar to when your computer is busy processing and does not allow other functions to take place; essentially, it locks you out.

As we go through the sleep cycle, our body goes into a deeper and deeper subconscious state. The deepest is called the *delta wave* sleep. During this deep sleep, it is very difficult for you to be awakened. A loud noise or a rogue alarm clock may wake us up to a conscious state, but that's not a good thing. If you stay awake, it is likely that your body will drag around like you are wearing an anchor the rest of the day. Sometimes you'll have to "reboot" with a power nap (30-45 minutes) or you may need a completely normal full night's sleep the next night.

The stages or phases of sleep are designed to allow our various organs time to produce hormones and then distribute them throughout the body, register how much is actually produced and then prepare for production in the next phase. The need for hormone production tapers off as the sleep cycles progress. With normal sleep, the process is usually finished after six hours of sleep. However, your body may need more sleep depending on your mental and physical state.

The phases of sleep are very logical. On the pathway to deep sleep, your body is busy reading the billions of receptors and signs that tell how many hormones need to be produced. On the way out of deep sleep, the hormones are simply pushed out of the organs and into your bloodstream, and eventually contact the brain and cause the REM (rapid eye movement) phase, and then whole process will continue to repeat. It shouldn't take you longer than 15-30 minutes to enter into a particular sleep cycle.

The REM phase is the typical dream phase. It occurs after the other non-REM phases have been completed. When all those hormones your organs have been producing hit your brain, it causes lots of activity and your mind reacts with what you might recall later as a dream. This happens approximately 90 minutes after the onset of sleep and repeats, as do the other phases, throughout the night.

### **Tips for Better Sleep**

*Talk to Your Doctor.* If you're having a problem sleeping, you should make sure your doctor is aware of it. They may recommend keeping a sleep journal for a few weeks. Include a description of your general attitude/emotions that day (happy, sad, overwhelmed, in control, etc.), the time you went to sleep, the amount of sleep (hours) you experienced, the number of times you woke up, if you felt the sleep was restful, significant activities that day, and any medication use.

Regular chiropractic adjustments help keep your nervous system at a calmer, more functioning state. Abnormal musculoskeletal function will take precious energy away from the normal sleep process. Studies

have shown that many sleep disorders, depression and various anxieties are removed or controlled with proper chiropractic manipulation.

*The Fan Is Your Friend.* The simple use of a fan blowing in your face (well, not right into your face) provides several major benefits, according to current literature. First, your face is covered with millions of tiny hairs - even if you shave every day. Each one of those little hairs is connected to your sympathetic nervous system. (When a cat becomes frightened, notice that they arch their back and all of their hair stands up.) When you blow a fan on these hairs, they become "overstimulated" and will go through a phase called sensory adaptation. This constant stimulation will eventually force your body to ignore it. This happens to most people when they are wearing clothing, too; the body will usually stop sensing the clothing against your skin. So, using the same logic, the fan will help calm your sympathetic nervous system and you will be able to enter into a deeper sleep.

Sheep - Copyright © Stock Photo / Register Mark *The Power of White Noise.* White noise provides a distraction to your body and allows for a deep sleep. Your nervous system has two main branches, the parasympathetic and sympathetic. The parasympathetic division slows everything down and focuses primarily on increasing normal body function. The sympathetic division speeds everything up and primarily focuses on physical activity. It also increases your mental awareness. Just like the sensory adaptation that occurs when using a fan, a constant white noise can help sedate or calm the auditory system. The noise will act like a jamming system and not allow your ears to focus on unnecessary sounds. Studies have shown that a pedestal fan is more optimal than a ceiling fan for this purpose. Various sizes and speeds should be tried to provide optimal sleep success.

*Lights On, Lights Off.* It is often a personal preference whether to have lights on or off when you go to bed. For some people, the faint, barely detectable flicker of an incandescent light is important; just like the fan and the white noise, the eyes are very susceptible to sensory adaptation and will give up if "overstimulated" by the right type of lighting, night light, bathroom fluorescent light, candles, campfire, television, etc. It is sort of a visual "lullaby" to your mind.

*No Liquids Before Bed.* Waking up to go the bathroom is a touchy situation. After all, if you have to go, you have to go. But if you can't drink enough water during the day, squeezing it in before bed is a costly mistake. It is more damaging to wake up two or three times during the night to urinate than to not drink enough water that day. Not having to wake up to go to the bathroom in the middle of the night increases

your chances of experiencing sound, uninterrupted sleep.

*Dial It Down.* It is important to avoid taking stimulants of any kind prior to going to bed. Drinking coffee, caffeinated tea and soda drinks will all prevent a normal sleep cycle from occurring (or even starting, in some cases). And some people will even use a commercial stimulant known as a "diet pill" to enhance their fat loss capability. Well, guess what? A poor night's sleep will reduce your body's natural production of human growth hormone, which will hinder your ability to lose fat.

