Understanding Circadian Rhythm & Sleep

Did you know people sleep 20% less than they did 100 years ago? And women are two times more likely than men to experience insomnia? We have approximately 10 million people in the United States using prescription sleep aids. Sleep problems are radically underdiagnosed and undertreated in healthcare. Getting quality, deep, restorative sleep is the key to healing our adrenals, our nervous system, our immune system. Sleep promotes skin health, athletic performance, insulin regulation, hormonal balance, just to name a few. You may think that you sleep well. But if you wake up several times and you remember that waking in the middle of the night, you're never fully getting REM or deep sleep. If you're unable to fall asleep or you wake up too early, especially with your heart pounding, or maybe you're still tired, but your body won't let you go back to sleep. You know what? All that is is a circadian rhythm problem. The Circadian Rhythm is also called your sleep wake cycle. It's your body's internal clock that sets the tone for sleepiness and wakefulness over a 24-hour period of time. It's drastically connected to your adrenal health.

So believe it or not, whether you are an early bird or a night owl is determined by your circadian rhythm. And if you're a night owl, your circadian rhythm is off. Because Melatonin is the hormone that's secreted by your pineal gland, which is controlled by your hypothalamus, the director gland in your brain. The function of Melatonin is to regulate circadian or biological rhythm and to regulate certain reproductive hormones. Melatonin is one of the most powerful antioxidants produced in the human body. And it is not common knowledge, but Melatonin is both water and fat soluble, which makes it able to reach every single cell in your body. Rather than taking a Melatonin supplement, which is fine to do on a short-term basis, why not have your body naturally produce this hormone on its own? It's the best way for balance. So, let's talk about how balancing your circadian rhythm can be the key to you, your lasting sleep. You want to first and foremost check your neurotransmitters, the chemical messengers in your brain. It's important because they have an influence on anxiety and nervousness, feelings of depression, all of which can influence your sleep wake cycle.

Hormonal balance begins in the brain, which is why we're talking about it first. You also want to take your sleep hygiene into consideration. How many of us look at our phones right before bed, or sleep with the TV on, or the computer? You've got to look at stress management. You've got to look at blood sugar regulation. All of these things need to be addressed at the same time when you want to balance your circadian rhythm. If we have...
hypoglycemia, these hormones that are responsible for the regulation of glucose such as cortisol, insulin, if cortisol is high at night, we can't sleep. And if blood sugar is low, we also can't sleep. [00:03:30] So, adding an evening snack can really help unlock lasting sleeping. And we'll put a few ideas up for you over at thewholejourney.com. Now, factors that influence circadian rhythm, when we go back to neurotransmitters, are serotonin. Serotonin helps with the body's sleep and wake cycles and our internal clock. And if we're low in serotonin, the cycle can be off track, which is why we'd recommend a diet that's high in tryptophan, because that can help [00:04:00] you make healthy serotonin levels.

So you're going to think about things like turkey, bananas, eggs, pineapple, nuts and seeds. These are going to be foods that are going to help you produce more of your own serotonin. And then you have gabba, which is one of your main inhibitory neurotransmitters. And if we are low in GABA, we experience anxiety or we have trouble falling asleep. Foods that your body uses to replenish [00:04:30] GABA levels in your brain are shrimp, halibut, citrus, tomatoes, whole grains (gluten-free whole grains), and legumes. Whether they be lentils or chickpeas, which are also high in iron. Walnuts as well are going to be a really helpful food to help you replenish your GABA levels. Now we go back to talking about Melatonin as the most well known, most famous sleep hormone that we have. It's secreted [00:05:00] at night. It's controlled by light and dark. So, the most holistic way to produce more Melatonin is to use a sleep mask before you go to sleep. Have four ounces of tart cherry juice before bed. And if you really need a supplement, then go ahead and take a supplement.

