

# Chapter 1

## Sleep, Blessed Sleep

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### *In This Chapter*

- ▶ Understanding sleep
  - ▶ Reviewing the benefits of healthy sleep
  - ▶ Knowing the consequences of sleep deprivation
  - ▶ Identifying common sleep disorders
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Nearly every human being falls asleep at least once daily and ideally sleeps soundly for six to eight hours. After a good night's sleep, most people wake up feeling refreshed, energized, alert, and ready to take on the new day.

Perhaps you take your ability to sleep well for granted; if so, you may be one of the lucky ones who lays down your head and sails quickly and peacefully away to la-la land each night. But for the estimated 40 million Americans who suffer from a sleep disorder, falling asleep and staying asleep doesn't come so easily. A person with a sleep disorder usually sleeps poorly or not enough. So, without understanding why, a person with sleep apnea or periodic limb movement disorder or any one of the more than 80 recognized, defined sleep disorders wakes up feeling lousy, sometimes as if he or she hadn't slept at all.

As far back as early Greek plays, the Bible, and even your caveman ancestors, people probably had sleeping problems. Of course, in prehistoric times, having someone stay awake to maintain the campfire all night long was a good idea. Maybe the guy who couldn't sleep because he worried about being eaten by a saber-toothed tiger volunteered for the night shift. Today your saber-toothed tigers take the form of financial worries, problems at home or at the office, or a specific physical ailment, but they may keep you awake just the same.

Too frequently, sleep disorders go unrecognized, undiagnosed, and untreated. The cost to individuals and to society is huge; more than 100,000 automobile accidents, many fatal, are directly attributed to sleepy drivers each year. In addition, experts say that many on-the-job accidents are caused in part by poor decisions and responses made by sleep-deprived workers. Because sleep-deprived people tend to be irritable and have short fuses, they aren't much fun to be around, which can profoundly affect both personal and work relationships. In addition, a lack of sleep adversely affects both memory and concentration, which can negatively influence a person's job performance. And this list of problems caused by lack of sleep goes on and on.

If you or your significant other, child, a family member, or close friend has a problem sleeping, the first step is to identify the problem and then seek treatment as quickly as possible. There is no reason why one should continue suffering. You need your sleep, and we intend to help you get it. Remember, chronic sleep deprivation, no matter what the cause, is dangerous and potentially fatal. One way or another, if left untreated, being sleep deprived can cost you your life.

Before you can understand sleep disorders, first you have to understand sleep, what it is, and what functions it serves for the human brain and body. In this chapter, you find out most everything you ever wanted to know about sleep, but were too sleepy to ask, and also get a broad overview of the various sleep disorders discussed in more detail later in this book.

## *Sleep: Recharging Your Brain and Body*

*Webster's New World College Dictionary* defines sleep as “a natural, regularly recurring condition of rest for the body and mind, during which the eyes are usually closed and there is little or no conscious thought or voluntary movement.” But that brief definition hardly scratches the surface when understanding the importance of regular, high-quality, restorative sleep to the continued health and vitality of the human animal.

If you don't get the sleep you need, you don't restore and refresh your brain and body. You're basically running on empty. You know what happens when a car runs out of gas, right? It stops running. Well, that's an apt analogy. Sleep is the gas that fuels your brain, and when you don't get enough, you may end up on the side of the road, literally, or figuratively. Alternatively you could think of sleep as something that charges up your battery. Without sleep, your battery goes dead.

### **Speaking some sleep slang**

Sleep is such a basic part of the human experience that the English language boasts many ways to refer to the process, including: snoozing, hitting the hay, getting 40 winks, logging some Zs, or catching some shuteye. Sleepers may be in the Land of Nod, the Arms of Morpheus (Morpheus was one of the sons of Somnus, the Greek god of sleep), or la-la land.

People often view sleep as a panacea, a cure for what ails them, a sop for the broken heart, a renewer of hope, a restorer of spirit and determination. When people can't sleep, they howl at the moon and storm around their bedrooms as if sheer determination could make them fall fast asleep. Unfortunately, it can't.



Even though all animals sleep, researchers don't agree on exactly why. They also don't understand all the many functions and benefits of sleep. Researchers do, however, have a fairly accurate picture of what happens when animals and people don't get enough sleep, and it's not pretty. Animals that undergo sustained total sleep deprivation die. Thus, sleep is required to sustain life.

