Episode 499: Dr. Meghna Dassani on Sleep Apnea and Why Healthy Sleep Is Such a Big Deal

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Katie: Hello, and welcome to "The Wellness Mama Podcast." I'm Katie, from wellnessmama.com and wellnesse.com. That's wellness with an E on the end. And this episode is all about sleep apnea, which it turns out, a lot more of us actually have than we think we might. I'm here with Dr. Meghna Dassani, who is an internationally educated dentist from Houston, Texas. And she's actually been to dental school twice, she has a huge amount of knowledge in this topic, and she has a passion for really delving into the world of sleep apnea, especially obstructive sleep apnea in adults and children.

And we go really, really deep on this topic today, starting broad with what sleep apnea is, the different types, and why they occur, the reason that this is on the rise, all the factors that come into play here, how different nutrients play a role, preconception diet, so many things go into this, warning signs to look for if you think you might have sleep apnea, things as simple as snoring and moving a lot during sleep, how this can have downline

effects in so many areas of health, and really like change lab, your lab results in hormones, neurotransmitters so much more. And then, of course, solutions and what to do when a person does have sleep apnea. So even if you don't think that you have sleep apnea, I, from listening to this episode, realized many people I know probably do without knowing it. And it's something I'm much more aware of now. She's definitely an expert and she's a pleasure to talk to. So let's join Dr. Dassani. Meghna, welcome. Thanks for being here.

Meghna: Thank you so much for having me. What a pleasure.

Katie: I am excited to chat because you are an expert in an area that seems to be either on the rise or there's more awareness about. But I know I'm seeing increasing questions about the topic of sleep apnea. I'm sure that you are dealing with a lot of these questions since that's your expertise. But before we jump into that world, I have a note in my show notes that you are also a trained baker, and I wanna hear a little bit about this because that is unusual, I feel like.

Meghna: So, growing up in India, my mom always believed that we needed to be well-rounded. I guess it helped that I enjoyed cooking, baking. That is my stress relief currently as well. So I find myself gravitating into the kitchen. One summer, I took an extended course, over a couple of summers then, started with, "Oh, let's learn how to bake cupcakes," and that turned into a whole different route. But it was a lot of fun.

Katie: That's awesome. I always say I'm a better cook than baker because I like to be kind of like wild and cook by taste, and that does not work so well in baking. You actually have to understand what you're doing.

Meghna: Right.

Katie: But that's really cool. Okay. So, into the nitty-gritty of today and the topic we're really gonna go deep on, I'm guessing most people listening have at least heard of the idea of sleep apnea. But I know until I started really researching it, I didn't understand truly what it was or all the implications it can have. So, to start broad, can you walk us through what sleep apnea is?

Meghna: Sure. So sleep apnea is when a person stops breathing for 10 seconds or more multiple times throughout the night, and it's the 10 seconds which gives us that specific diagnosis or they're headed towards an apneic event. And the scary part about this is a lot of people don't understand that the 10 seconds or more...I have seen sleep studies come back where they've stopped breathing for over a minute, a minute-and-a-half. But we have to forget...don't get hung up on the 10 seconds. It's not just, oh, 10 and you're done. What is the length of time that you're actually stopping breathing?

Katie: Wow. That's astounding to me because it's not just like they're having shortness, like, short gaps in breathing, but like that's a really long time. Even 10 seconds it's a long time. A minute really is a long time. What's going on in the body that this is happening? Because obviously breathing is a nervous system process that's supposed to happen automatically, so it would seem to me like indicative of something is not right if the body's not doing it.

Meghna: Right. So there's two types of sleep apnea, for lack of a better word. We could have obstructive sleep apnea, which thankfully is the more common one, or we could have central sleep apnea. Obstructive sleep apnea is where you cannot breathe and central is where your brain...there is a lack of a response from the respiratory center of the brain. Like I said, it's not something you're gonna see...you know, you and I are sitting and talking about it will have that as a predominant kind. So the one that we deal with more commonly is the obstructive sleep apnea. Most commonly, what happens is when you and I or anybody goes to bed, we typically start off on our backs, right? When we are sleeping, our body relaxes. You know, when we fall asleep, our body relaxes, so all the muscles relax as well.

Well, guess what? The muscles around the neck, the tongue, which is a muscle, also relaxes, and it falls back. And this is what creates the physical obstruction. At that point when that happens, there is no oxygen. We're not oxygenating the blood. The heart says, "There's no fresh oxygenated blood that I need to take someplace," so the heart slows down. At some point, the brain goes, "Wake up. I need oxygen," and it jumpstarts our heart into, "Okay. Let's get caught up. The brain needs that oxygen." And this process goes on every time that person is stopping breathing.