### **Natural Sleep Aids**

*Melatonin is naturally produced by the human body.* All humans produce melatonin as the main chemical that promotes sleep. Melatonin is available in a supplement form; mixing it with vitamin C seems to offer the best absorption and promote the best night's sleep. Keep in mind that studies suggest taking high doses of melatonin may actually prohibit normal sleep. It is best to start at approximately 1.5 mg per night and then add .5 mg each night, not to exceed 3 mg for a total dose. Individuals who have difficulty remaining asleep will often find success by using a time release melatonin supplement. (Always talk to your doctor before taking any supplement for the first time.)

*Arginine and orthinine* are amino acids that can help you sleep better. Take them in a 2:1 ratio on an empty stomach (no food 30 minutes prior) and with 3-4 ounces of water. Start at 2 grams of arginine and 1 gram of orthinine for the first two nights; then you can double the dosage from there. Most people see their best results when they are between 2 and 4 grams of arginine (1-2 grams of orthinine). Higher doses will be wasted; your body will filter them out in your urine. The effect of these amino acids is to deepen the sleep cycle and therefore promote more natural production of human growth hormone.

*Tryptophan.* Your body uses the amino acid L-tryptophan to make serotonin, the main chemical that helps you sleep. Adrenaline and tryptophan are antagonists to each other, so lower levels of one will normally result in higher levels of the other. Never mix tryptophan and melatonin; use them separately for best effectiveness. The typical dosage of tryptophan is 500 mg, 30 minutes prior to bed on an empty stomach. A handful of shelled sunflower nuts has approximately 500 mg of L-tryptophan. Turkey is also very high in L-tryptophan and works very effectively to promote sleep, as demonstrated by your relatives every Thanksgiving holiday.

*Vitamin B.* Here is a simple one to try first: Take a B complex with your last meal of the day. B vitamins promote normal nerve function and relaxation, which in turn promotes normal, deeper sleep.

Good sleep is one of the most underappreciated contributors to good health, even though the connection between the two is abundantly clear. Are you getting enough sleep? Remember, it goes way beyond whether you'll be sluggish the next day; a poor night's sleep can affect your health in countless ways, from the psychological to the physical. Discuss these helpful hints with your doctor and make sure you get the sleep you need every night. It's that important.

### **Common Sleep Stoppers**

- Stop sign - Copyright © Stock Photo / Register Mark Improper planning
- Uncomfortable beds and sheets
- Unexpected stress
- Normal, everyday stress: job stress, money stress, etc.
- Lack of sex
- Lack of proper diet
- Injury
- Pain
- Noise
- Lack of white noise
- Medication use
- Improper napping (too long or too close to normal bedtime)

### Medicine bottle - Copyright © Stock Photo / Register Mark **How Pain, Stress and Medication Affect Sleep**

The sensation of pain is very powerful and affects the normal process of sleep. When you're in pain, it can be difficult to sleep due to the constant stimulation to your nervous system. Billions of dollars have been spent trying to control pain to allow someone to receive a normal night's sleep. Significant numbers of individuals attempt to self-medicate or mix medications in an attempt to achieve sleep, which can have dangerous consequences.

When we sleep, our body breaks down various chemicals and forms a major sleep chemical known as serotonin. The activity of serotonin can be blocked by high levels of cortisol. Our bodies produce cortisol in direct relationship to the amount of stress we are under. Cortisol works as a very slow adrenaline and its presence will elevate the heart rate and mental alertness at all times of the day and night.

Prozac is a commonly prescribed anti-depressant drug that works by making your nerves more sensitive to serotonin. Many doctors will prescribe antidepressants long-term, which can lead to a hypersensitivity to serotonin. This is scientifically called *serotonin syndrome*, symptoms of which include changes in mental status (confusion, agitation, mania, anxiety, coma), cardiovascular dysfunction (irregular heartbeat, high or low blood pressure), gastrointestinal problems (nausea, diarrhea, abdominal pain, loss of appetite, excessive appetite, cravings), movement problems (muscle spasms, muscle rigidity, restlessness, tremors, shaking, lack of coordination, shivering, seizures), dry mouth, unusual sweating, and flu symptoms, just to mention a few. These symptoms will definitely *not* help you sleep.

## **11 Ways to Get a Great Night's Sleep**

1. Woman sleeping - Copyright © Stock Photo / Register Mark Limit exercise and other stressful activities immediately before bedtime.
2. Remove all distractions from the bedroom that could keep you from sleeping.
3. Organize your life so you can get to bed at a consistent time each night.
4. Sleep on a regular schedule: 4.5, 6, 7.5 or nine hours is ideal because it marks the completion of a sleep cycle.
5. Buy a pedestal fan to help you sleep deeply; point it at your face (not too close to cause sinus problems).
6. Make sure your bed, mattress and pillow are comfortable enough to sleep through the night.
7. Don't drink liquids so close to bedtime that you need to get up in the middle of the night.
8. If you need to fall asleep to TV, music or with lights on, program a sleep timer so they'll go off at a certain time.
9. Minimize or eliminate medication use for pain/sleep/depression if possible.
10. Use natural supplements (only if needed and with advice from your doctor).
11. If you're experiencing sleep problems, talk to your doctor and keep a sleep journal for a few weeks.

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