How Much Sleep Do You Need?

DM: Welcome everyone, this is Dr. Mercola. Today, I’m pleased to have with us, Dr. Naiman, who is going to help bring up our level of understanding on the crucially important topic of sleep.

I’m absolutely committed to getting people healthy. In my experience, you can have the best diet in the world, have the best exercise program, be free from emotional stress but if you aren’t sleeping for whatever reason, it is like virtually impossible to be healthy.

This is really one of the essential components of staying optimally healthy and taking control of your health. That’s why I’m just delighted to have Dr. Naiman with us. Welcome Dr. Naiman.

RN: Thank you. I’m happy to be here.

DM: I like to review a different topic now which is how much sleep do we need which is a really common area. Over the years, I’ve come to a conclusion that there is no perfect answer because like everything it’s a range that people are comparing. But it probably is somewhere between six and eight hours.

If it’s less than six -- there is some really compelling research I think initially from the University of Chicago that shows that you actually increase your insulin resistance and increase the risk of diabetes. Interestingly, over a certain amount, I don’t know what that is if it’s eight or nine but over a certain amount of hours can do the same thing.

For me personally, I use it as a warning. It’s not uncommon for me to get less than six hours of sleep and still feel rested. I seek not to do that based on that study. If I would look at the clock and it’s still like four and a half hours, I’ll just go back to sleep or seek to or at least seek to relax to let my body do the stuff. I wonder if you can comment on that and the range of sleep because it’s a big topic for many people.

RN: It is. I’m smiling for a couple of reasons. One is it’s the most common question that I’m asked when I speak to groups of people. How much sleep do I need? Actually, there is a little piece called Counting Sleep in my newsletter, my fall newsletter which went out yesterday. It’s a topic I’ve taught about a lot and addressed a lot.

One of the problems here is we love numbers. As a physician, people come, they want their numbers. They want to know their cholesterol and their blood pressure, their sugar levels and so on. Not that these are unimportant. They’re important but too often they’re taken out of context. They’re just taken out of context. People want to know their sleep numbers too.
I think asking how many of hours of sleep should I get is like asking, “Doctor, how many calories should I eat?” How many calories should one eat? Of course the answer to that depends on who that one is. It’s so individual. It also depends on the quality of those calories.

Again, a lot of people are knocking themselves out night after night after night with sleeping pills. They maybe getting seven to eight hours or whatever but is it sleep? It looks like sleep. It might feel like sleep but you know what, it’s not really sleep. That’s part of the question too is the quality of it.

There is really interesting data. I don’t think we have a final word on this yet suggesting that if you’re below a certain amount of sleep or above a certain amount, you increase mortality risk and increase risk also of type 2 diabetes, a number of other conditions. I think the data is very strong showing that if you don’t sleep enough, you’re in trouble.

By the way, everybody loses sleep here and there. It’s not like if you miss a few, you know, if you’re getting short sleep for a few nights. Our bodies are so incredibly resilient. They’ll make up for that. But if it’s a chronic pattern, there is no question that short sleeping which is defined (indiscernible 1:09:57) as sleeping less than five or six hours depending on the study shows dramatically increased risk for heart disease, autoimmune diseases, things like arthritis, neurodegenerative diseases, cancers across the board. The American Cancer Society did a study of a million American adults, short sleepers, showed a dramatic increase in risk of cancers across the board.

So we know that there is a mountain of data showing if you don’t sleep enough, you’re going to get yourself sick. There are probably many different avenues that explain the pathophysiology here.

The other end of it I think is a little more suspicious. When you say people are sleeping too much, questions arise like why? It may be in some of those studies they don’t have frank illnesses. These are people who don’t qualify clinically as having diabetes or heart disease. They may have metabolic syndrome. They may have very early stage of underlying chronic inflammatory process.

When people start to get sick, one of the things the body does is it tries to rest. It improves immunity. It withdraws energy from the waking world to address those issues. So it may well be that some of those longer sleepers are sleeping extra time because their bodies are trying to heal themselves, that there maybe an underlying illness. Albert Einstein routinely slept 10 hours a night, lived well into his 70s despite the fact that sucked on cigars all day. Obviously, it didn’t hurt his creativity a whole lot.

