Dr. Richard Wurtman

# THE TOP 5 MELATONIN MISTAKES EVEN SMART PEOPLE MAKE

9

Plus 5 Tips for Getting a Sound Night's Sleep



## About Dr. Richard Wurtman

A professor emeritus of neuroscience at the Massachusetts Institute of Technology (MIT) Department of Brain and Cognitive Sciences, Dr. Richard Wurtman is widely recognized for the discovery that melatonin is the hormone that regulates sleeps.

After graduating from Harvard Medical School, Dr. Wurtman trained at Massachusetts General Hospital before joining the National Institutes of Health (NIH) lab run by Nobel Prize winner Julius Axelrod. In 1967, MIT invited him to start a neurochemistry and neuropharmacology program (later called the Department of Brain and Cognitive Sciences), and in the 1980s he began his 20-year tenure as director of MIT's NIH Clinical Research Center.

His 40-year body of work has focused on studying how various nutrients and hormones affect the neurotransmitters that influence appetite, sleep, mood, behavior, and cognitive health, and then using those findings to develop products that improve quality of life. Dr. Wurtman is also the author and editor of 18 books, holds more than 50 patents, and is author or coauthor of 1,050 scientific papers.

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## INTRODUCTION

## **Sleep Isn't a Luxury**– It's Essential to Your Health

Dear Reader,

If you're having trouble falling asleep, or staying asleep, you're not alone. It seems that America is experiencing an epidemic of poor sleep, and this has serious consequences for our society.

In addition to the obvious problems of fatigue and mental grogginess that come with sleep deprivation, a chronic lack

of sleep has been linked to a host of health issues, including cardiovascular disease, diabetes, impaired memory, immune and metabolic disturbances, weight gain, diminished sex drive, anxiety, depression, and more.

People who produce healthy levels of melatonin tend to sleep soundly through the night and wake up feeling rested and refreshed. And growing research has shown that regular, restful sleep goes far beyond adding an energizing zip to your day. It actually revitalizes your head-to-toe good health by:

- Sharpening your memory, focus, and concentration,
- Energizing your heart and cardiovascular system,
- Supporting healthy blood sugar balance,
- Increasing your capacity to deal with stress,
- Boosting your mood and mental energy,
- Enhancing your immune health.

One of the best ways to avoid the poor sleep epidemic and help steer clear of these health risks is to improve your sleep efficiency, and one of the best ways to do that is with the hormone melatonin. Unfortunately, many people use it incorrectly.

In this report, I'll tell you what you need to know about melatonin—including the best way to use supplemental melatonin to get a sound night's sleep.

To your health,

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Dr. Richard Wurtman.

DISCLAIMER: The content in this report is offered on an informational basis only, and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the guidance of a gualified health provider before making any adjustment to a medication or treatment you are currently using, and/or starting any new medication or treatment. All recommendations are "generally informational" and not specifically applicable to any individual's medical problems, concerns and/or needs.

## What Most People Don't Know About Melatonin

Melatonin is popularly known as a nutrient that helps you sleep at night. But it is more accurately described as your body's master sleep hormone, produced deep within your brain in a tiny gland called the pineal. Melatonin plays a commanding role in regulating your body's sleep-wake cycle—also known as your circadian rhythm. That is, it helps set our internal body clocks so we fall asleep and wake up at appropriate times.

People who produce healthy levels of melatonin tend to sleep soundly through the night and wake feeling rested and refreshed. But for many people—particularly as they age—the production of melatonin is disrupted, causing them to have problems falling asleep and/or staying asleep.

The problem is that with age our pineal glands become increasingly calcified which drastically decreases production of this hormone. In fact, studies indicate that around age 50, people produce <u>50% less melatonin</u> than they did in their peak production ages of 8-10. And by age 70, melatonin production has <u>dropped by a staggering 75%</u>!

This helps to explain why so many people in their mid-fifties and beyond struggle to get a good night's rest. Often, they have enough melatonin in their bloodstream to get to sleep, but their pineal gland can only increase melatonin levels to about 30 or 40 pg/mL during the night—a far cry from the 150 pg/mL of their youth.