## *While you were out*

Ever wonder what your brain and body do while you're sleeping? Well, sleep is the time the brain directs the body to heal and repair itself, rebuild damaged or worn-out tissues, and restore chemical balance. If that's not enough, your immune system also manufactures more NK or natural killer cells to fight off infection and disease while you're sleeping, and your pituitary gland produces growth hormone. (In children, growth hormone promotes growth; in adults growth hormone helps repair and renew tissue.) And you thought nothing really happened while you were sleeping!

Although your body may be essentially motionless for much of the night, your brain is active, busily cycling through the five stages of sleep (see the "Stages of sleep" sidebar in this chapter for the scoop on each sleep stage). Each cycle occurs several times throughout the night. Among other things, your brain is organizing and storing memories. Interestingly, one type of sleep occurring each night is accompanied by rapid eye movements (REM). REM sleep is the time when most dreaming takes place. However, you generally won't recall the content of your dreams unless someone or something awakens you during the dream, and you remain awake long enough for memory to activate.

Even with all this activity, your brain still manages to recharge during a good night's sleep so that you awaken feeling energized and ready to go. However, if you don't sleep well, you awaken groggy and feel irritable because poor sleep interferes with your brain's ability to prepare itself for another day of physical and mental activity.

### **Sleeplessness can be torture**

Interrogators commonly use sleep deprivation as part of the interrogation process designed to break and confuse prisoners (criminal, war, or political) in order to extract information. After being deprived of sleep, many people are ready to answer any question as long as they'll be allowed to sleep. With little or no sleep, people

feel sick. Their bodies are sluggish and uncoordinated, and their minds feel like mush. Their one overriding thought is their desire for sleep and even the most defiant individual may become quite compliant if he thinks his cooperation can help him get to sleep sooner.

## Stages of sleep

If you think you just fall into bed, turn the lights out, go to sleep, and remain relatively still and inactive during the night, you don't have the whole picture. Believe it or not, even though sleep is restorative and allows you to recharge your batteries, it's still a very active time for your brain, which orchestrates a wide range of night-time activities while you snooze.

You may be surprised to find out that sleep is divided into five distinct stages. Different stages serve different purposes. Stages 1 through 4 are known as non-rapid eye movement sleep (NREM) or non-REM sleep. The fifth stage is rapid eye movement sleep (or REM sleep), the stage when most dreaming occurs. The brain cycles through these five stages about five to six times each night.

During the first sleep cycle, you spend a long time in deep sleep, or Stages 3 and 4, and a relatively short time in REM sleep. As the night progresses and your brain continues to cycle through the sleep stages, REM sleep periods become longer, and deep sleep periods get shorter. As morning draws near and you gradually approach wakefulness, deep sleep ceases almost entirely, and your brain cycles between Stages 1 and 2 and REM sleep.

- ✔ **Stage 1** mostly serves as the transition between sleep and wakefulness. During Stage 1 sleep, your brain and body relax. Your breathing becomes more regular, and your muscle activity gradually decreases, although you may make some jerky movements just as you pass from wakefulness to sleep. Your eyes make slow rolling movements behind your closed eyelids as you settle down.

Stage 1 is very light sleep, and you can be awakened quite easily. When awakened from this stage, you may feel startled or you may not even think you were asleep. During Stage 1, sleepers may suddenly feel out of balance as if they were falling, or make

jerky movements with their whole body or limbs. They may experience dream-like flashes of images, hear loud noises, or even feel like they're hearing indistinct voices. This is a normal part of Stage 1 sleep and no cause for alarm. Most people who sleep normally stay in Stage 1 for five minutes or less, but an individual with insomnia may stay in Stage 1 for much longer.

- ✔ During **Stage 2** sleep, the heartbeat and respiration slow and become very regular; the sleeper's body relaxes more deeply. Sleepers can still be aroused, but not so easily as when they're in Stage 1 sleep. Most sleepers spend about 30 minutes in Stages 1 and 2 before passing into Stage 3, which is a deep sleep. Stage 2 accounts for about 50 percent of all sleep time.
- ✔ **Stages 3 and 4** are deep sleep states, also known as *slow wave sleep (SWS)* because of the pattern of the brain waves they create on an electroencephalograph recording. The sleeper is very relaxed, with a slow, regular heartbeat and breathing. During deep sleep, sleepers are very difficult to arouse, and when you do wake them up, they're groggy and slow to react to physical and verbal stimuli. There is no visible eye or muscle movement during Stage 3 and 4 sleep; the sleeper is perfectly still, particularly as she progresses into Stage 4, which is the deepest and most restorative sleep. The body performs much of its necessary repair work during Stage 3 and 4 sleep.