But what needs to happen when we're sleeping? We need to heal. We need to rest, relax, recharge, rejuvenate. Well, how is our heart doing this when it's in the constant stop-and-go, stop-and-go mode? And this is what we find predisposes our patients to high blood pressure, to strokes, to the other laundry list of health conditions that sleep apnea comes with. It's not just the annoying snoring that we know it as, but what are the far-reaching consequences that not just adults, kids too, end up dealing with?

Katie: So, you mentioned snoring. I'm guessing then that snoring can be kind of a warning sign of sleep apnea, although snoring can also occur, I would guess, without sleep apnea. But if that's the case, like, what are some of the other signs someone could look for to know if they might have an issue with sleep apnea?

Meghna: Right. So snoring is typically the first sign that something is wrong with that person's breathing. And like you said, not necessarily sleep apnea, but when we connect the dots as to what other things are going on, that can be one of the first signs that patients typically bring up. Moms will notice if the kids are doing it, or I will notice if my spouse is doing it. Typically, it helps open the door for us.

When we're dealing with sleep apnea, kids versus adults, we can typically fit adults into a box, as I like to say. You know, they'll present with their classic symptoms, snoring, choking, or gasping for breath, waking up multiple times during the night to go use the bathroom, daytime sleepiness. Those are things that...or, you know, patients that come in with high blood pressure. You're just more predisposed to all of those. Now, kids, on the other hand, I could have four kids with six different symptoms, and they would all be positive for sleep disorder breathing. Kids will present yes with snoring, but bedwetting in an older child that has previously stayed dry, a child that we're considering a diagnosis of ADD or ADHD, night terrors, trouble focusing at school. All of those are things that should put our guard up as to, "Hey, what else is going on?"

Katie: And is this on the rise right now, or are we just understanding it more and able to diagnose it more? Because like I said, it seems like breathing is a natural bodily process. So, anytime it's not happening the way it's supposed to, like, it indicates something is wrong. And I know from my nutrition side, we definitely have a rise in a lot of chronic issues across all age demographics right now. But is this also on the rise? And if so, why do you think that is?

Meghna: It's a combination of factors. Yes, we are more aware, so there's more diagnosis happening. More conversations are happening. But also along with, yes, the tongue or the excess weight around the neck could be contributing to what obstruction is happening, in children or even in adults, the size of the jaws matters, too. If we naturally have craniofacial anomalies, that could predispose that person to not being able to breathe or have the airway that they need. Go back to nutrition like you discussed, we as a society have moved towards more processed foods, right? Think about what our ancestors used to eat versus...well, we're getting better now again, but all of that ties in as well. So I do believe it's a combination of factors just coming together.

Katie: Got it. And I would guess...I know I've read a little bit about in research in my kids like the airway size and, like you mentioned, how wide the maxilla is determines how much air can get in there, probably also a person's body weight or inflammation within the body because it would seem like, you know, if you're inflamed, all tissues a little swollen could also be this you notice a lot because that's smaller tissue in the throat. So it seems like many aspects of health, there's kind of a perfect storm going on that's causing this. Also, I know there might be a lot of people listening thinking like, "Oh, well, my spouse or my child snores for sure. So do they have sleep apnea?" How can someone know is it just snoring, or is it potentially sleep apnea?

Meghna: There's a lot that goes into actually determining. Like you mentioned, is it the tonsils, which we see more commonly in kids? Is that what's contributing to it? The only way we can have a diagnosis of sleep apnea is through a sleep study, so connecting with an ENT, or a pulmonologist, or a sleep MD that can actually get a sleep study for that person. Now, in some states, they could do home sleep tests. That is the only thing that's going to give us an accurate diagnosis. Do you have sleep apnea, or is this snoring due to other factors? Then we know which direction to actually put our efforts into making sure that gets resolved.

Katie: And with like airway and jaw and mouth size being a component, it makes me wonder, especially as parents, is there anything we can do with our kids especially if kids are also having sleep apnea to help optimize those factors? Like I know, as you're speaking, I had my tonsils removed as a kid. I had braces. I would guess things like that can affect some of those. But are there things we can do in the positive at any point to positively affect kids' potential outcomes there?

