Sleep and Bedtime Contemplations:
A Special Interview with Dr. Rubin Naiman

By Dr. Joseph Mercola

DM: Dr. Joseph Mercola
RN: Dr. Rubin Naiman

DM: Hi, this is Dr. Mercola, helping you take control of your health. Today we are joined by Dr. Naiman, who is an assistant professor at the University of Arizona in Dr. Andrew Weil’s program and focuses on the understanding, appreciation, and integration of sleep into health. Welcome and thank you for joining us today.

RN: It’s my pleasure. Thank you.

DM: We have done a previous interview. For those who haven’t seen that, why don’t you give a little history of your work in this area and how you came about doing what you do?

RN: Well, I’m trained originally as a clinical psychologist. I think very early on in my work, I began to recognize that it was hard for people to move forward, and address and heal emotional issues if they were sleepy, if they were tired. That awareness began… The seeds were there early. It began to grow and grow.

I also had, from the time I was quite young, sort of an intuitively based interest in dreams. The combination of those 2 experiences… By the time I was about 10 years into my career, I shifted my focus entirely into sleep and dreams. I had spent the first 10 years working primarily with cancer patients and became more and more curious specifically about the relationship of cancer in dreaming, something Carl Jung had written about extensively. It blossomed about 25 years ago into a full-blown interest in sleep and dreams.

At that time, I joined the staff of Canyon Ranch Health Resort here in Tucson where I live and met Dr. Andrew Weil for the first time. I found myself in this setting – in alternative, holistic, or what we now call integrative health setting, where I was able to address sleep issues in a much more comprehensive, sort of “outside the conventional box” way. I did that for about 12 years at Canyon Ranch, another 4 or 5 years at Miraval Resort, and ended up laying the foundation of what we now call integrative sleep medicine. The last 12 years, I’ve been in the faculty, as you mentioned, of the Center for Integrative Medicine as their sleep and dream specialist.

DM: That’s terrific. Thank you for sharing that. Why don’t we go into some of the details of sleep now and maybe review some basic physiology, the different stages of sleep, and what they’re important for, because I think that’s going to be useful to really fully appreciate the insights that you have in this important area.

RN: Right. Well, most of us now know there… We think of sleep in terms of two basic kinds. We think about sleep, true sleep, what we call stage sleep, or deep sleep, and then we talk about rapid eye movement (REM) sleep, which is dream sleep. I think one of the best ways of understanding those 2 kinds of sleep is to think of them as kinds of nourishment. Sleep and dreams are a bit like water and food to the psyche, to the soul, to the mind, and so on.
We need both. We absolutely can’t survive without fluids and water, and we need good nutritious food. In the same way, we need both sleep and dreams. I think of sleep as being like the fluid that replenishes us and refreshes us, and dreaming as being another kind of nourishment, almost like food. Maybe we’ll talk a little bit about how the mind actually consumes and digests information when we dream.

DM: Okay. I think the most recent statistics I reviewed suggest that people aren’t sleeping enough. I mean, the average person is probably sleeping under 6 hours, where if you’re – and you may have better data under that. But I think it may be more optimal to be getting closer to 8 hours. Maybe let’s just touch on that and how that impacts the quality of our life.

RN: Right. I think the best data we have suggests that the average American sleep is sleeping just under 7 hours, 6 to 8 hours.

DM: That’s good.

RN: Yeah. For the average person, it actually isn’t enough. We have to keep in mind that sleep debt accumulates. If somebody is missing, say, an hour of necessary sleep per night and if they’re sleeping an average of 7 hours, at the end of 7 days and 7 nights, they will have lost the equivalent of a full night’s sleep. Many of us do this. Even though they might not notice an obvious change in their functioning, the reality is they will function as if they’ve been up the entire night. There’s a danger in that, of course, in terms of accidents, performance, and so on. We all need to get the right amount of sleep.

It does vary from person to person. In my theory, I think it could [be] from season to season and depending on our health condition, our age, whether there’s pregnancy, or we’re taking care of young kids, and so on. But the best way to measure if we’re getting the good quantity of sleep that we need is by looking at the quality of our waking day. If our energy is basically sustained – and of course, energy flows in rhythms; it will come up and down throughout the day in little bits… But if we’re not conking out constantly, if our energy is sustained through the day, we’re lucky getting good-quantity and good-quality sleep.

DM: Isn’t it true that one of the most important components of sleep is the REM sleep, which is when we dream. When we cut our sleep short, sleeping just under 7 hours as opposed to 8 hours or more that many people need, that’s when most of the dreaming occurs. It occurs in the final phases of sleep before you wake up. Why don’t you expand on that?

RN: Absolutely. Thank you. This is a point I’m just deeply concerned about. There’s been so much media attention, necessary attention, to the fact that we’re sleep-deprived. But it looks to me like we are at least as dream-deprived as we are sleep-deprived. As you’re saying, because we get most of our REM sleep and most of our dream sleep in the latter third of the night, that’s what we tend to lose. Most insomniacs I should say tend to have trouble sleeping through the night. They’ll wake up 1, 2, 3, or 4 hours before their sleep is done. They are not so much losing sleep as they are losing dreams.

The other part of this is that if we routinely wake up with an alarm clock, which I think the vast majority of us do, we’re actually snipping off the end of our dreams night after night after night. The metaphor here is if we have a really good novel, it’s as if we’re tearing off the last few pages. It’d be very, very frustrating. Yes, dreaming is essential. In recent years, there’s been a lot of research underscoring the fact that dreaming has functions very different from sleep.

