# **SLEEP BASICS**



This is such an important aspect of life that it determines how we organize/function the rest of our lives. It influences the way in which we schedule or work and leisure activities. It has a great impact on how we design our homes. So why sleep? Sleep provides wakefulness, and alertness needed to be responsible. It is the one third of our life that makes the other two-thirds possible.

### 1. HINDERANCES TO SLEEP

Caffeine, alcohol, nicotine, daytime naps, shift work, staying out late, inconsistent sleep schedule, drugs, noise, light, temperature, bed partner, nightmares, anxiety, guilt, fear, grief, sadness, disease, pain

# 2. BENEFITS TO QUALITY SLEEP

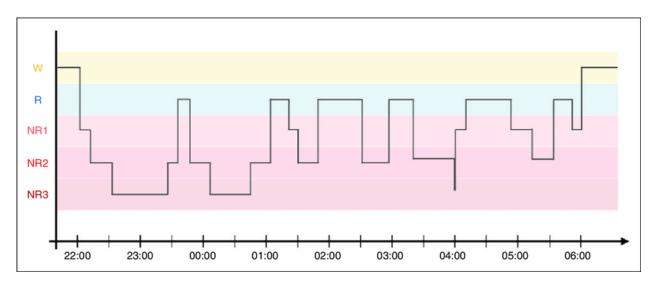
Focus, concentration, learning, memory, emotional regulation, peak performance, attitude, motivation, strength, peace of mind, muscle rebuilding, immune system function, metabolic balance,

# 3. CONSEQUENCES TO POOR SLEEP

Fatigue, illness, poor performance, muscle weakness, difficulty with concentration/focus (forgetfulness), mental disturbances (hallucinations), discomfort, poor mood (anger, irritability, depression), relationship turmoil.

### 4. STAGES OF SLEEP

Sleep comes in two varieties: Rapid Eye Movement (REM) and the 3 stages of Slow Wave Sleep (SWS). Adequate sleep involves between three and five 90-minute cycles with varying periods of SWS and REM sleep. It <u>DOES NOT</u> automatically equal 8 hours. SWS is divided into light sleep and deep sleep. Light SWS in Stage 1 is transitional, good for falling asleep and waking up. Sleep in Stage 3 helps you to feel rested, but if awoken during this deep SWS you may feel groggy or disoriented. REM sleep, when most dreams occur, comes at the end of a cycle. It affects emotion, memory, and learning.





It usually takes 2-3 months for a sleep problem to get totally better, but most people see improvements within 2-3 weeks if they consistently follow the guidelines. The purpose of the guideline is to teach your brain to associate your bed with entering and maintaining a sleep state. Try to avoid using your bed or sleeping quarters for anything other than sleeping which may teach your brain to activate while in it.

#### 1. CAFFEINE: Avoid Caffeine 4 - 6 Hours Before Bedtime

Caffeine disturbs sleep, even in people who do not subjectively experience such an effect. Individuals with insomnia are often more sensitive to mild stimulants than are normal sleepers. Caffeine is found in items such as coffee, tea, soda, chocolate, and many over-the-counter medications (e.g., Excedrin).

### 2. **NICOTINE**: Avoid Nicotine Before Bedtime

Although some smokers claim that smoking helps them relax, nicotine is a stimulant. Thus, smoking, dipping, or chewing tobacco should be avoided near bedtime and during the night.

# 3. ALCOHOL: Avoid Alcohol After Dinner

A small amount of alcohol often promotes the onset of sleep, but as alcohol is metabolized sleep becomes disturbed and fragmented. Thus, alcohol is a poor sleep aid.

### 4. EXERCISE/HOT SHOWER: Avoid Vigorous Exercise Within 2 Hours of Bedtime

Regular exercise in the late afternoon or early evening seems to aid sleep, although the positive effect often takes several weeks to become noticeable. However, exercise within 2 hours of bedtime may elevate nervous system activity and interfere with sleep onset. Spending 20 minutes in a tub of hot water an hour or two prior to bedtime may also promote sleep.