Meghna: So what I always tell parents to consider is remember the roof of the mouth is also the floor of your nose. When we don't have a palate that is broad or is more V-shaped or narrow, that also tells us what's going on with the upper airway in that child. So starting from birth, breastfeeding is super important in how it guides development because of how the tongue is positioned, and the size of the breast versus baby bottle nipples that just do not allow for optimal growth and development of the palate the way it's needed to. Now, some of it could be genetics, right? That family is genetically predisposed to having narrower jaws or whatever other conditions may be happening. So I always start there.

And I tell moms this. You know, yes, we always encourage breastfeeding. If that is a choice that, you know, you decide not to do it or unable to do it, no harm, no foul. There's other things that we wanna make sure that we are doing to ensure that the child is developing the way we want them to, which then leads into pacifier use, thumb sucking, baby bottles, making sure we're getting the kids off of those soon enough. I can't tell you how many children I'll see that walk into my practice, and we have 2, 3-year-olds still on the bottle. We'll have older kids that are still sucking their thumb. We have to work towards getting that resolved.

Katie: And I'm curious if you know of any of, like, the nutritional tie-ins here as well. Like, I know early on in my nutritional studies, I read "Nutrition and Physical Degeneration" by Dr. Weston A. Price. And he shows these pictures of different tribes throughout the world and on a highly nutritious indigenous diet versus a Westernized more nutrient-depleted diet. And it seems like from his research, this is most important, like, preconception and pregnancy when the baby's getting all of those nutrients. But I'm curious if you have seen that connection. And if so, like, can parents do things if they can plan ahead preconception to help optimize that, and/or if our kids are already out of the womb, is there things we can do to help them?

Meghna: Yeah. No, there's definitely a connection for sure because it's the quality of nutrition that we ingest as moms is obviously affecting, you know, growth and development of the kids in utero as well. Current research shows vitamin D plays a huge role, huge, huge role. And again, I go back to the lifestyle that we have, and not just our kids, even as adults. You know, we're all indoors all day long. We're at desk jobs and doing things inside. Vitamin D production doesn't quite happen the way it needs to. Supplementation if that doesn't happen. As moms have successive pregnancies, those vitamin D levels are depleted, and if they don't get topped off, it's not just us that deals with the consequences of this, our children do as well. So, yes, all of that definitely ties in for sure.

Katie: Yeah. That was shocking to me to learn as I was having my kids. Your body has all these, especially fat-soluble vitamins, we have all these stores of them. And during pregnancy, the body is gonna give the baby

whatever it needs, even at the expense of the mom. But I feel like, in a lot of cultures, they're much more cognizant of those nutritional needs, and they have very specific diets for pregnant women that are extremely nutrient-dense. And that's, unfortunately, something that doesn't seem to have fully translated in Western culture completely, but I feel like there's much more awareness about it now. And it seems like from Weston A. Price's work, even making sure babies and toddlers have a very nutrient-dense diet as they switch from breastfeeding to eating solid foods can be really instrumental in that development because their face is changing shape still for those first several years, right?

Meghna: Yeah, totally. I agree, which is where baby-led weaning is huge. You know, what we give our kids by way of more whole foods instead of the purees and things that come in the little pouches and all of those do not encourage the child to use those muscles, which are growing, developing, like you said, forming the shape of the face, which is changing, the palate, the jaws, all of that does come into play, for sure.

Katie: It also makes me wonder about like in the U.S. especially, and I'm sure other places in the world, we, for cosmetic reasons, rearrange teeth and put braces on kids so they look better. But I would think anytime you're arranging teeth, you're also affecting the whole structure of the head in some ways. So I'm curious, can things like braces, or Invisalign, or all the various ways people do that be either counterproductive or productive for this? Like, can it be helpful, or should it be avoided? How does that come into play in the sleep apnea equation?

Meghna: It can definitely help because when we have teeth that are not quite aligned the way they need to, they can take away the space the tongue can occupy in the mouth. The tongue does not belong in the floor of the mouth. The tongue should be resting passively in the roof of the mouth. Now, if we have teeth that are malaligned, like I said, it can take that space away. So creating that space, widening that arch certainly plays a role.

The one thing dentistry is becoming more cognizant of, and we're still in the process of is trying to, and there is no one-size-fits-all, but avoiding extractions of the bicuspids. You know, we went through a phase where almost everybody got...remember back when we all got our tonsils out, we all got teeth pulled for braces. And we're trying to move away from that where we can avoid it because you want those wider arches. What happens when I pull a tooth? You have to constrict everything to make it fit and to have the arch form the way we need it to. So in this case, we're trying to expand the jaws to make everything fit. That also gives the tongue more space so the tongue doesn't have to fall back, teaching the tongue to sit in the roof of the mouth. So, yeah, all of that plays a big role.