I mentioned just a few minutes ago. I think of the dream as being a digestive and assimilating process for information. Just in the recent years, we have heard a lot of reference to the gastrointestinal (GI) tract, to the gut, as being the second brain because there are all kinds of neurotransmitters that we thought at one point belonged only to the brain and we find them in the belly. There’s a wisdom associated with
digestion, if you will. There’s a process of careful screening and selection of the food we eat. The belly determines what it’s going to keep, what it will assimilate, and what it will let go of.

Likewise, what we’re finding about REM sleep and dreaming is that the brain in one sense becomes a second gut. If we think about all of the information that we’re exposed to in the course of a single day – the conversations, the things we read, the things we see, hear, and think about, and the things we just experience all around through our senses – all that information can be understood as something we consumed. The brain consumes this. What happens in REM sleep at night is all of this information that we’ve metaphorically swallowed is digested and assimilated. It’s sifted through. Again, in its wisdom depending on lots of factors, the brain decides what it’s going to keep and what it’s going to let go of.

I think as this information is digested, that process of assimilation shows up metaphorically in the dream, in the images of the dream. The bottomline here is that if we don’t dream well, it has a profoundly negative impact on our memory. In a deeper sense, it’s as if we stopped growing psychologically. We stopped adding to who we are.

**DM:** Terrific. Thank you for that explanation. Maybe if we can now touch a bit on sleep hygiene, so that we can help people optimize their dreaming and their sleep time. Clearly, from my perspective, one of the most important issues is to make sure you’re getting to bed early enough, because if you have to get up at 6:30, you’re just not going to get enough sleep if you go to bed after midnight. That’s a key thing. You have your lifestyle structure. But then some simple components of expanding on how you can pay attention to the environment in your bedroom, such as the amount of light coming in, the electromagnetic radiation (EMF), and the clocks. Even discuss alarms, the different types of alarms that are possible.

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**RN:** Right. What you’re touching on, Dr. Mercola… The first step, of course, I think is recognizing that the best way to assure that we’re getting a good quantity of sleep and quality of sleep is to get to bed on time. Most of us have much more control about when we go to sleep than we do around when we get up, because the world has expectations and demands – there are children, there’s work, and so on.

This is a problem where people tend to steal time; they steal sleep time at night. There’s a decision about “I’ll get this done. There’s a piece of work I want to get done,” or “There’s some housework, some dishes, phone calls.” People tend to make waking life a lot more important than sleep. The irony in this is that the quality of waking life depends greatly on the quality of our sleep. [It’s] the willingness to slow down.

I think of this in terms of our relationship with sleep, you know. In Greek mythology, sleep was just not a thing we did; sleep was embodied in the archetype of a Greek god named Hypnos. People had the sense that they had a relationship with sleep. It was like a friend. In fact, I like to remind people that good sleepers are people who often say that they love sleep. In talks I do around the country, I’m often approached toward the end by somebody who will come up. They’ll look around, they’ll lean over, and they’ll whisper, “I love sleep. I really love sleep.” I thought it odd for a while that they whisper this. Now I realize they don’t want to offend all of the insomniacs in the room.

But it’s really critical to begin with looking at our relationship to sleep. We tend to think of sleep as being solely functional. I need good sleep because it will improve my memory, my immunity, my appearance, my athletic performance, my sexual performance, and on and on and on. All these things are true. But they’re only the functional reasons. This is like saying, “I’m going to have a certain diet because I need the nutrients,” but forgetting about the fact that eating is one of the great joys and blessing of life. We enjoy food. We need to learn to enjoy sleep.
Good sleepers – one of the characteristics of really healthy sleepers is they tend to love sleep. I talked to people about falling back in love with sleep. If you love sleep, if you want to have a good relationship with sleep, start dating it. Start courting it. Acknowledge you love to sleep before you get into bed with it. This is the first step, and it’s a critical attitudinal shift. Because we can do all of the right things, but if our heart is not in the right place around sleep, it really won’t help as much.

Regarding other points, yes, we want to recognize that when we’re heading to sleep, we’re going to sleep, we’re shifting consciousness. I think of this metaphorically. I think of the bedroom as being a portal. Of course, it’s another room in one’s house. But it’s also a passageway. It’s almost like a Stargate because it’s going to take us to another place. In fact, I like to think of the bed as a magic carpet. The notion of a magic carpet actually comes from the bed, because the bed will fly us to other lands in the dream world. It will take us some place.

If we begin to think of it like that, we restore a sense of mystery that is so essential. I think that when we step into the bedroom, we need to think about this in the same way when we step into a movie theater. Most of us instinctively, as soon as we go into a movie theater, we change consciousness. We quiet down. In fact, the word I use is we “hush.” By the way, of course, this is the name of my new book, a little segue. My most recent book published last month is called Hush: A Book of Bedtime Contemplations. It’s about remembering something we all know in our hearts: we need to shift consciousness. We step into the bedroom as if it’s a theater of sleep.

In the same way when we step into a theater, there’s an expectation that we can just relax and be receptive, and that something interesting and useful will come toward us. We can do that as we step into the bedroom. In a practical sense, of course, that means the bedroom needs to be dark, quiet, and cold. As you’re suggesting earlier, also free of subtle energies. A lot of people don’t recognize that electromagnetic currents create electromagnetic fields. At a very sort of imperceptible level, sometimes the bedroom is just buzzing with energy. We want to address that. We want to dial that energy as far down as we can.