Taking supplemental melatonin can counteract this decline, helping you to:



Unfortunately, many people who have tried supplemental melatonin have been disappointed with the results because they aren't taking it correctly. Here are the top five melatonin mistakes even smart people make—and how you can avoid them to get a sound night's rest

### Mistake #1

## **Taking Too Much Melatonin**

The most common misstep people make when using melatonin is taking too much. After extensive study, my research team at MIT found that for people over 50, the very best results are achieved with a melatonin doses of just 1 mg or less each evening! That's a far smaller dose than you'll find with most melatonin supplements, which can include up to 10mg.



Taking too much melatonin can result in elevated melatonin levels throughout the day, causing a groggy "hung over" feeling when you should feel alert and refreshed. Plus, taking too much melatonin can actually make your sleeping problems worse by overwhelming the melatonin receptors in your brain. This causes the receptors to become progressively less responsive to the effect of melatonin, until they stop working altogether.

If you are one of those people who has been taking too much melatonin, you must observe what I call a one-week "washout" period. During this time, you will abstain from taking any melatonin at all.

This break will give the receptors in your brain the chance to reset themselves after being desensitized to the higher doses of melatonin. Once the receptors are working normally again, most people become more responsive to the lower, healthier dosage level and experience fewer problems sleeping.

## Mistake #2

## **Taking Melatonin Too Close to Bedtime**

f elatonin needs time to work, so taking it right before bed can leave you L tossing and turning. Instead, you want to take melatonin 30-60 minutes before you go to bed. This will help you fall asleep up to 20 minutes faster and reduce nighttime waking by up to 65%.

#### **How Much Sleep DO YOU REALLY Need?**

When it comes to lifestyle practices that promote When you get fewer hours of sleep than your your health and vitality, solid sleep is right up there with the best of them. But while many people know it's important to eat a wholesome, balanced diet and get regular exercise, they may not know that research shows it's also important to get 7.5 - 9 hours of sleep each night.1

Surprised by that 9 hour per night sleep recommendation? Most people are. But, according to the National Sleep Foundation, healthy adults need between 7.5 and 9 hours of sleep per night to function at their best. Unfortunately, research indicates that the average adult sleeps fewer than 7 hours per night...and some people get far less sleep than that.

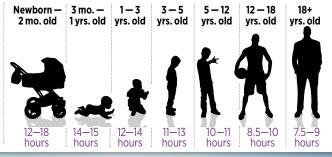
body needs, you accumulate what is known as a "sleep debt." And that debt-just like any other debt in your life-can have serious consequences if you don't address it.

If you've built up a large sleep debt over the years, you can't erase it with extended sleep on the occasional weekend. What you really need is a regular, healthy sleep schedule that you can stick to.

This means making your sleep a priority and not the first thing you sacrifice in order to squeeze in other commitments in your life. Schedule your 7.5-9 hours of sleep each night, just as you schedule your work hours each day.

#### **Recommended Hours of Sleep Over a Lifetime**

The human body goes through very different stages of growth and development over a lifetime, and these stages have different sleep requirements. Based on extensive sleep studies, the NIH found these average sleep needs by age:



<sup>1</sup>National Sleep Foundation's sleep time duration recommendations: methodology and results summary Hirshkowitz, Max et al. Sleep Health: Journal of the National Sleep Foundation, Volume 1, Issue 1, 40 - 43



### Mistake #3

## Not Taking Melatonin in Divided Doses

Many people only take melatonin before bed, only to wake up again in the middle of the night. The problem is that your body quickly metabolizes melatonin. So, it's best to take 1 mg of melatonin in divided doses, including a 0.3 mg dose to fall asleep quickly and a second 0.6 mg dose about four hours later to keep you asleep for the rest of the night.

Obviously, you don't want to wake up in the middle of the night to take a second dose of melatonin. That would completely defeat the goal of getting a good night's sleep! So how do you take a divided dose without having to wake up in the middle of the night?