The first deep sleep of the night usually lasts about one hour in the young adult before the sleep cycle begins its first REM sleep episode. As people get older, their deep sleep episodes shorten. They may also feel less rested and rejuvenated after sleeping.

- ✔ **REM sleep** is the time when you have most of your dreams. During this sleep stage,

your eyes move rapidly back and forth under closed eyelids. During REM sleep, you're temporarily paralyzed, apparently Mother Nature's safeguard to prevent the physical acting out of dreams. Although researchers still aren't sure why, they know that brain blood flow increases during REM sleep, heartbeat speeds up, and breathing rate increases. Sleepers usually spend about 90 minutes in the first four stages of

sleep before passing into the first REM sleep episode of the night. The first REM sleep episode usually lasts about 10 minutes. In successive NREM-REM cycles, the REM sleep episodes become progressively longer, with the final REM episode lasting as long as an hour. REM sleep accounts for about 20 to 25 percent of total sleep time in a normal adult.

## *Telling time — your brain's internal clock*

At the end of the sleep period, which is usually morning, we awaken. Awakening at this time occurs for two reasons. First, the drive to sleep has dissipated across the night. Second, a biological clock tells the brain that it's morning. The combination of relieved sleep drive and internal alarm system regulates the timing of sleep cessation, unless you have a sleep disorder.

Your own unique biorhythms and your brain's internal sleep-wake clock located in the suprachiasmatic nuclei (SCN) also determine the timing of when you fall asleep. The SCN responds to light and darkness in the environment and can reset your sleep-wake cycle. In addition to the internal clock, another factor helps control your sleep-wake cycle, *homeostasis*. Homeostasis is the force that attempts to maintain a balance between sleep and wakefulness. When you stay awake long past the point when your brain told you it was time for bed, you begin building up what is known as a sleep debt. *Sleep debt* is the difference between the number of hours you actually sleep and the number of hours you should have slept (see Chapter 2).

Your brain is a very precise and demanding bookkeeper when it comes to sleep; it figures out a way to make you pay back the sleep you owe, so don't think you can get away with depriving yourself of adequate sleep for too long. Your brain always collects on sleep debts, devalues your wakeful time while you're in debt, and sometimes charges a high interest rate (interest being in the form of an illness like a cold or flu that *makes* you stay in bed).

## *Deciding how much sleep is enough*



The amount of sleep people require varies, but numerous studies suggest that for most people a *minimum* of seven hours of good quality sleep nightly is necessary for optimum health. Ideally, you should sleep seven or eight hours a night; people who sleep this amount tend to be the healthiest. That amount of sleep isn't a suggestion; it's a physical requirement. To consistently

get less seriously compromises both your physical and mental health. Unless, of course, you're a rare short sleeper, which we discuss in the "No, really . . . I'm not sleepy . . . z-z-z-z-z" sidebar in this chapter.

All too often, when you're pressed for time, sleep is the first thing you cut back on, right? You reason that you can get by with a little less, and then a little less, and before long, you may find yourself snapping at your spouse or your children, making a bad decision at work, or forgetting an important meeting, or worse yet, falling asleep at the wheel of your car and waking up (if you wake up) wrapped around a telephone pole.

Why do people suffer so many negative consequences when they cut back on their sleep? Because you can't change your need for sleep any more than you could sprout wings and fly. The human brain and body require a daily period of rest in order to

- ✔ Achieve a high energy level
- ✔ Have sharp mental function, the ability to concentrate, and good decision-making skills
- ✔ Improve memory
- ✔ Maintain a positive mental outlook that helps you manage stress
- ✔ Strengthen your immune system to help keep you well

## How can I sleep? Let me count the sheep

Sleep and sleeplessness have inspired countless poems, songs, and lullabies. Long before people had any scientific evidence of sleep's benefits, the English Poet Laureate William Wordsworth nonetheless demonstrated tremendous insight into its importance. In his poem, *To Sleep*, Wordsworth, while discussing his own insomnia, introduced the concept of counting sheep as a way (albeit futile) to try and fall asleep.