DM: Yes. Well, a few points, some responses: I was certainly guilty and I think as many people are of not really cherishing sleep and viewing it as a necessary component that just had to be done. I would pride myself in getting to work at 5:00 in the morning and probably functioning with less than 5 hours of sleep for so many years, probably 20 years or so. I’ve look back on that and I realize what a massive mistake that was. But I felt this pressure to get so many things done and not enough time to do it. I suspect many people are in similar situations. If I could just encourage them from my own mistakes to not make that one, because it definitely is going to compromise your health. There’s no question about it.

The other comment would be the electromagnetic radiations you referenced that many communities… In fact, most communities, from my understanding, in the United States do not have requirements for residential buildings to have the wires, that means the bedroom needs to be dark, quiet, and cold. As you’re suggesting earlier, also free of subtle energies. A lot of people don’t recognize that electromagnetic currents create electromagnetic fields. At a very sort of imperceptible level, sometimes the bedroom is just buzzing with energy. We want to address that. We want to dial that energy as far down as we can.

The other component is almost all of us have wireless routers. Many of them are in areas that are really kind of a challenge to get to. Thankfully, there’s new technology that allows… I mean, if you’re not going to shut off the circuit to your bedroom, but at least, you know. Your router is probably not in your bedroom, so you still need to address this. You can buy a device for 10 to 20 dollars or so that essentially you plug into. It’s a wireless receiver. You can easily with the push of one button shut your router off and on. You’re sleeping without that radiation permeating your body in the most important recovery phase of your life, when you’re resting.
Comment on that and then comment on the different types of alarms that are available. That would be a big issue for people.

**RN:** I have a device, actually a remote device. It’s a button. It’s a little remote button I have that cuts all the electricity in my bedroom.

**DM:** Oh, perfect.

**RN:** Yeah, those are available. I’ve had that for probably 5, 6, or 7 years now. Those are available. They’re not difficult to install.

Years ago, if we go back a hundred years, the treatment for anxiety, the treatment of choice for anxiety, was to send people to the country. I mean, we used to laugh about it. But now we recognize that there’s something about getting away from all this energy even back then that was very helpful. I think what we’re talking about is creating that kind of quiet. We want to reduce that buzz of energy. We also want really clean air in our bedrooms. That’s very important. That can be done with plants. There are lots of regular plants that clean the air and that are dealing with filtration. This is very important.

In terms of alarms, I think if we have to use an alarm – and many of us do on a routine basis; some of us only if we have to catch an interview or if we’re flying somewhere… If we have to, I think it’s better to opt for some of these newer gentle alarms that will not blast you out of bed. You can get these for smartphones, or you can get them built into regular alarms.

One of the things I strongly recommend, in addition to having sort of a soft, graded alarm system, is that we modulate the light that comes out of these digital alarms or digital clocks. Many of them put out pretty intense white or blue light, which is the worst thing for sleep. We need to keep in mind that light trickles across a closed eyelid. There’s evidence that that kind of exposure to light at night not only compromises sleep, but it probably increases the risk for certain illnesses, including cancers, over time.

We want to minimize the light. Or if we’re going to have light, we want to have a low blue light, more along the amber or red spectrum of light that doesn’t suppress melatonin, which is why all of this is a problem. We want to dial the light down at night.

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**DM:** It seems to be one of the mechanisms. People might wonder how sleep is connected to cancer, and at least one of the theories is the suppression of melatonin, because it has a very potent anti-cancer benefit. But it doesn’t work if you take it as a supplement; it works when your body makes it naturally.

**RN:** Right. Well, I think it can work both ways. Melatonin is a pretty simple molecule. I speak and write a lot about melatonin replacement therapy. I think we need a good-quality melatonin. There’s still a lot to learn about it. I think a lot of the melatonin in the market turns out not to be sensitive to the circadian aspects of it. Normally, melatonin levels are very low during the day. They rise up very gradually at night. They’re still pretty low through the first part of sleep. The increase in melatonin levels peak in the brain, in the body, and in the gut as well in the last 2, 3, to 4 hours of sleep. They’re actually peaking when we’re dreaming. High levels of melatonin are associated with REM sleep.

I think the loss of melatonin, which I think is epidemic in our world, is also associated with decreases in REM sleep. Most melatonin products are instant-release. Because melatonin has a half-life of about 45 minutes, you get a spike if you swallow it around bedtime. You get a spike that will come down pretty quickly. It almost is the opposite curve you see in nature. I tend to recommend a sublingual variety (under the tongue), so it’s absorbed and it avoids the first liver pass, and also a sustained-release or continued-release variety. You’re somewhat mimicking nature a little more closely.
DM: All right. If someone needs melatonin – and certainly it can be useful as a bridge I guess – you’re suggesting 2 forms: (1) the sublingual for the quick release and the other (2) an orally [ingested] sustained-release one.

RN: Right. Or a combination of the two. There are some companies that make a combination.

DM: Sublingual to sustained-release?

RN: Yes.

DM: Oh, I wasn’t aware of that. Interesting.

RN: I do think we need to realize that if we’re exposed to light at night even in an hour or two before bed, we’re suppressing melatonin. The brain gets a signal when it’s exposed to the blue wavelength of light. It gets a signal that it’s daytime, and that suppresses melatonin. If we’re watching television screens, TV screens, computer screens, iPad screens, or telephone screens, all of these put out a lot of blue light.