The data suggests that if you go back a hundred years, people were sleeping an average of nine hours a night. People also had a very different relationship with
sleep at that time. Sleep patterns were very different. It was routine that people woke up in the middle of the night for about an hour or two. It was called night watch. Everybody did it. It was a really interesting time. People also slept during the day.

Think the Yin Yang, the white wave representing in this case waking; the dark Yin wave representing night and sleep. There is a dark Yin sphere within the white wave. This is a place of rest in the middle of waking consciousness and natural rhythms.

In the middle of the dark Yin wave, there is a place of Yang, there is a white sphere suggesting that there is a place where awareness, a kind of waking, awareness in the middle of the night. When we lose sight of that, we overreact to two things. We tend to overreact to being sleeping during the day. We tend to overreact to being awake at night. Overreactions cause anxiety.

Example, people get sleepy during the day. It’s normal to get sleepy in the middle of the afternoon. We are biologically programmed, genetically programmed to nap. All mammals are. So you got somebody sitting at their desk trying to crank out a report that their boss wants and they’re getting sleepy.

I’ve talked to hundreds of people about this. What happens is they begin to fight their sleepiness. They actually get angry at themselves. They’re dousing their sleepiness with coffee. They’re biting on their tongues. They’re fighting their sleepiness. They fight it at least for an hour.

If they didn’t sleep well at night, sleepiness visits them routinely during the day. They spend a lot of time chasing it away. They get to bed at night sleepiness starts to come. They have this habit now of unconsciously reacting by pushing it away. So they’ve learned this unconscious habit of pushing sleepiness away.

Also, in the middle of the night, when we falsely assume that any kind of awareness is pathological inside, people get up and go, “Oh crap, its insomnia.” I’ve asked hundreds and hundreds of people over the years. I’m fond of asking people -- tell me the first thing, what’s the first thing that comes to your mind when you wake up in the middle of the night? Honestly, what’s the first thing that you think when you wake up? The most common answer I’ve gotten over the years is, “Oh, shit.” People wake up and they curse their wakefulness.

There is a kind of awareness that we can actually cultivate at night. Waking up three, four, five times a night when we turn, when we pull the cover off of our spouse, we fluff the pillow, is absolutely normal. When we learn this automatic judgmental reaction to wakefulness, as soon as there is a spark of it and we judge it, we spin out.

One of the most common things along those lines too, the most common behavior people engage in when they wake up in the middle of the night is they look at the
clock. Again, we’re back to this notion of combativeness of numbers. People want to know their numbers.

Patients have actually said to me, “Gosh, I wake up, I get exactly 2:20 every morning.” I say, so you’re looking at the clock? No. Well, how do they know its 2:20? It’s the first thing people do is they want to anchor in waking consciousness. They want a sense of control over this ephemeral night consciousness.

This addiction to numbers is the problem. There are nuances with sleep just as there are with waking. There are so many different ways of being awake, different kinds of experiences. Light sleep is fine. Being half awake and half asleep is fine.

In fact, I really believe that in any moment in time during the day and at night, it’s a mixed percentage. Right now, you and I are talking; we’re probably 98% awake. I’m just making up a number. There is a restful part of us. We might say we’re 2% asleep. It gets closer to bed time. It might get 50/50. What we call being sleepy is being part of awake, part asleep. In the middle of the night when we get up to use the bathroom, we might be 95% asleep still and 5% awake just to find our way there.

We need to allow a mix of these different forms of consciousness. I haven’t said much about dreaming here. When we look at sleeping in the larger context of consciousness, as human beings, we do sleeping and dreaming and waking. And in any given moment, one of those is dominant. One of those is primary.

Think of a braid of hair where you’ve got three strands, there is sleeping, there is dreaming, there is waking. At any given moment, one of those is on top but the other ones are present. A complete consciousness and integrated, a whole human consciousness. I call this the united states of consciousness, you know, when we’re one.

There is always an element of sleepiness which during waking life is peace. There is always an element of dreaminess which in waking life is expansive creativeness. There is an element of all three together. I think making peace with those and opening our hearts to those really would help us be more peaceful in our relationship with sleep at night.