*A flock of sheep that leisurely pass by, One after one; the sound of rain, and bees Murmuring; the fall of rivers, winds and seas, Smooth fields, white sheets of water, and pure sky;*

*I have thought of all by turns, and yet do lie Sleepless! and soon the small birds' melodies*

*Must hear, first uttered from my orchard trees; And the first cuckoo's melancholy cry.*

*Even thus last night, and two nights more, I lay, And could not win thee, Sleep! by any stealth: So do not let me wear tonight away:*

*Without Thee what is all the morning's wealth? Come, blessed barrier between day and day. Dear mother of fresh thoughts and joyous health!*

Wordsworth eloquently expressed what most people feel; they like sleep, they crave sleep, and when they don't get it, sleep is about all they can think about.

## No, really . . . I'm not sleepy . . . z-z-z-z-z

Some people, called *short sleepers*, truly do seem to function well and aren't sleepy given five hours, or less, of sleep a night. **Note:** If you have yourself convinced you don't need as much sleep as other people because you've only slept four or five hours a night for years, but you go around bumping into poles during the day, muttering to yourself, falling asleep if you sit down in a dark warm auditorium, and forgetting where

you parked your car, you're not a short sleeper. A short sleeper sleeps four or five hours every night but has no apparent signs of sleepiness or problems with daytime functioning. There are rare exceptions. But in our experience, most people who think they're a rare exception (that is, a naturally short sleeper) are just sleep deprived and in denial.

When you're properly rested, you stay physically and psychologically healthier, your brain and body recharge, remain healthy, and function at an optimal level. That's how the human animal evolved.

People who get too little sleep tend to have more health problems than people who get an adequate amount of sleep. For example, the Nurses Health Study followed more than 71,000 women for ten years to observe a number of health indicators. One unexpected result (at least to the researchers) of the study was concrete evidence that long-term sleep deprivation increases the risk of heart disease. Women who averaged five hours of sleep per night had a 39 percent higher risk of heart disease than women who slept seven to eight hours each night.

But you may be surprised to discover that people who sleep nine hours or more also have more health problems. Researchers aren't yet sure if people with health problems sleep more as a consequence of their poor health, or if people who sleep more than eight hours a night have a higher risk of chronic health problems.

## Recognizing the Dangers of Sleep Deprivation

If you regularly get less sleep than your brain requires, then you are, by definition, sleep deprived. Every year, thousands of sleep-deprived people are involved in automobile and industrial accidents, and their sleepiness is frequently cited as a contributing factor in the accidents. The National Sleep Foundation believes the problem is so pervasive that it has established a national Drowsy Driver education program to inform people about the dangers of driving while sleep deprived. (Check out [www.drowsydriver.org](http://www.drowsydriver.org) for more information.) But an increased risk for accidents is just one

part of the consequences you may suffer if you continue to deprive your brain and body of the sleep they require to keep you healthy.

## *Problems associated with poor sleep*

If you're sleeping poorly on most nights, we probably don't have to tell you how badly you feel. Go ahead and read the following list of problems associated with chronic sleep deprivation anyway, so you can prove to your other half that there's a real reason why you've been so crabby lately.

If you're sleep deprived, you may

- ✓ Age more rapidly
- ✓ Be more susceptible to colds, flu, and other infections
- ✓ Display an increased risk of accidents due to sleepiness and poor coordination
- ✓ Experience more emotional problems, including depression and anxiety
- ✓ Feel irritable and experience mood swings
- ✓ Forget important information
- ✓ Have reduced ability to deal with stress
- ✓ Increase your risk of obesity, heart disease, diabetes, and death
- ✓ Show poor judgment, poor concentration, and an inability to make decisions

### **Why we don't sleep enough**

Some sleep experts claim that the United States is the most sleep-deprived nation on Earth. Both fortunately and unfortunately, Americans live in a world where the natural cycles of light and dark have been altered through the use of artificial lighting. This altering allows for 24-hour emergency services and better conditions for jobs requiring overnight shifts (night watchmen and so on). However, human adaptation to the 24-hour non-stop day generally reduced the number of precious hours reserved for sleeping.

As a result, in order to keep up with their busy schedules, many people cut back on their hours of sleep. But no matter how many bright lights you turn on or how many hours you try to push yourself without rest, the human brain's basic requirement for sleep hasn't changed in thousands of years. If you're truly interested in staying healthy and feeling good, the list of things you allow to keep you awake when you should be sleeping should be short and sweet.