We want to really be cognizant to that, even wear glasses or goggles that screen the blue light (which are called blue blockers) or put screens into our computers. There’s a free program called f.lux that you can download onto your computer. Your computer will automatically change the quality, the wavelengths, of the light when it detects settings evening time. That will help you a little bit.

But we really need to reestablish a good relationship with night. In my first book, I talk about how I think people are still afraid of the dark, not in the literal sense. But when the world grows dark, we turn inward. I think people are afraid of confronting parts of themselves when it gets dark. I like to tell people to think about dusk and darkness as being chocolate time. The word “dark” eventually will get its redemption because of its link to the word “chocolate.”

DM: Terrific. Now, you also have some other contrarian views with respect to being awake. Of course, we all know the importance of sleeping. But as I mentioned in the introduction, one of your insights is the importance of being hyper-alert while you’re awake. I’m wondering if you can expand on that.

RN: Right. Most of us think [inaudible 24:31] and this is having just one speed. We either sleep with our eyes at their levels of statures of sleep, and we think when we’re awake we’re awake. If you give it a little bit of consideration, you’ll realize that not true. We get up in the morning groggy. At different points throughout the day, we might be a little sleepy. Certainly in the evening, we grow sleepy. The point here is that wakefulness occurs in stages as well. We can be a little bit awake or we can be a lot awake. Because of the focus in our culture, the intense emphasis on productivity, we have become a culture of hyper-aroused individuals. What that means is that we tend to be excessively awake.

I’m more struck by the fact that the most common infraction of the law in the United States is speeding. It’s not surprising if somebody’s… We get in our cars and we speed. I think we don’t realize that when we get in our heads, we also speed. Many of us are familiar with the notion of heart rate and how that’s influenced by emotion. I sometimes think about head rate – how fast my thoughts are going and how many thoughts I am entertaining, juggling simultaneously.

There’s really strong evidence that people with insomnia, people who don’t sleep well at night, tend to be hyper-aroused. What that means is they’re too wakeful. If you ask people who don’t sleep well to explain why they think that’s the case, they’ll tell you that at night in bed, they are exhausted, they are spent, and they are fatigued. But they’ll add that they feel that they’re just not sleepy enough. What’s interesting is that what the research shows us is that they’re plenty sleepy. They think they’re not sleepy enough
because they’re too wakeful. Sleep problems don’t typically occur because of a lack of sleepiness or inadequate sleepiness; they occur around excessive wakefulness. We’re running too high, too fast.

There’s a profile associated with this. We see a cortisol dysrhythmia. Cortisol levels are popping up at night instead of coming up in the morning. We see decreased serum melatonin. We see increased heart rate. We see increased high beta electroencephalography (EEG). Beta is the waking range, but it’s the high-end, the high-altitude range of that. And an activation of the hypothalamic pituitary access, which I’m sure you’re familiar with. But basically, this is one of the great energy channels through the brain. People are just hyped. They’re frenetic.

The thing is, Dr. Mercola, if everybody around us is speeding, if everybody is going 85 down the highway, and we’re going 75, we’re going to feel like we’re going too slow. There’s a tendency not to notice. Given the context of the velocity of our lives, we tend not to notice how fast we’re going, and we really need to notice that. We need to stall, yield, slow down, and stop sometimes. When speed pumps in our daily lives, we need to really slow down.

I think the most critical bridge that takes us from waking to sleep is the bridge of rest – true rest. We live in a world, too… It’s hyper- arousable. We’ve forgotten what rest is. When people rest, they actually are just shifting into different kinds of activities. People often rest by – or people often confuse rest with recreation. They’ll go on a movie or go on a hike. Go bowling or do whatever. These are recreational activities, not true rest.

People often confuse rest with inebriation. We live in a world where people consume too many mind-altering substances. A glass of wine, of course, can be fine and healthy for some people. But people consume too much alcohol; people consume too much pot, and so on. Inebriation is not rest.

True rest, as most of us now know, involves the practice – well, I think of it as the rest practice – of something that allows us to be receptive, to really slow down. I think the reason a lot of people resist this is when we start to slow, we start to experience what I’ve called personal turbulence. We know that jet airliners fly at 25,000, 30,000, to 35,000 feet above the weather. They want to fly above the weather. When it’s time to land, they gradually descend. Often, they’ll descend through a layer of weather, and they’ll hit turbulence. This is normal. There are all kinds of shaky weather if you ask.

I think it’s true rest psychologically if we go quickly through our day, we’re flying above the weather of our emotions, and re-cour sing. I think that’s fine. When people slow down to rest – and this is most evident around napping… If someone tries to stop and nap in the middle of this sort of frenetic day, they’ll feel this personal turbulence as they slow. They’ll come through this layer of emotions, thoughts, feelings, and things. Usually when they hit the turbulence, they’ll pull back up.

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What I suggest in the rest practice is it’s a way of learning to descend through personal turbulence and touching the ground, the ground of some peace, some quiet, and some inner serenity. That kind of practice is so helpful in getting to sleep, because when we slow, when we start to descend at night – and I encourage people to descend before they get into bed – we’ll feel that turbulence. A lot of people who can’t fall asleep complain that they can’t stop the mind. Well, they haven’t given it enough time. If they’re flying really high and fast, that’s fine. But they need a longer landing strip and more time to descend.