So how many hours should I sleep? Enough hours so that your energy is sustained through the day without artificial stimulation with the exception of a day time nap. No matter how well we sleep, we’re going to get sleepy in the middle of the afternoon. It does not mean, we didn’t sleep well enough. But if we didn’t sleep well enough we’re going to get sleepy off and on through the day. We want to sleep enough and dream enough so that our memory is good, and so that our energy is sustained through the day.
Some people can get by on six hours. I think there are a very, very few. Some might even get by in five hours. By the way, when I say without artificial stimulation, obviously, we’re referring to things like caffeine, nicotine, energy drinks (indiscernible 1:17:39) off the shelves (indiscernible 1:17:39) but also excessive adrenaline. A lot of people who don’t use stimulants, they will unconsciously trigger adrenalin release.

They’re sort of in hyper all the time. If you don’t artificially push yourself, when your energy is steady -- by the way, there are energy waves too, it doesn’t have to be high all the time but it’s relatively steady through the day then you’re getting enough sleep.

**DM:** I like the functional description rather than I guess putting it down into an objective number range. As part of that description, I think there are some confusion. At least myself personally, I do know when I push it and for some reason, I’m just not getting either high quality sleep or enough sleep.

I’m particularly predisposed to what I call postprandial hypoglycemia. So in other words, I have a very low insulin resistance so that it doesn’t take much sugar or exposure to carbs for it to really be easily metabolized and drop my blood sugar. If I’ve gotten enough sleep, I’m not that predisposed to it but if I haven’t, I just start to fall asleep at the computer. So I’m wondering if you’ve factored that into your definition with respect to functional (indiscernible 1:18:54) sleep issue.

**RN:** It would be interesting I mean, I don’t know your sleep patterns but it would be interesting to see if you allowed yourself to get more sleep, if that would go away. By the way, there is really good data on the connection between insulin resistance and sleep. The early studies deprived people of sleep. They cut their sleep by three or four hours. They cut it almost in half at night and the next day, there is a dramatic spike in insulin resistance.

Subsequent studies deprived them of less sleep but there is a strong correlation almost dose dependent with sleep deprivation and insulin resistance. We know that insulin resistance is a huge problem. You might experiment with getting more sleep.

**DM:** It’s always interesting. Another question that many people have and I think there is a lot of confusion on is this is this ability to store sleep in a bank or to catch up with sleep. Many of us for whatever reason, schedules, will not get sleep for a number of days in a row or we’re cramming for a midterm or something and you just have to stay up.

What’s your position or what’s your belief and views and experiences on catching up for sleep? You know, you get minimal sleep during the week and on the weekend you catch up. You’re 10, 12, 15 hours for the weekend. Does it even work? My guess is it doesn’t work and you’re just wasting your time.
RN: First of all, you can’t really bag sleep any more than you can bag oxygen. We just need to replenish it. If you’re well slept, you’ll be more resilient in terms of reacting to a period where you’re not getting enough sleep or you’re jetlagged, you’ll do better. If you’re under slept and you throw jetlag, on top of that, it gets a lot worse.

In terms of making up for sleep, it is a very common pattern in our world that people short sleep during the week and then sleep in. It’s considered delicious. For me, it’s kind of funny. It’s like starving yourself during the week and then pigging out on the weekend. It’s not the best way to eat as we know.

You can make up for some lost sleep on the weekend but here is the price, it throws off your circadian rhythm. Again, the infrastructure of our sleep is this rhythmic drumbeat of day and night, of light and darkness, of sun and melatonin and so on.

What most people do on the weekend is actually go to bed later and sleep in much later. You really confuse the poor brain. It’s almost like shifting it to another season. It’s almost like a little bit of stationary jetlag. You’re yanking your circadian rhythm around. Not something that’s recommended.

DM: I did remember what I’ve forgotten last time too when you’re talking about this information explosion that there was a physician, Richard Swenson who wrote the book, Margin. I think 15 years ago now. It really addresses the very issue that we get more and more of everything faster and faster.