Katie: And then I guess from here, it's like, okay, so if someone's identified they have potential sleep apnea, or maybe they're listening and thinking like, "Oh, this could be an issue for me based on what they're talking about," what are the steps to dealing with that? And does it vary based on age? Like, for instance, if this is caught in a child early enough, can some of those things be helpful to where it's not a lifelong problem, or what's the approach at different ages?

Meghna: Yeah. I always tell parents, and I'm lucky enough to work with a group of providers that follow the same philosophy, the sooner we can catch this in our kids, the younger we can address this, we can potentially circumvent these problems. So with kids how we deal with it is we grow their airway. We use their growth spurts, and I can direct growth of their jaws to where I know we're going to have a wider, bigger...just more air that's reaching their bodies. So that's one way to deal with it in kids.

Now, in adults, the CPAP is the gold standard. I'm not going to assume everybody knows what a CPAP is. It's basically a reverse vacuum, right? It's blowing air into you whether you want it or not. Well, you do want it because you're stopping breathing, but it makes sure you're getting that oxygen to your brain. A lot of people can't tolerate it. It is just not an option. For some folks, they can't tolerate the pressure, they hate the mask, so whatever it may be. In those patients, oral appliances are a great alternative. They move that jaw forward, keep it from falling back, keep that tongue out of the way, holds that airway open for those patients, they're able to breathe at night. So, yes, based on what age they're in, what stage of growth and development, treatment is going to vary for these patients.

Katie: It makes me wonder in milder cases if...you mention, like, laying on the back, people tend to snore more, or like, I know that there's studies about, like, weight being connected to, or like body fat percentage being connected to risk of sleep apnea. Can factors like that make a difference? Like, if someone has a more mild case, can things like sleeping on their side and losing weight be enough of an intervention to help move that needle at all?

Meghna: It certainly can, although I always caution patients about wanting to do that and nothing else because, while we're losing the weight, while we're getting healthier, we still want to maintain that open airway. So, for these patients, I always tell them, "The appliance is FDA-approved for mild to moderate sleep apnea. Get fitted with an appliance." Not only getting the better quality of sleep is gonna make you feel better, you're more motivated to go work out, to eat healthier as opposed to being exhausted. I don't know about you, but I reach for carbs and sugar when I'm tired, when I'm sleep-deprived. And when I'm well-rested, I'm more likely to reach for carrots or broccoli. So, that's what I tell patients. It's like, "Let's get you breathing." That's going to help jumpstart that weight loss or the healthier lifestyle, and then we can reassess. But we always wanna make sure that airway is open.

Katie: That makes sense. And, yeah, I know I've seen the data in different studies about how even one night of impaired sleep can like make you have the blood sugar levels of pre-diabetic or diabetic. It interferes with your hormones, your neurotransmitters. Like, we know sleep is drastically important. And I also think about, like, if you kind of, like, triage the order of importance of things, like, most people listening are aware that what we eat is really important, but we only eat a few times a day. So like, it's important, not the most important. We should hopefully drink more water than that, so water quality, very, very important. But we're breathing all day long. So the quality of our breathing in both the subconscious, just natural body nervous system process, and in even I think how we're conscious of our breath can be a big needle mover for health. Like I know there's

experts that talk about part of the reason meditation is so great is if you're conscious of your breath, and you're breathing more slowly, your body can downshift into parasympathetic, you can heal.

And so that makes me think, what are the other downstream consequences of sleep apnea because with sleep being, I would say arguably one of the biggest factors in overall health and knowing just how drastically it affects our whole life anytime we're not getting good sleep. And probably, I would think in a lot of these cases, people aren't even fully downshifting into deep sleep or even a parasympathetic nervous system state if they're waking up and, like, jolting. What are the other downstream consequences of sleep apnea? Does it increase the risk of a lot of other issues?

Meghna: It does for sure. These are patients that I find are at a higher risk for heart attacks, stroke, diabetes, even Alzheimer's and dementia, because when we get into these deeper stages of sleep is when our brain is able to clear out the beta-amyloid that collects intercellularly. Well, when that doesn't happen, we know that that is directly correlated to Alzheimer's in our older population. Ties in the fact we're seeing more and more younger patients come back with these diagnoses, makes you wonder why. Learning for our kids, you know, just IQ levels being affected. What are we losing? What growth and development isn't happening? So many things that tie into just not being able to sleep. And like you mentioned, deep sleep is when our neurotransmitters get replenished. This is when our hormones...growth hormone is released during deep sleep. Well, if I can never get into or stay in deep sleep long enough, I may or may not have enough growth hormone released at that time.