DM: It seems like napping would be one of these strategies, habits, or resources that one can use to increase rest as you defined it. Are there any other strategies that you practice or that you recommend?
RN: Yeah. Meditation I think is very useful. There are many different forms of meditation available for people today. Probably the best known one is Jon Kabat Zinn’s mindfulness-based stress reduction (MBSR), which is taught all over the world. There are trained people who do this. It’s extremely helpful as a way of resting. There are other forms of meditation. There are other forms of mindfulness meditation, trance-based meditations, and so on. There are technologically assisted ways of resting – heart rate variability, wave techniques, and biofeedback techniques. There is hypnosis. There is self-hypnosis.

I think there are semantic channels. I think yoga is an incredibly really good way of resting. There is a yoga technique called nidra that I often use with people. We can think of it as a guiding meditation that involves really learning to deeply relax the body and this progressive muscular relaxation. There are certainly no shortages of roads that will take us to rest.

DM: Okay. I’m wondering with respect to useful tools that one can help to monitor and assess the level of rest that one is achieving – some recent devices, you know. When I was practicing, heart rate variability was just coming to vogue. Technology wasn’t too great so they had to buy these sensors and put it into a computer. Usually, it was at 2,000 dollars. But now there are a lot of free apps for your smartphone – Android and iOS – that you can download and measure heart rate variability. I’m wondering what your experience with this is and any recommendations you might have.

RN: Well, I have… I’m a little old-fashioned. I have one of the Amway machines. It’s a little device. It’s the size of a small phone. Yes, I haven’t experimented with the apps yet. But yeah, I think so. I think there are a tremendous number of good apps, a lot of sleep apps.

DM: The apps are free typically. They can be a dollar or two. But I mean, they’re basically free.

RN: I think most of them are very useful – the vast majority is – because they provide a kind of biofeedback. Unfortunately, we’re such an extroverted culture. Too many of us have kind of lost the sensitivity to our own inner promptings. What these devices do is they mirror back for us what’s going on in our sleep or in the pace of our lives, whether we’re having REM sleep, in our wakefulness, exercise, and so on. I think these are really, really great developments. They’re very rapidly evolving. I think in short order, we’ll see some incredibly sophisticated devices that will give us the information we need to make better decisions.

It still comes down to this tension between how much value do I place on productivity versus how much value do I place on rest. I think as much as the next person, I really value being productive. I love doing things. I learned a long time ago that that doesn’t come at the expense of rest. That is something inherently essential. And I would add something exquisitely spiritual around learning to rest. It’s just as important as learning to not do as it is to do.

DM: Yeah, I couldn’t agree more. I’m certainly a neophyte student in that area. I’ve understood that intellectually, the importance of it, but never really integrated it in a practical basis and have always resisted meditative practices – not because I don’t believe in them; I just never got around to doing it I guess. But as I’m getting older, I’m becoming more motivated to pursue that type of discipline because of the benefits, and then having this technology, too, to actually give you the feedback to see that you are making a difference in your physiological parameters easily measured.

With respect to other devices, too, I think we’re both disappointed. There was a really good one, and it was really cheap. It was like 100 dollars. It’s called Zeo. You could wear it at night. It’s essentially a sleep lab in a box that would determine not only how long you slept but different phases of sleep that you’re in and overall give you a score. I really appreciated that device. It really helped me understand that I was sleep-deprived at a serious level. Since using that, I probably added another hour or 2 hours more, most probably it’s 2 hours of sleep a night.
RN: Right. Yes. It’s a biofeedback device.

DM: Yeah. But that device is no longer made. Even though we have the devices, the software is kind of broken.

RN: Right.

DM: Hopefully, they’ll come up with something better and more useful even.

RN: I agree. I have a couple of these still. I think they’re wonderful. They’re very easy to use. They’re wireless headband. The data that you get from them is very, very helpful. I particularly like it because it gives you not only a printout of sleep architecture, but it shows how much REM sleep you were getting in addition to deep sleep.

DM: Yeah and deep sleep. That was one of the insights I learned, too. I have pretty good REM sleep but I get very little deep sleep. I was sleeping something less than 10 minutes a night of deep sleep. Eventually, I was able to get it up to an hour or 2 hours. But boy, that was really eye-opening. Without these types of tools, it’s hard to know. I mean, because you lose your state of consciousness. You have no understanding of what’s going on when you’re asleep and no idea of the potential harm that you’re causing to yourself.

RN: I think that’s such a critical point. There’s like the slow erosion of consciousness that happens. It’s really hard to find a man, a male, in the US over the age of 50 who gets any deep sleep. Women are biologically programmed for 30 to 40 percent more deep sleep than men. This is probably Mother Nature’s way of compensating for the challenges of pregnancy, childbirth, and early childhood rearing. But that data, that statistical data, is not a health norm. I really believe that we need to do anything and everything we can to restore deep sleep.

I often think about the depth of our sleep, our willingness if you will, to dive into the deep waters of sleep as being associated with our willingness to go into the depth of who we are. I think – and I’ve written about this in Hush – in some ways there’s a parallel between our ability to access deep sleep and our ability to connect with our deeper selves. I think over time in our world, we’re so drawn away from the deeper essence of who we are, and drawn more and more into focus on the outer world. Again, it’s a breathing process. We want to focus on the outer world, but we want to come back and go very, very deeply into who we are. This again speaks to what I think are our critical and forgotten spiritual aspects of sleep.

Years ago you asked how I got interested in this. A friend of mine just reminded me about this. There was a book called Autobiography of a Yogi, which I read I think when I was 18 or 19 and I first got into yoga. He spoke about the beautiful experience of sleep. Most of us think of sleep as being unconsciousness; it’s not an experience. In our world today, because we equate sleep with unconsciousness, it opens the door to massive dependence on sleeping pills. Sleeping pills do not really in the long run create sleep; it cause unconsciousness. And we confuse the two. We think if we are knocked out, we think we’re asleep.