I just wanted to point out that this is not a static situation. It’s bad now and it’s a lot worse than it was before but it’s going to get a lot worse in the future. It is a continuing because that’s just an artifact of Mohr’s law, you know, the dramatic explosion and the power and the reduction of the cost of the microprocessor. These strategies have become even more important to integrate, to get back to the basics, to get back to the foundations. It’s just so essential.

RN: One of the things that’s fundamental to this is this common belief that being awake is much better, much more important than being asleep, being productive is much better, much more important than not being productive. I think it’s a huge mistake. I think we’ll be doing ourselves a great disservice by thinking that the value of our lives is measured in terms of what we can produce.

I’m not opposed to productivity. I love it. I enjoy creativity but I think we need to reconnect with the incredible joy of just being. Not just because it’s a value to our health and our (indiscernible 1:23:16) which it is but because it’s fun. It feels really good to rest, to relax, to open your heart. We’ve lost touch with that. So many people are automatons today.

I think unfortunately it ends up taking a heart attack or something for someone to hit the wall before -- sometimes two of those before people will reconsider slowing down. There is so much (indiscernible 1:23:44) seconds around.
And you know, when you are with a group of people -- I was in New York not long ago -- I love New York City. I love to visit there. But you know, you’re walking down a busy street; you’re like a fish in a school of fish. The crowd brings you along. I walk faster when I’m in the city than say, here is Tucson. You have to or you’ll get stampeded. A part of that is this social entrainment. There is a certain pace.

If you look at television news in the last few years, you go back 10 years ago, newscasters used to sit at a desk. They would sit and they pretty quietly read the news. Most of them now stand. In fact, they’re kind of postured like they’re ready to run out the building. There is a drum roll behind the news. It’s almost like just in case there is a terrorist attack.

What they’re doing is they’re trying to spike our adrenalin. I think we really confuse being excited with feeling good. There is nothing wrong with being excited but that’s not the only source of joy. Energy, we’re crazed with this notion of energy. Spirituality is understood in terms of energy and energy medicine. Energy is great but it’s not all there is. There is also not energy.

In Eastern traditions there is nothingness. There is rest. There is something there if you will in a none ordinary sense of (indiscernible 1:25:05). There is something that we lose touch with. The thing that I find most amazing about sleep beyond all of its biomedical and psychological impact, is it’s this gracious gift. It’s like if we’re willing, our being takes us into this incredible place of serenity, an incredible place of peace.

I’m not a regular meditator but I’ve done it. I know guys who have been meditating for 25, 30 years. What I figured out is when I sleep well, I get taken to the same place that they have practiced all those years to get to. We’re taken there by grace. It’s given to us. Here is the big if, if we’re willing to receive it.

And that willingness is blocked by our placing a tremendous premium on activity and productivity and waking. Not saying that’s unimportant. I love it as much as the next person. But there is something else that’s equally important and that’s this beautiful mystery that’s hidden behind rest, behind sleep.

**DM:** It’s kind of obvious once you bring out the association and you’ve mentioned it in the introduction but I never really made the connection between the similarities between meditation and rest. If you’re resting well and sleeping well that -- I don’t know that it eliminates the need for the benefits of meditation but it would certainly, you’re going to many of the same benefits. There may be a synergy doing both, I don’t know.

**RN:** I think so. I think we don’t have really good data on this yet but it’s pointing in that direction. I know of two people. I met one who can go into a meditative state, open his eyes and generate brainwave activity. It’s comparable to deep sleep,
slowing brainwave activity which is phenomenal to me because sleep medicine, sleep scientists, say it’s impossible to be awake and asleep at the same time.

Now is that wakefulness? Well, you know, it’s awareness but it’s awareness of something most of us are not aware of. We tend to lose consciousness. We’re not familiar with the exquisite serenity that shows up in sleep. So we don’t see it. But we can actually practice that.

Just last week, (indiscernible 1:27:21) released my last audio book called The Yoga of Sleep. It was really an opportunity for me to come out of the closet with the spiritual side of sleep. There tends to be so much interest and understandably, in biomedical issues. But to look at the fact that sleep is not simply something you do. It’s not just functional. It’s exquisite in its own right.