### **5. NAPPING**: Avoid Daytime Napping

Many individuals with insomnia "pay" for daytime naps with more sleeplessness at night. Thus, it is best to avoid daytime napping. If you do nap, be sure to schedule naps before 3:00pm.

# **6. BEDROOM ENVIRONMENT**: Moderate Temperature, Quiet, and Dark

Extremes of heat or cold can disrupt sleep. A quiet environment is more sleep promoting than a noisy one. Noises can be masked with background white noise, such as the noise of a fan. Consider earplugs too. Bedrooms may be darkened with black-out shades or sleep masks can be worn. Position clocks out-of-sight since clock-watching can increase anxiety about lack of sleep.

### 7. **EATING**: A Light Snack at Bedtime May be Sleep Promoting

A light bedtime snack, such a glass of warm milk, cheese, or a bowl of cereal can promote sleep. You should avoid the following foods at bedtime: any caffeinated foods (e.g., chocolate), peanuts, beans, most raw fruits and vegetables (since they may cause gas), and high-fat foods such as potato or corn chips. Avoid snacks in the middle of the nights since awakening may become conditioned to hunger.



Sleep restriction involves restricting the amount of time you spend in bed to the amount of time that you currently spend asleep. The brain must learn that the only thing it does when you are in bed is to sleep.

### 1. WHY WOULD THIS BE HELPFUL?

Research has demonstrated that sleep restriction is the most powerful technique for improving sleep. Although it can be a bit of an adjustment at first, most people find that it is not much worse than their current difficulties with sleep. In general, most people notice that their sleep improves considerably within just a few weeks. Sleep restriction initially produces a mild state of sleep deprivation, which, after only a few weeks, helps people fall asleep faster, stay asleep longer and improve their overall quality of sleep.

### 2. HOW DO I DO IT?

Example: Your usual bedtime is 10:00 PM and you get out of bed in the morning at 6:00 AM. With this routine there is an 8-hour period during which you are in bed trying to sleep.

However, if takes you 1 hour to fall asleep and you wake-up for 30 minutes during the middle of the night and 30 minutes before you get out of bed. So you spend a total of 6 hours sleeping and 2 hours awake.

Your sleep efficiency (the percent of time you are actually asleep during the time period you are trying to sleep) is 75%.

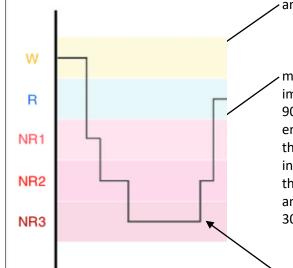
Sleep Restriction in this case would mean decreasing the amount of time in bed (8 hours) to the estimated time actually spent sleeping (6 hours).

In this example you would adjust either your bed-time or the time you get up in the morning so that the maximum amount of time you spend in bed is 6 hours. With this example you could go to bed at 12:00 (midnight) and get up at 6:00 AM, or continue to go to bed at 10:00 PM and get up at 4:00 AM.

After sleep efficiency reaches 85% or greater, time in bed can be increased in 15-20 minute blocks. Time in bed each week is increased if 85% sleep efficiency or greater until sleep efficiency starts to fall below 80% then time in bed is decreased by 15-20 minute blocks. This process of increasing or decrease time in bed is done until sleep efficiency falls between 80-85% on a regular basis.



Sometimes referred to as the "power nap," tactical napping is used to supplement normal sleep. Napping is no substitute for regular nighttime sleeping, but when used appropriately, it can assist with focus, boost energy, improve alertness, aid in memory, and maintain physical coordination.



23:00

22:00

<u>IDEAL</u> power naps will last 10-30 Minutes and will help with boosting alertness and energy.

AVOID napping naps greater than 40 minutes and less than 75minues. Duration is important. Sleep cycles occur approximately every 90 minutes. During these cycles your body will enter Stage 3, or deep Slow Wave Sleep. During these stages many of the body systems slow down in order to repair and restore. If awakened during these stages you may feel groggy, weak, sluggish and have difficulty with thinking processes for up to 30 minutes.

75-90 Minutes: This will often get you through a full cycle of sleep. This can lead to improved emotional and procedural memory and creativity.