But in Autobiography of a Yogi and other writings I’ve read since then – Rudolf Steiner or Sri Aurobindo – there are long spiritual traditions around the world that recognize that we can actually become aware of sleep. In the Western world, conventional sleep medicine docs will say, “You can’t be conscious of sleep.” But you know, in my experience and most people I’ve talked to about have had an experience at times of being asleep and knowing they’re asleep. Maybe this is some of the lighter stages of sleep. But you can actually cultivate an awareness of sleep.
The challenge is sleep itself (I’m going to use the word) beautiful. It’s so serene. It’s so quiet that most of us have no waking world framework, no waking world language to think about, let alone talk about it. Practicing meditation begins to give us… It takes us into this other land in consciousness. It begins to give us a sense that, for lack of a better phrase, there’s something there. Sleep is not just the absence of waking; it’s the presence of something really sweet and really beautiful. Again, this speaks to why we can fall back in love with sleep. We have to begin to consider that it’s not just functional. I’m not saying that function isn’t important; from the health perspective, it’s critical.

Most of the sleep information we get on the Web, most of the books written about sleep – there are hundreds of book about sleep that are out now – almost suggest that we have to become an expert to be a good sleeper. It’s like you’ve got to memorize these 12 sleep hygiene steps, understand sleep architecture, and understand what’s going on in terms of melatonin, physiology, and other neurotransmitters. The best sleepers I’ve met can’t read. They’re young children, dogs, and cats. God knows how, but somehow you know they haven’t read all these books to be able to sleep.

In fact, that’s one of the reasons I wrote Hush. It’s a little book for nightly readers. It’s to remind people of I think the truth they already know in their hearts. Sleep – sleep is default unconsciousness. Even though we say, we think and say, “I’m going to sleep,” all the evidence – and by evidence, I’m going to say both scientific and spiritual evidence – suggests that we are all always already asleep and that sleep is a default. It’s already in there. Ironically, the harder we try to get someplace we’re already at or the more effort we direct at getting to sleep, the more it will keep us awake. Excessive sleep effort keeps us tethered to waking consciousness.

There is this essential practice not of going to sleep, but of learning to let go of waking, because sleep is already there. All we need to do is release waking and then we recognize that sleep is present. It’s like the sun is always present. If we can release the cloudiness of waking, if you will, we have that experience. I want to emphasize that there’s a deeply personal subjective side alongside of the science. It’s not either or; they’re both necessary. Sleep medicine or sleep science has taught as a tremendous amount about sleep. But they’ve forgotten the sleeper. They’ve forgotten you and me. They’ve forgotten that sleep is an exquisitely subjective personal experience.

I encourage people metaphorically to go to sleep with their third eye open and to consider that they’re descending into this beautiful, dark, sweet water of sleep where they are amphibious like we were when we were in the moon. It’s another world that we go into. Being aware of that is just as important as all these other important things we’re talking about in sleep hygiene, melatonin, and environmental issues. We need to restore personal relationship with sleep.

DM: Thank you. I’m wondering… You had mentioned that most men over 50 tend not to have much deep sleep at all. Maybe you can comment on the consequence of that practice, and then if you’re aware of any specific strategies that could other than increasing the length of time you’re sleeping, which I imagine would help, to actually convert some of the REM to deep sleep to compensate for that.

RN: Well, I don’t know that we would need to convert. I think we want to hold on to… We want our sleep to include about a fourth… A fourth of our sleep should be REM sleep – 20 to 25 percent. When we lose deep sleep – whether we’re male or female, or any age – we end up compromising immunity. What happens when we go to sleep is we dissipate energy. We literally cool. There’s a release of energy. A lot of heat, for example, comes out of it. Through the night we get cooler and cooler. By the way, this is one of the functions of melatonin. Melatonin dilates peripheral blood vessels. It opens up these vessels under the skin, which allows heat to be dissipated. We want to cool at night.

DM: I never knew that. It’s a vasodilator.
RN: It’s a vasodilator, yeah.

DM: Wow.

RN: We’re giving off heat at night, and we’re quieting… The remaining energy is diverted toward maintenance, which is pretty complicated cleansing. A lot of that involves the immune system galvanizing at night. That energy is directed toward immunity. When we have compromised immunity – and I’m oversimplifying stuff, of course – we increase the risk for chronic inflammation. There is just that ton, that mountain, that growing mountain of data, showing that poor sleep or poor deep sleep is associated with increased risk for viral infection, increased risk for cancer, increased risk for cardiovascular disease, increased risk for neurodegenerative disorders and autoimmune disorders. It just goes on and on.

There’s something so fundamental to our health around immunity that happens in deep sleep, probably one of the best reasons to get deep sleep. How do we do that? I was suggesting earlier that there’s a process of letting go. I think there is a psychophysiological process, a kind of willingness to really fall in every sense of that word – to tumble, to surrender, to deeply let go. I think if we use this metaphor, which I use often to see of sleep, many of us get into the waters of sleep but we snorkel; we don’t go deep into the waters. We stay in the lighter sleep.