DM: I wonder if you can go into a public health issue, kind of a warning of sorts. Sort of an artifact of our culture is that there are requirements and really demands for a fairly significant segment of our population to engage in shift working; you know, the police, the firemen, the hospitals, physicians. It’s just a necessity of life. My understanding of it is that it’s going to -- it’s not an if, it will inevitably, invariably decrease your lifespan.

RN: Unquestionably.

DM: Sometimes you don’t have a choice but (indiscernible 1:28:24) address this and really warn people to at least recognize it. If they’re choosing to participate in a profession or an occupation that demands them to do that, that they’re making a sacrifice, and they’re decreasing their lifespan, it’s their choice. You could smoke, you can drink, as long as you know the warnings. I wonder if you could elaborate on the warnings and what you have seen to give this public health warning, message.

RN: That’s very important. I’m glad you raised the question. If you take the F out of the word shift in shift work, you come very close to what it’s like. There lots of studies of this done. There is unquestionably a need for some people to be awake at night. People have medical emergencies or accidents in the middle of the night. There are fires in the middle of the night.

It’s questionable whether or not we need to be able to go to a 7-Eleven or a Circle K and get a Slurpy at 2 AM. In my opinion, there is a lot of unnecessary shift work, really unnecessary shift work. We can reduce the number of people.

You go to a city like Las Vegas, that’s all by choice. We do have data. Engaging in shift work does dramatically increase mortality. I think we see about a seven year reduction in life span, (indiscernible 1:29:52) if we do shift work. We see increases initially in gastrointestinal disorders. The yanking back and forth of the circadian rhythm confuses the body about when to eat, when to digest. Those are some of the early signs. We see dramatic increases in depression, clinical depression among shift
workers and then we see a slew of other diseases that are associated with compromised immunity. So if you can, avoid it all.

There are things you can do if you need to do shift work. One is stay on the same shift for a stretch of time. It’s much harder to yank back and forth. You can create a prosthetic environment. You’re basically turning day and night upside down.

Let’s say you’re working in an emergency department so you do that.

There is actually some data, I’m convinced yet but there are some data showing that you if you increase melatonin even during shift work during the artificial day it will minimize some of the side effects. These are some early studies.

So you make your night into day and then you make your day into night. When you’re driving home from work, you put on a pair of sunglasses. You don’t want that light telling you it’s time to get up. You cover your windows with aluminum foil and you create an artificial night. You disconnect the phone. You do anything and everything to recreate night so that you can sleep. You use melatonin again at that time. You try not to shift back and forth.

It’s also easier if you’re rotating shifts to rotate it clockwise. It’s easier to adapt in that direction than it is backwards. It’s true with jetlag too. Unfortunately, a lot of organizations that do shift work rotation pay no attention to that. The airlines are starting to pay a little more attention to that because they measure pilot awareness and performance and so on.

So, yeah, it’s a huge problem. I think you hit a key point and that’s that a lot of it is choice. In some cases, it’s not but there are things we can do to minimize it and then if at all possible, if you need to do it, do it for a short period of time.

DM: Another question is on sleep timing. A common natural health understanding is that for every hour of sleep before midnight it’s equal to two hours after midnight. That of course is not a significant issue for shift workers but for those of us who don’t have to do shift work.

I’ve heard Dr. Deepak Chopra speak about this too and chronobiology and he’s obviously studied Ayurvedic medicine. It seems to be an interest of yours too. This is well understood for thousands of years. That’s a big issue. I’m wondering if you can give your experience on that.

RN: We see a much deeper regard for what we sometimes call circadian medicine, the impact of timing. We’re so hung up in our world about what we do. I remember years ago, getting a prescription for something (indiscernible 1:32:51) physician saying, “Take two of these every four hours.” I thought, okay, but when? In my mind, should I start it at 9 AM, or noon? Somehow that seemed intuitively important. I was a college student.
In our world, we don’t pay much attention to when we do it. Ayurvedic medicine which I’m not all that familiar with, I have a little more familiarity with (indiscernible 1:33:15) or traditional Chinese medicine and acupuncture. Those older schools with longer traditions have a lot of regard for not only what you do but for when you do it.