The answer comes from cutting-edge supplement capsule technology. Ingenious nutritional scientists actually engineered a unique capsule within a capsule. The outer capsule has a fast-dissolving shell that releases 0.3 mg of liquid melatonin to help you fall asleep easily and stay asleep for about 4 hours. Then the inner capsule releases 0.6 mg of melatonin in slow-dissolving microbeads to help keep you in a sound sleep for the rest of the night.

## Mistake #4



## Giving Up Too Quickly

Some people might see improvements in their sleeping cycle within a day or two of taking a supplemental melatonin, but this is usually not the case. Often, it takes up to a week to completely reset your body clock. Please continue to take your supplemental melatonin 6-7 days before evaluating its effectiveness.



## Ignoring Other Sleep Disrupters

A lthough age is the primary cause of declining melatonin production, other lifestyle factors (some that go hand-in-hand with advancing age) can compound the problem, including:

- Certain prescription drugs, such as blood pressure medication, acid blockers, and anti-anxiety/ anti-depression drugs,
- Chronic stress,
- Caffeine from coffee, soda and, even some energy drinks,
- Smoking.

So, in addition to taking melatonin you want to avoid these common sleep disrupters.

## Plus, Here Are **5 More Tips** for Getting a Sound Night's Sleep

1. Watch what you eat and drink

What you do in the hours leading up to bedtime can affect the quantity and quality of your sleep hours. For instance, it's best to avoid eating a big meal too close to when you turn in for the night, especially if it contains fatty, fried or spicy foods that can upset your digestive system.

Also avoid alcohol and caffeine before going to bed. Although alcohol is considered a relaxant, it can hamper your ability to reach a deep sleep, and compromises your sleep quality. Caffeine, on the other hand, is a stimulant that can prevent your body from falling asleep.





Although the National Sleep Foundation reports that 95% of people use some kind of computer, video game, or cell phone within the hour before bed, this gadget habit is detrimental to good sleep. The short wavelength light given off by these electronics may delay the release of melatonin and interfere with your body's ability to fall asleep.

 $Even \,the\,LED\,display\,on\,certain\,alarm\,clocks\,may\,be$ 

enough to disrupt your melatonin production. So, turn your clock away from you when you get in to bed. (Bonus benefit: No more watching the minutes tick by, which is slow torture if you have trouble falling asleep.)

And watching television before bed—especially if the shows you choose cause anxiety or concern—may make your mind race, compromising your ability to relax and rest. Try reading a good book to help you wind down instead of turning on the television.

## 3. Make your bed inviting



Sleep won't come easy if you struggle to get comfortable on a poor quality mattress, lumpy pillows, or sheets and pajamas that are irritating. The feel of all of these items can really affect the quality of your sleep.

Pick a mattress that's supportive, but doesn't leave you feeling achy and stiff in the morning. Pillow firmness is a personal preference, but replace those that have lost their shape and spring, and consider non-allergenic pillow choices if allergies hamper your breathing at night. Finally, stick with bedclothes that breathe and aren't binding so you don't get sweaty, overheated or uncomfortable at night.



#### 4. Create a comfortable sleep zone



In addition to making your bed comfortable, pay attention to the environment surrounding your bed. Most sleep authorities agree that a cool room—around 65 degrees—fosters the best sleep. Any hotter than that and the ambient air could interfere with your body's natural nighttime temperature dip, causing restless sleep.

Also, make sure to block out light, which can inhibit your body's natural melatonin production and make getting to sleep and staying asleep more difficult.

Consider an air purifier in your bedroom, especially if you are prone to seasonal allergies. Minimizing dust, pollen and other air contaminants will help you breathe better and prevent sleep disruptions from coughing, sneezing and an irritated nose or throat.

Finally, keep your bedroom neat. Wellness experts believe that an uncluttered environment helps translate to an uncluttered subconscious and encourages a stress-free brain that's ready for sleep.



Many prescription and over the counter medications can disrupt your sleep. So, check with your doctor or pharmacist to see if one of the medications you're taking could be making it difficult to fall asleep, or stay asleep.



## DR. WURTMAN

6710A Rockledge Drive, Bethesda, MD 20817 healthydirections.com

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