It’s because we stay close to the surface of waking life. It’s as if we’re tethered. We’ve got a bungee cord tied around our ankle. We try to dive in but we’re pulled toward waking. We want to make sure that there’s nothing in our world that is holding us back from diving really deeply. That again could be environmental issues. If there’s noise, temperature, electromagnetic energy, heat; if our sleep environment is not conducive to releasing us, we’ll stay toward the surface of the waters of sleep.

There’s a psychological and a psychophysiological peace, which I think is best understood spiritually. The notion of letting go… In Greek mythology, I mentioned Hypnos was the god of sleep. This is a difficult topic for people but I think it’s very germane. Hypnos’s brother is Thanatos, the god of death. In many traditions around the world and historically, there’s been this uneasy kinship between sleeping and dying. The god of sleep is brother to the god of death.

The connection is there’s a kind of letting go. It’s not just that when we’re asleep we might look like we’re not alive. In dying, if you will, there’s a profound letting go. There’s a practice of surrendering. In the Christian tradition, “Now I lay me down to sleep” is a recognition that I’m moving into another world. Again, I think we need… I think falling asleep raises a very deeply personal spiritual issue. If I’m going to let go… In fact in my book Hush, I say that falling asleep is an act of faith. This may be religious for some people, it may be spiritual to other people, or it may be psychological for still others.

But if I’m really going to let go, to let myself go into the depths of sleep, I have to trust. I have to have a sense of faith that the world around me will be okay; that I’m safe; that my family is safe; and that my home, my community, my loved ones, and the things that are dear to me are watched over. This is not an intellectual notion about higher power or God. This is a felt sense. It’s a deeply personal felt sense of what I really believe. I think in that relationship, there’s an opportunity. In that process – the relationship with sleep – there’s an opportunity for us to explore some of our most profound operational spiritual values and an opportunity to learn to let go more deeply.

DM: Well, I couldn’t agree more because when you’re asleep, of course, you’re not conscious and you’re really defenseless. It’s a personal security issue. If you’re not comfortable in your environment and you think someone may harm you, some harm may come to you, it’s going to be really hard to let go.

RN: Right. Another factor that comes up for people, particularly as we age in our world, is pain, as some people deal with pretty severe chronic pain issues and others have more moderate pain reactions.
What’s so interesting around this is that we believe – and there’s truth to this – that we have to dial down our pain in order to get to sleep. But there’s a deeper truth: that the best way to dial down our pain is to get to sleep. We know that in deep sleep, the pain threshold is raised 50 percent. That’s much harder to feel pain when we’re in deep sleep. The pain threshold is raised 200 percent at REM sleep. If we can allow ourselves, if we can dive if you will, if we can descend into the depths of sleep, it really helps us to give the body a rest, to allow it to relax so deeply that it transcends the pain experience.

DM: One of the other challenges that many people suffer with – it’s many million in the United States alone – is sleep apnea, which typically is related to a mechanical obstruction because of too much body mass in people who are overweight. But in many cases, that’s not the case at all. I believe I probably suffered from a small element of that even though I’m pretty lean because of less-than-optimal things that happened in my infancy or childhood with respect to building facial structure and exercising facial muscles, which would allow the airway to open up completely. I’m wondering if you can comment on that, on your use of continuous positive airway pressure (CPAP), and how you feel it’s integrative into an appropriate manner or program.

RN: Yeah, very important. Just to begin with the more severe cases. There are probably 20-some million American adults with sleep apnea. We’re not talking primary snoring; it’s much more than that. But the apnea where there’s an actual obstruction of the upper airway, a complete or partial obstruction that deprives the individual of oxygen, desaturates the production of oxygen, and causes all kinds of problems all the time, very severe problems.

Yes, as you’re saying, a lot of this is associated with weight. People who have severe or even moderate to severe sleep apnea I believe need immediate intervention. In cases like that, I think CPAP would be a lifesaver. There’s no question about it. In all the epidemiologic studies, we found there were very few people over the age of 65 with serious sleep apnea. The researchers realized it’s because they passed away. You can’t live with this for a long time. Those cases aside… By the way, I think even when people do use CPAP, in many, if not most cases, it can be looked at as an intermediate step in healing.

DM: Kind of like crutches.

RN: Kind of like crutches. Exactly.

DM: When you break your leg.

RN: In the meantime, you want to strengthen those muscles. There are things you can do with obvious lifestyle issues – exercise, nutrition, and diet. There are psychological factors. All that needs to be addressed. I think a lot of people fear getting sleep-happy because the common pattern is that they’ll stay on it for the rest of their lives. There may be some cases where that’s necessary. I think in a lot of cases it’s not necessary.

When we step back, it turns out there are other… Sometimes we think of energy medicine issues associated with upper airway constriction with sleep apnea. The classic stereotype of the apnea patient is The Godfather, who’s a really large guy. But he has a constriction in his throat, which from a yoga perspective, we might call the throat chakra is tightened. Despite being large and powerful, he talks like this. He’s got a constriction in his throat. There’s a tightness there.

There’s some evidence that some apnea is associated with upper airway hypertension. The term hypertension here is not related to blood pressure; it’s a literal tension in the voice box or in the throat. There’s a holding, there’s a tightness in there. From an energy medicine standpoint, it’s associated with
constriction, expressivity, and people being free to express who they are. If you hold that tension, if there’s excessive tension through the day, it’s going to overrelax or release [inaudible 54:48].