The notion of an hour of sleep is worth two hours before midnight I think is metaphor. Here is a story, roughly the first third to first half of sleep is when we get most of our true deep sleep. We get our stage sleep. We get slow wave sleep, or delta sleep, stage 3 and 4 at that time. We spend most of the first part of the night truly sleeping, most of the latter part of the night dreaming. There are some sleep interspersed in the latter part. There is a little bit of dreaming in the first part.

In Chinese medicine, for example, they say the best time to get to sleep is roughly 9:00 or 9:30. Now, that raises another question about which 9:00 or 9:30 because we’re shifting. Probably, it shifts with season. But roughly a couple of hours after sunset, there have been enough melatonin raised in our brains that will naturally put us out. Of course we’ve got the TV news going and getting lit up and so we don’t get that. I do think there is some validity to that.

I’ve never seen really hard scientific data. I’ve seen a lot of anecdotal experience. And there is data that suggests that there is a window of heightened opportunity for falling asleep. Now, that can vary depending on your personal circadian rhythm. But you want to get to bed at about the same time every night. I think ideally 9:30, 10:00, 10:30, somewhere in there. Again, with shifts allowed for seasonal changes. So, yeah, I do think that’s important. You’ll get a better quality sleep though.

DM: I want to make a point about electronic aids to sleep. As sort of a preface to the question, it’s my understanding that many years ago, there wasn’t a number of companies who sold tools that you could learn while you sleep. I think that’s been disproven now because once you reach the sleep stage, you’re really not comprehending anything.

I’m wondering if you can comment on these other subconscious, other electronic aids which actually involve brainwave entrainment. They’re usually done in stereo and they’re really synchronizing the brain to the frequencies that are suggestive of really the stages of the sleep. I’m wondering if you find those useful, any particular technologies and if you can give us your insights on that.

RN: The (indiscernible 1:35:47) of learning in sleep is it’s a classic example of wanting to drag waking life into bed. That’s like sleeping in our clothes. Give it a break already. Brainwave entrainment is an interesting idea. There is a little bit of data on it that I’ve seen.
One of my audio books is called *To Sleep Tonight - First Aid for Insomnia*. We use very specially crafted, what we call hypnoacoustic technology. One of my sons is a sound musician, a sound engineer. We crafted this stuff to parallel brainwaves. The data is scarce on that. It makes sense.

We know for example that you can increase adrenaline by walking. You know, this whole notion that I run because I'm afraid and I'm afraid because I run. You can entrain certain activities internally with behaviors. It doesn't make a lot of sense. I generally don't recommend -- generally, there are some exceptions, bringing that waking stuff into sleep.

I think there are lot of exercises that we can do as we're preparing to sleep. We can listen to things. We can meditate and so on. I'm a bit of a purist. I think we ought to get into bed and then just let go and let nature take us to sleep.

There are people with intractable persistent insomnia. Most people with insomnia find that it’s intermittent and it’s off and on even though it’s a pain, it’s a struggle. I’ve had patients who have gone 10, 12, nights without sleeping and it’s a horror. In cases like that, I relent a little bit. I do send them to bed with guided imagery, with hypnotherapeutic suggestions and things like that.

The synchronization entrainment is a little bit like music. You want to think about the fundamental rhythm in music coming from the baseline of the drum for example. That is really hard to replicate. It’s a much larger rhythm. We go back to this notion that you want the drumbeat of day and night to be in place. If that’s not in place, the smaller order rhythms what we call ultradian rhythms are going to be out of place. Those instruments are going to lose their place in the symphony of daily life.

Trying to calm your brain down in the few minutes before going to sleep is like going a hundred miles an hour and hitting the breaks about 10 ft before you want to stop. You want to hit the breaks before the car actually gets into the garage.

I’m not opposed to those. Again, I produce some of these kinds of audio devices. I think they can be used judiciously but they need to be used in a larger context of a renewed regard for nature. I’m not sure how to be able to put it. We need to reconnect with nature.