## Yawning for sleep

Ever wonder what makes people yawn? A lack of sleep definitely plays a part, but the real cause of yawning is oxygen deprivation. When you're fatigued, you tend to breathe more shallowly simply because you don't have enough energy to draw in deep, full breaths. Over a period of time this shallow breathing decreases

the amount of available oxygen so your brain sends out a sort of 9-1-1 that says, "Hey! Get me some oxygen! Now!" Your body's response to this emergency call is a big yawn, a deep, deep breath that pulls a lot of oxygen into the lungs very quickly. And your brain thanks you for yawning so hard.

Unfortunately, if you're stumbling around like a zombie during the day because you're sleep deprived, your sleepiness could pose a real danger for you and those around you. As we mention earlier in this section, sleepy people have poor coordination, impaired judgment, and slow reaction times. In other words, they're accidents looking for a place to happen.

## *Sleepiness and driving*

U.S. roadways and highways are littered with the corpses of drunk and sleepy drivers and their victims. The National Highway Transportation Safety Association reports that sleepy drivers are involved in as many crashes as drunk drivers. And sleepy driving accidents tend to be more violent than drunk-driving accidents because even the drunkest driver has some sort of ability to react and respond to an emergency situation, even if that ability is impaired. A driver who is asleep doesn't react to the emergency situation at all because he or she is completely unaware.

Public awareness of drunk driving is high, but sleepy driving is barely on the radar. Sleepy drivers cause more than 100,000 traffic accidents every year, accidents that could all be prevented if everyone made sure they had enough sleep before operating a motor vehicle. According to the National Sleep Foundation, drowsy-driving accidents cause 1,550 unnecessary deaths, 71,000 injuries, and \$12.5 billion in property losses and lost productivity every year. The National Highway Traffic Safety Administration reports 1 million accidents are caused annually by driver inattention. Two of the highest risk factors for inattentiveness behind the wheel are sleep deprivation and fatigue. Sleepy drivers aren't just putting themselves at risk by getting behind the wheel; they're putting their passengers as well as other drivers and their passengers at risk. They are also a threat to pedestrians.

People who drive for a living have an even higher risk of being in an accident while driving. Approximately 47 percent of all truck drivers report that they've fallen asleep at the wheel at least once during their driving careers.

## Pushing for reform — Maggie's Law

In June 2003, New Jersey became the first state to pass specific laws laying out civil and criminal liabilities for drivers who are convicted of causing an accident while they're sleep deprived. The law is named in honor of 20-year-old Maggie MacDonald. A trucker who'd been using stimulant drugs to stay awake for 30 hours so he could meet his delivery deadlines fell

asleep at the wheel, crossed three lanes of traffic, and smashed into Maggie's car head-on, killing her instantly. Despite his indisputable guilt, the trucker got off with a \$200 fine and no jail time because the defense argued, successfully, that there was no law against falling asleep at the wheel in New Jersey. Now there is.

## *Sleepiness and industrial accidents*

The list of industrial accidents caused, at least in part, by sleepy workers in key positions reads like a "Who's Who" of disaster headlines over the past several decades.

Pilot fatigue and the resulting diminished judgment were given part of the blame for the 1999 American Airlines crash in Little Rock, Arkansas. Sleep deprivation was also involved in the accident with the Staten Island Ferry that crashed into the dock at full speed in October 2003. The assistant captain piloting the ferry made no attempt to slow the boat down because he was sound asleep at the controls. Many other disasters were caused by key personnel who made bad decisions because they were operating on too little sleep.

Many industries are finally waking up to the fact that allowing their employees to work with too little sleep is dangerous. However, just as many employers ignore the fact that humans require adequate sleep to function well. So for every intern program that now allows its young doctors to sleep six hours every night, you still have a program that pushes its doctors to perform on one or two hours sleep (or no sleep), and that lack of sleep can lead to serious medical mistakes. Even worse, these programs may require house staff to work back-to-back shifts with no break in between. Increasing pressure has come to bear on work schedules during medical training in the wake of several high-profile wrongful death cases.

If you consistently have trouble falling asleep, staying asleep, or awakening unrefreshed and feeling groggy, then you likely have a sleep disorder. Only your doctor can determine what's actually going on with your sleep, but you can help him in the diagnostic process by keeping a sleep diary. (For more information about creating a helpful sleep diary, see Chapter 2.)