When I was a kid, in New York, in Jersey, we used to play this game. We would make a fist. I don’t know if you ever did this as a kid. We hold our fist as long as we could. After a few minutes, the hand would just involuntarily just open up on its own. You could feel it. That’s a good metaphor I think when there’s excessive tension held in the throat for whatever reason – maybe this is structural or psychological – at night, it becomes excessively lax. The loss of that muscle tone, the flabbiness, if you will, increases the risk for apnea. When you add the loss of muscle tone associated with REM sleep, apnea patients often have very little, in fact commonly zero percent REM sleep over time.

I should mention I think the loss of REM sleep, chronic loss of REM sleep, is also a critical factor in depression. Most sleep apnea patients end up with clinical depression. Yes, there are these structural things.

One of the interesting alternatives… Some of the alternative medicine approaches to sleep apnea in recent years has been learning to play the didgeridoo. There is small number of studies and there are some longitudinal studies underway both in the US and in Europe that have shown that learning to play the didgeridoo appears to be curative for mild apnea – and mild apnea is still apnea. It’s still pretty serious. We’re not quite sure why that is.

The didge, for people who don’t know, is a long Australian, aboriginal wind instrument. It requires learning circular breathing. It appears in odd ways to re-tone, to tone up the upper airway. There are a number of research studies in devices now coming to market that are looking at alternative ways of strengthening that upper airway, again which would be an alternative to CPAP.

DM: Yeah. I’m a huge fan of exercise. But it’s the rare personal trainer who’s going to teach you how to exercise your facial muscles.

RN: Some people think that singing could help. I’ve been a consultant in the music industry for some years. There are a lot of musicians or a lot of I should say vocalists or singers who you’d expect to have apnea but who don’t. But certainly that’s not the rule for everybody. There’s been a little bit of research on this. It’s unclear. It’s possible singing might be helpful, but we’re not really sure.

DM: Yeah. And then there’s another set of practices called Buteyko breathing exercises that will basically allow you to increase your level of carbon dioxide concentration, and that has some benefit. What’s been your experience with this practice?

RN: Right. It’s not something I’ve done directly. I have a colleague who’s a Buteyko practitioner. I know they have what appears to be some odd approaches to dealing with snoring at least. They’ll actually encourage you put duct tape all over your mouth at night. I have a good friend who did this and who swore that it worked. Of course, the Buteyko people think we overbreathe. We over-oxygenate. They put a tremendous emphasis on learning to breathe whether it’s at night or during the day and breathing through the nose and not through the mouth. But it’s not something I’ve personally used with patients.

DM: Okay. Good. And then lastly, one of the strategies that many experts in sleep seem to recommend against is napping, primarily from the perspective of because it may interfere with your ability to sleep well during the night. But you have a different view, and I’m wondering if you can share that. Can you explain the rationale for that?

RN: Two things: I do agree. I think if somebody has insomnia, we want to maintain sleep. We don’t want them to subtract their sleepiness during the day. Often if they do nap, they’ll end up napping for an hour or 2, which is not good. But the other side of this is I often talk to insomnia patients about using the nap
as practice territory. There’s not a whole lot of pressure. If you don’t fall asleep when you’re practicing to sleep during the nap, it’s not going to ruin the next day. I have exercises and various CDs. I have apps that talk about using the nap as a way of practicing sleep.

For people who sleep well, I think the nap is great. It’s a way of descending, of touching down, and of reconnecting with rest during the day. Again, a nap is a nap; it’s not compensation for good night’s sleep. We generally recommend positioning it in the middle, somewhat around the middle of the waking day, about 8 hours into it and running for approximately 20 minutes or so. It’s very refreshing. It’s great for memory. It reduces blood pressure. It increases mood. It’s just all around a good thing to do.

DM: Great. You have mentioned earlier that you’ve got a new book out, Hush. Maybe you could have a few words on that.

RN: Thank you. Yeah. I’m very excited about this book. As I said, it’s not one of these chockfull-of-information books; it’s a book that I think attends to encourage people to get back in touch with their own inner wisdom about sleep. It’s based on an integration of sleep science, sleep spirituality, as well as sleep psychology. It includes what I call 100 Spiritual Prescriptions for Sleep. I think of these as bedtime snacks for the soul. You read one or two at night. It doesn’t really provoke a lot of contemplation; it’s meant to invoke sleep to get people to transition from sort of normal patterns of thinking into a way of using thinking to let go of thinking, and of course, to allow the default of sleep to come to the surface.

DM: Terrific. Yes. It sounds like a phenomenal book. It’s a little bit different from most in there. It’s designed to be read before you go to sleep, which in my experience is one of the best ways to quiet my mind down. If I’m really stressed out or anxious about something, I’ll typically pick up a book.

RN: Right.

DM: Pretty shortly I’ll be passing out in bed into sleep.

RN: We tend to think of it as a good book as something that doesn’t put us to sleep, you know. That’s critical. Actually, in some of the promotions for this book, it says, “The book that’s meant to put you to sleep.”

DM: Right. That’s a great strategy. All right. Are there any other words you’d like to say before we close?

RN: Just thank you. I just want to… I want to say I really appreciate the work you’ve done. I’ve been a follower and an advocate of your work. I think you bring a certain sensibility to health that is lacking in so many other circles. It’s a pleasure talking with you.

DM: All right. Well, thank you for that and thank you for your work in this area. It’s certainly a topic and an aspect of life that I think most of us have pretty significant opportunity for improvement. I know that’s certainly true for me. I’m in the process of integrating more of these and using these tools to measure and assess rest and probably going to experiment with meditation at some point in the future. Thank you again for all your help, for providing this information, and for making it available for everyone.

RN: You’re welcome.

[END]