**DM:** Just another follow up question with the chronobiology. There are a large number of people who believe they are night owls. They typically don’t fall asleep until 2, 3, 4 in the morning. They do this consistently so it’s not really a shift worker issue but it is a chronobiology because they’re really out of sync with the sun rhythms.

Is your belief that there is this biological variability that they truly are incapable of falling asleep in conjunction with it or it’s just their belief system?
RN: In part, it is their belief system. If you look at evolution, we’ve had artificial light, a lot of artificial light for well over a hundred years. Prior to that, it would be really hard to stay awake at night looking at a candle. A candle gives off approximately 1 watt of light. We turn in and screw in a 25 watt light bulb and we say, “My God that’s dim.” That’s 25 candles. You need a lot more light than a few candles to keep you awake. We’re biologically programmed to get to sleep when it’s dark.

Night owls will tell you that that’s the way they are but you know what, there a typically strong psychological and biological factors. I worked for some time at a project where I spent a lot of time in California with a family working on this project. The mother, the wife, that I was working with is a newspaper reporter. She claimed to be a night owl. She would get to bed at 12 or 1 o’clock in the morning.

While I was there, I watched what went on. We’d have dinner and about an hour after dinner she would have a bowl of coffee ice cream. She had coffee ice cream because she just loved the taste. It had nothing to do with the caffeine of course. But she had a couple of scoops of coffee ice cream.

If you walked into her office at night it was like walking on to one of these alien spaceships. She had four halogen pole lamps in her office, in addition to desk lamps around. When you walked in there, you got hit with this intense beam of light. And then she sat down to write this dramatic newspaper articles. She called herself a night owl because nobody could sleep under those circumstances but she engaged in that behavior night after night. This is a very common story by the way when you question night owls. You uncover patterns of behavior, patterns of thinking that contribute to keeping them awake. Often it’s reinforced.

For some people, honestly, it’s the only time they have alone to themselves. It’s true with some insomniacs too. They’ll wake up at night and they’ll frustrated. They’ll admit to (indiscernible 1:41:31).

I’ve seen this in a lot of young mothers. They’ll say, “Well, you know, I hate it but there is something about it that I really like because it’s the only time when the baby is not going to cry and the phone is not going to ring. I don’t have to do dishes or whatever.”

In cases like that when the secondary reinforcer or secondary gain of the wakefulness is time alone. I will prescribe that. You know, I’ll say, on your calendar twice a week, cut out a couple of hours, pretend it’s the middle of the night and this time. You’re giving yourself free unstructured time. I think there is a human need for that.

Going back to your question, I personally believe that even though we can measure night owls versus larks, we’re just measuring behavior. We’re not really measuring what’s beneath. I think in nature, we’re all morning people.
DM: You’ve given us loads of great information. We’re getting kind of close to the end, I’m wondering if there is any closing comments you want to make then I have some questions about how people can contact you.

RN: We’ve talked a whole lot about strategies and of course I think a couple of things, one is it’s not one size fits all. That people need to look at their own being, their bodies, their minds, their life circumstances and personalize their sleep. Personalize their strategies.

Again, there are so many different avenues to go. Let me toss in one thing if you don’t mind my mentioning a product. There is something new that I’ve just started experimenting with about six months ago. It’s called Zeo. I don’t know if you’ve seen this.

DM: Spell that.

RN: Z-E-O.

DM: It’s like (indiscernible 1:43:16)

RN: Yeah. I like this thing because it’s a sleep measurement device that you can use at home.

DM: Oh I’ve heard of it. It’s an electronic device.

RN: It’s electronic. It has a headband. It sends a very, very low signal into what looks like a night stand clock. What I like about this is is you can get a sleep study and it’s strongly correlated with polysonography which you typically have to go into a sleep center to get. It’s going to cost you $2000. You do it one night. You can measure your sleep night after night. What it lets you do is personalize.

You can now look at -- you can say, here are the days I’ve got two or three cups of coffee and look at my sleep. Here is a night where I had excessive alcohol. Here is a night where I took a sleeping pill. Here is night where, this is when I made love that night. Look at how I slept. You can really look at specifically how all those body, mind and bed factors affect you, affect your sleep over time. I think this product can offer us a tremendous amount.