## Warning! You're about to fall asleep!

Don't ignore your brain's warning signs of impending sleep. If you exhibit any of the following symptoms of sleepiness while driving, pull over immediately! You could fall asleep any second.

- ✔ You have trouble keeping your eyes open and keep blinking frequently.
- ✔ You can't keep your head up.
- ✔ You drift from lane to lane or keep hitting rumble strips along the roadside.
- ✔ You keep yawning or rubbing your eyes.
- ✔ You miss your exit or ignore a traffic sign.
- ✔ You can't remember driving the last few miles.
- ✔ You startle, realizing you were just asleep.

Can you think of any sane reason to keep driving when you're sleepy? We can't.

You don't have to keep suffering through one sleepless night after another, or stumble through your days only half awake. *Sleep Disorders For Dummies* can help you take the right steps to find a doctor, get a diagnosis, and incorporate effective treatment and management strategies into your day-to-day life that will bring restorative sleep back into your life.

So, are you ready to start doing something about your sleepiness yet?

## What Sound Sleep Giveth, Sleep Disorders Taketh Away

If you have several of the symptoms of chronic sleep deprivation discussed in the previous section, chances are you feel pretty crummy, *and* you have a sleep disorder. A *sleep disorder* is any condition that causes an ongoing loss of sleep, causes poor quality sleep, or is a defect in the sleep-wake system. Some sleep disorders are conditions that disrupt or disturb the normal sleep pattern, resulting in an ongoing loss of sleep or a poor quality of sleep. But other sleep disorders are characterized by odd behaviors occurring during sleep (for example, sleepwalking) or during the transition between sleep and wakefulness (for example, sleep paralysis). The International Classification of Sleep Disorders lists more than 80 separate conditions that may adversely affect sleep; we include the most common in this book.



Not all poor sleep is caused by sleep disorders. One of the purposes of this book is to help you figure out if you have or don't have a sleep disorder. A good place to start is to log your sleepiness. After you figure out how sleepy

you are, you can decide if you should consult a doctor, and your doctor can determine if you have a sleep disorder.

## *Do you need help? Examining your symptoms*

Before you go see a doctor, take a look at your symptoms, the things you may be doing while asleep and the consequences you suffer during the day as a result of your poor-quality sleep. After all, no one knows better than you (or your bedmate) exactly what goes on when you lay your head down each night. Do you snore? (You may not know the answer to this question, but your bedmate surely does!) Do you wake up several times in the middle of the night? Are you anxious or restless? Do you have nightmares? Do you feel lousy when you wake up? Do you wake up with headaches, unexplained bruises, or other injuries? These symptoms are all important clues that can point doctors in the right direction after they start the diagnostic process.



Gather as much information as you can for your doctor, because if you can't describe what's troubling you about your sleep, your doctor has to dig that much deeper to try and figure out the nature of your problem. Record your daily observations in a sleep diary for at least two consecutive weeks (preferably four) before you go see your doctor. Bring a copy of your sleep diary with you to give to your doctor. (We provide a good basic sleep diary in Chapter 2.) The information you gain by observing and recording when you go to sleep and wake up, how long and how well you sleep, and how you feel when you wake up can help you decide not only whether you need to see a doctor about your sleep problems, but also give your doctor valuable clues as she begins the diagnostic process.

The good news is that no matter what is causing your sleep problems, effective treatments are available. You don't have to continue suffering from poor quality sleep. Chapter 2 gives you the information you need to evaluate your sleep habits, so that you can work in partnership with your healthcare provider to identify and treat the source of your problem.

## *Reviewing the diagnostic process*

Even after you decide that you need to consult a doctor about your sleep problems, you probably still have a long list of questions about what happens next. After an initial physical exam and patient history, your doctor may schedule an overnight study in a sleep lab. This study provides objective information about your sleep quality and often identifies the cause of your sleep disturbances. (Occasionally additional tests may be required to confirm a diagnosis.)

## A sleepiness quiz

The Epworth Sleepiness Scale, designed by Dr. Murray Johns of Australia, is a self-administered test that helps you rate your likelihood of dozing off in eight situations. Answer accurately and go with your first impulse; there are no “right” and “wrong” answers, only answers that are truthful in representing your situation. The purpose of the test is to help you determine just how sleepy you really are.