But try to knock off technology and have as little light coming in as possible for the last hour before bed. Now cortisol, the stress hormone, and Melatonin balance each other [00:05:30] out. Cortisol should be higher during the day while Melatonin is low, and then Melatonin rises as cortisol goes down at night. That's a really nice circadian rhythm that's ultimately going to look like a beautiful bell curve. Blue light is an indicator for us to wake up. Our retinas have evolved and they have developed to associate blue light with waking and daytime. So when we are not exposed to blue light for about an hour or after, [00:06:00] our body starts to produce Melatonin necessary for sleep. Your activity level and stress can influence your circadian rhythm and function. So, make sure that you're getting exercise throughout the day. It's going to help with your blood sugar. And also make sure that you're eating routinely throughout the day to shut off the stress response. And consider having a snack before bed that has protein, carbs, and fats. And try to eat breakfast within one hour of waking up.

These are all [00:06:30] ways to give your natural sleep cycle, put it more in balance. Modern life has set us up for many disorders which can manifest after years of poor sleep hygiene,
and disrupt the natural pattern of the body. So, I encourage you guys, all of you, to be counter
cultural to help you reclaim natural restful sleep. And tips for doing that are to maintain a
good sleep schedule. Try to have the same [00:07:00] bedtime, the same sleep hygiene
routine, the same limiting evening technology, and having a snack before bed. This is all
going to be really helpful and really supportive. Our favorite, banana and salt with cashews.
Or let's say a smoked salmon wrapped with marscapone cheese on a cassava tortilla with a
little pesto. Maybe some broccoli sprouts, great source of indirect antioxidants to lower
inflammation while you sleep. If you eat liver, a little liver [00:07:30] pate with a cucumber
would go a long way with a cup of broth that has a little collagen in it. Or maybe just a cup of
broth with collagen and fruit.

These are going to be great sleep snacks. And if you're still having trouble sleeping after
doing the sleep hygiene routine, after using food as medicine, you can try a couple of
supplements. You can try to add in Pharma GABA. So when you're trying to replace your GABA
levels, you want to make sure that you've got a smaller molecule so it can pass the blood
[00:08:00] brain barrier. That's why I like Pharma GABA, not just regular GABA that you're
going to get at the health food store. And it's clinically proven if you have high cortisol and if
you are stressed, to increase alpha waves during times of stress, and that helps you support
sleep by neutralizing cortisol and adrenaline. L-theanine is an awesome, very safe amino
acid. I even used it when I was breastfeeding. It also increases alpha brain waves, so those
calming brainwaves, [00:08:30] you can take it before bed. Or this one you could even take
during the day. Then, you have phosphatidylserine. I love phosphatidylserine. This is going to
blunt the cortisol response, right? Our stress hormone response. Bind to high cortisol and
pull it down.

Or you can also supplement with Melatonin, maybe one to three milligrams time release
Melatonin maximum while you're making these shifts, while you're getting the food in your
diet, while you're starting to knock off of technology, wear your sleep [00:09:00] mask. All of
that stuff. And then you can titrate off of Melatonin because you won't need it anymore. Signs
you don't need Melatonin anymore are super vivid dreams. Almost like disturbing dreams
they're so vivid. And if you wake up groggy where that's not normally your style. Again, you've
got your sleep mask. Open the blinds first thing in the morning as soon as you wake up.
Expose yourself to light in the morning, walk outside if it's warm enough to get out there. Or
consider getting a light box. You really [00:09:30] want to expose yourself. Go for a walk. You
want to increase what's called CAR, your cortisol awakening response. That's the measure of
your first morning cortisol when you wake up and it peaks 30 minutes after that, and then
starts to progressively drop throughout the day. So your goal is to get a bell curve.
Raise your core temperature at night before bed with a light sauna, a warm not a hot bath, or oiling your feet with sesame oil before bed. If you go too hot, you may get other adrenal problems on the other side there. So, warm is better than hot. Maintain a good routine. The body feels safe with routine, guys. It gives it consistency. Consistency is a jewel.

Exercise. The times you exercise. The quantity of foods you eat, and when you eat, and giving your body consistency, it will give you consistency back, that you can rely on. And that together we use all of this information to create that beautiful bell curve, and happier, healthier circadian rhythm. This is going to create a stronger nervous system, therefore giving you a rock solid foundation for the rest of your life. This is going to help you recover from physical and emotional stress much, much quicker. So, there you have it, natural tips for improving your circadian rhythm.

If you have questions, comments or concerns, let us know. We love connecting with you. Thank you so much for watching and we'll catch you next time on Food As Medicine TV.