DM: I’ve heard about it. I was (indiscernible 1:44:17) too. I think, I actually tried to purchase it but it wasn’t available at the time and I just lost track of it. But it’s available now?

RN: It’s available now.

DM: Is that about a $100 or so?
RN: It’s $200. If you get all the bells and whistles it can be more. But frankly compared to $2000 for a sleep study, it’s quite a bargain. You use this thing for years. They’re sophisticated. They’ve got a website where you can confidentially load your data and take a very close look at your own sleep. I’m really into personalizing sleep strategy. It’s not one size fits all. This is a device that helps you personalize.

DM: Before you leave that device, how would you personalize based on the assessment? Basically, do you combine the analysis or the objective data collection with a sleep diary?

RN: Yes, exactly.

DM: And make the correlations.

RN: And the data collection is quite sophisticated. It will show you time awake, how long it took you to fall asleep, time in light sleep, time in deep sleep, time in REM sleep. It will distribute that over a graph and give you percentages. It will give you an accumulative score of your sleep over time. A very sophisticated device that I think can be used in a really positive way.

DM: Are you using it now with your patients?

RN: I am, yes. Here is something else that I found very interesting. I have a lot of intractable insomniacs, people who come in and say, I haven’t slept at all in the last three days. It turns out not for everybody but for most people when they look at their Zeo in the morning, you get a graph on the device and you can put it in your computer.

They realize, oh my God, I was awake for an hour here and an hour there but look at how I got six and a half hours of sleep in between. We have recollection of wakefulness more than we do of sleep at night. It’s simple biofeedback device. That in it of itself helps. But again, you can really fine tune your sleep strategies. You can figure out what works for you.

The second thing I want to say is the strategy is necessary but it’s insufficient. We want to engage in the right strategies but the deeper issue which I’ve touched on and I appreciate you gave me the opportunity to do this, is what I think of it as a spiritual dimension.

Again, spiritual is not religious although I often say that people falling asleep is an act of faith. You have to trust that there is something bigger than you that’s watching the store and watching your family and your body and the world.

There is that other piece that boils down to surrender. If I’m going to surrender, the question is what am I surrendering to? In this way, sleep disturbances stir up deeply
personal, deeply spiritual questions about what can I trust in life, if I’m going to freefall into this place called sleep. But that willingness is as important as putting all the strategies in place. They both go hand in hand. I think when you bring both of those together, you’re almost guaranteed good sleep.

DM: So you’re currently working at Canyon Ranch.

RN: Oh no.

DM: I thought you were, I’m sorry. So you have a private practice.

RN: Yeah. I left Canyon Ranch some time ago. I have a private practice. I’m a clinical assistant professor of medicine at Dr. Andrew Weil Center for Integrative Medicine at the university. Most likely there is participating training, residence and post op physicians, fellows who come in from around the world. I’m the sleep specialist there.

DM: So you’re employed by the university?

RN: I teach at the university. I have a private practice. I also do a lot of training nationally. I’m about to head on the road now at conferences and places like that. On the consultant, I’ve been a consultant in the development of a number of sleep products. I’m still in the process of doing that. I work with sleep disorder patients. I do a lot of work with narcolepsy, severe sleep disorder. I work a lot with persistent insomnia. I do some consulting around sleep apnea. If I can mention my website --

DM: Sure, yeah, absolutely.

RN: It’s www.DrNaiman.com. The easiest way to find is to Google my first name Rubin and sleep. It will pop it up.

DM: That’s amazing how Google is really the default way of finding people now.

RN: It is yeah.

DM: Especially when you’ve got the Smart phones all you do is just talk into your phone instantly you have --

RN: It finds you.

DM: That’s great. People will want to know what you’re up to and the latest and they can consult with you or attend one of your lectures. That’s the best way to do it.

RN: Right. There is a contact button on the website. I’m very easy to find.
DM: I can't thank you enough. I mean, you've obviously compiled a large amount of beneficial information that will help so many of us really address this essential element of health in our lives. I really appreciate the time, effort, and energy you took to compile that and share that with us.

RN: Thank you very much doctor. I've always appreciated your work. It's good to meet you and have this discussion.