What’s the chance you’ll doze off in the following situations?

### Sitting and reading

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

### Watching TV

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

### Sitting inactive in a public place, such as a theater or meeting

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

### As a passenger in a car for an hour without a break

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

### Lying down to rest in the afternoon when circumstances permit

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

### Sitting and talking to someone

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

### Sitting quietly after a lunch without alcohol

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

### In a car, while stopped for a few minutes in traffic

- 0 No chance of dozing
- 1 Slight chance of dozing
- 2 Moderate chance of dozing
- 3 High chance of dozing

Add up your points to get your total score, and then use the following key to interpret your results. According to normative data collected at the Baylor College of Medicine and VAMC Sleep Disorders and Research Center

- ✓ A score of less than 8 indicates normal daytime alertness.
- ✓ 8–11 — You have mild sleepiness.
- ✓ 12–15 — You have moderate sleepiness.
- ✓ 16–24 — You have severe sleepiness.

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If your score is more than 16 points, you're dangerously sleepy and could cause an accident or make a mistake at work. Consult a physician to determine what is causing your sleepiness. Even if your score is lower but you frequently doze off while reading, sitting, or engaging in other quiet activities, you're too sleepy and

need more sleep or medical attention to figure out why you're sleepy.

If you get a high score on this test, share this information with your doctor. Your excessive sleepiness could be an indication that you have a sleep disorder.

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Chapter 3 walks you step by step through the diagnostic process and explains everything that you might experience, including the tests your doctor may order and how to prepare for a visit to a sleep lab for an overnight sleep study. You also find out about all the different types of doctors who treat sleep disorders and the pros and cons of consulting a doctor in any given specialty.

## *Taking a quick look at sleep and sleep disorders*

Sleep disorders are classified and grouped in many different ways. For this book's purposes, we group them either according to the type of sleep disorder or the type of symptoms the sleep disorder causes. This organization allows us to discuss sleep disorders in a logical and easy-to-understand way. The following sections provide an overview of the disorders we discuss in this book.

### *Insomnia*

*Insomnia*, the most common sleep disorder, is a condition that makes falling or staying asleep difficult for people. Trying to fall asleep becomes a nightly battle between the part of the brain and body that desperately craves slumber and the other part not fully willing to let go of the waking state long enough to allow healthy sleep.

In Part II we examine the various types of insomnia and the many different things that can make it difficult for people to fall asleep or stay asleep, ranging from the easy-to-fix (too much caffeine) to the not so easy (stress and anxiety). We discuss how insomnia is diagnosed and look at effective treatment options, including a discussion on the history of sleeping pills. We also review some bad ideas that lead people to improperly treat insomnia all by themselves.

Sleep disorders aren't the only reason individuals get a poor night's sleep. A wide spectrum of medical, neurological, and psychiatric disorders ranging

from pain to depression and from breathing disorders to panic attacks can keep your eyes open at night. Something as seemingly minor as indigestion can keep you wide-awake as can a serious condition like heart disease. We review other medical and psychological conditions that can interfere with sleep in Chapter 5 and offer some tips to deal with the problems so that you can get to sleep.

Finally, we look at some simple (and a few not-so-simple) changes you can make in your lifestyle (see Chapter 6) and sleep environment (see Chapter 7) to help you sleep better, no matter what's causing your sleep problems. Sometimes even the best treatment can't help you get a good night's sleep unless you do your part. Although some sleep disorders arise from conditions over which the sleeper has no control, like sleep apnea or restless legs syndrome, others result from poor sleep habits. Poor sleep habits include going to bed at a different time every night, staying up too late, or even consuming too many nervous system stimulants like caffeine.

We review good sleep habits and offer a variety of tips to help you incorporate these habits into your lifestyle. We also define sleep hygiene and show you how focusing a little attention on your sleep environment and making a few simple improvements can help you to sleep better every night. We offer a wealth of information on ways you can easily incorporate basic sleep hygiene principles into your daily life.

Discover how to make sleeping well a priority. You find out how to select a suitable bedtime and how to stick to it. We offer suggestions to help you develop a comforting bedtime routine to encourage sounder sleep and tips to manage stress so that it can't interfere with your rest. You discover that you can relax no matter how tightly wound you may be, and finally, we discuss activities and things to avoid close to bedtime because they can definitely interfere with sleep.

You uncover what you can do to encourage better sleep and how making slight adjustments to the environment can help to turn your bedroom into a sleep sanctuary. Before you know it, you'll be looking forward to going to sleep each night!

### ***Other troubling dyssomnias***

Insomnia isn't the only condition that can keep you pacing the floor at midnight. *Circadian rhythm disorders*, discussed in Chapter 8, disrupt how and when sleep occurs during a 24-hour period. The most well-known circadian rhythm disorder is jet lag. Shift work sleep disorder affects people whose sleep patterns are disrupted because they work a night-shift or split-shift job that keeps them awake when most of the world is sleeping. People whose biological clocks are out of sync with their environment may develop delayed sleep-phase syndrome.

In addition, we review three other less common circadian rhythm disorders, along with treatment options and tips to help people diagnosed with one of these disorders get a better night's sleep.

Snoring, the topic of Chapter 9, can also disrupt sleep, especially for the bed-mate who has to listen to the window rattling all night long. Many people are surprised to discover that a sleep disorder closely associated with snoring (called *sleep apnea*) can actually be life-threatening. We look at the phenomena called snoring and offer practical advice to help people determine if they snore, and whether or not that snoring is a benign common variety or the more dangerous type caused by sleep apnea. We review the diagnostic process and the currently available treatment options in depth with their pros and cons. We also offer some smart strategies that can help everyone sleep better.

Finally in Part III, we look at narcolepsy, a rare sleep disorder that can make people fall asleep suddenly. People who have narcolepsy feel excessively sleepy during normal waking hours and can suffer severe anxiety due to the unpredictable nature of their condition. Complete control of symptoms is difficult to achieve with existing medications, but in the next decade, you'll likely see exciting breakthroughs for narcolepsy treatment. Chapter 10 reviews the state of research and drug development and offers the most up-to-date information on current treatment options. We also offer some effective management strategies for people who suffer from this relatively rare disorder.

### ***Parasomnias***

*Parasomnias*, the topic of Part IV, are sleep disorders that produce unusual behaviors while you're asleep or at the transition between sleep and wakefulness. What makes parasomnias both so interesting and potentially dangerous is that a person who's asleep engages in behaviors (like walking around the house and eating) normally associated with being awake. As you can imagine, performing such activities while asleep can place the sleeper and his house-mates in some jeopardy. We review the most common parasomnias (some of which can be quite frightening) and offer some easy tips to help both patients and their families manage parasomnia episodes safely.

Parasomnias also affect children; in fact, most childhood sleep disorders are parasomnias. Many parents are surprised to discover that children can suffer from sleep disorders just like adults. We review sleep disorders common to children, advise when parents should consult a doctor, and offer some common-sense management strategies for helping your children sleep better. We also include advice for instilling good sleep habits into your kids right from the get-go. Starting good sleep practices right at the beginning is a smart way to avoid sleep problems later in life.

## Famously sleepless

Although you probably won't break out in song or pen a famous poem just because you're sleep deprived, many artists and writers have described sleep or sleeplessness in their work. The novelist F. Scott Fitzgerald is another famous insomniac. In his essay, *Sleeping and Waking*, he described his affliction and also provided a textbook example of what not to do when you're having trouble sleeping.

*"As I said, I think of that night, two years ago, as the beginning of my sleeplessness—because it gave me the sense of how sleep can be spoiled by one infinitesimal incalculable element. It made me, in the now archaic phraseology, "sleep-conscious." I worried whether or not it was going to be allowed me . . . I was drinking, intermittently but generously, and on the nights when I took no liquor the problem of whether or not sleep was specified began to haunt me long before bedtime."*

Fitzgerald describes how he falls asleep, but then wakes up two hours later, utterly unable to go back to sleep. He smokes and drinks in his bedroom, obviously unaware that both these activities wreck sleep. He also mentions using sleeping pills, reading in bed, trying to get some work done, and using favorite dream sequences to encourage sleep. But nothing works, and he is sadly resigned to live the life of an insomniac.

You can find literally thousands of references to sleep and insomnia in literature and art. Not every one of you may love and think about sleep with the fervor of an artist or poet. Nonetheless, you almost certainly understand sleep's restorative powers, even if it's on a subconscious level. Experience shows you that everything really does look better in the morning when you're refreshed, relaxed, and rejuvenated, full of energy and enthusiasm after a good night's sleep.