Now, growth hormone isn't just for kids, right? Of course, they need it for growth and development. What happens to us as adults? Well, our healing happens. You know, you go out for a run, or you do CrossFit, or just work in the yard. All that healing, the growth hormone is what's contributing towards it. Leptin and ghrelin are hunger and satiety hormones. Those don't get topped off to the levels that we need them to be. So if I'm sleep-deprived, I am reaching for unhealthier foods like we said earlier, or my body may not need the calories, but because my leptin levels aren't where they need to be, I don't know when to stop eating. Cortisol levels are so much higher, stress hormone. This is like a laundry list. We could keep going on and on and on, and bottom line is every single system does get affected.

Katie: That makes sense. And it seems like this is an area that if someone has this issue it's super important to address because, as I've said in the past, you know, you can't out-supplement a poor diet. You also can't out-eat well lack of sleep. Like, all these things are kind of like a triage order, and you will not win the hormone battle. If you're trying to willpower through hormones, it will never work because they're there to actually protect us. And if there's

Meghna: Exactly.

Katie: ...they're gonna win no matter what. Like, anyone who's ever tried to, like, willpower through a diet when they've got a hormone issue knows, like, you cannot beat biology with willpower. At some point, that's gonna break down. Talk more about these appliances. So, what are they? And how are they working? And if they're creating more space in the mouth and the airway, can they also as a secondary effect help straighten teeth as well?

Meghna: So in children, typically, first off, it comes with diagnosing what it is that's causing the problem, right? So, in a child, it could be something as basic as is the tongue not resting where it needs to? Is that what has impaired growth and development of the palate? Because the tongue acts as a natural expander and natural retainer. When the tongue's tied down below, it can't sit up, that isn't happening. Addressing is there a tongue tie? Do we need myofunctional therapy? Once we've gone past looking at that, you know, that's been addressed, or maybe that's not an issue, we have narrowed jaws. Expanders to actually direct growth of the jaws in the direction that's needed. What direction? How much? Again, all this needs to be taken into account. And, of course, it's going to determine what type of appliance is used. So for children, the beauty is we can use their growth spurts to nudge growth in the direction. I'm just turning the wheel in the direction we need to go. Their body is doing everything else.

So, yes, to answer your question with does it help straighten teeth? The body knows where the teeth need to come in, which is, you know, when we talked about Weston Price's book with all those beautiful photos, those arches, right? Once the jaws have the space they need, the teeth know where they need to come in, the teeth know where to drop in. So, at the most, some alignment may be needed. But for the most part, the teeth are where they need to be. In adults with appliances, like I mentioned earlier, the appliances are actually moving that lower jaw forward. They are keeping the tongue out of the way. They are preventing the jaw from falling back, and it's actually tightening the muscles around the pharynx. It's holding it there. Now, this is what keeps that airway open. In adults, no, that's not going to change the alignment of the teeth because all the appliance is doing is mechanically holding it forward.

Katie: Makes sense. Okay. And I know like my approach in general to anything health-related is use intervention when possible and then hopefully, like, move past it. Like, with Hashimoto's, I was on medication for a while, and then now I'm fully in remission and don't have it anymore. Is this something that can happen with the sleep apnea? Like, if someone uses the appliance or has to use a CPAP machine to address it in the short term, but also does the other lifestyle interventions, is this a thing that can be resolved in the long term and not have to have an intervention lifelong, or is it case by case? How does that work?

Meghna: It typically is case by case, but with adults, I always caution them about being overly optimistic about, "Oh, I'm gonna get off the appliance or the CPAP in X amount of time." There's a lot that goes into it. We have to remember this is all accumulated effects over years, right? Probably started as something insidious in childhood and slowly got to the point where it is. So with adults, I always tell them, "We're gonna need you in something as long as you wanna breathe. So we're gonna consider this long term."

Kids, though, it's a whole different story. That's where the beauty is because we now have an airway that we can potentially mold into, "What is the best that this child can grow into? Let's get them to their greatest potential." Those are my favorite days when I see these kids come in, and moms are like all tears because they're not worried about their child stopping breathing. And these kids are like...you see them a month later, and they're like so much taller. I'm like, "Did you have a growth spurt already?" Well, yeah, because their brain's getting that oxygen. It's able to do the magic it's made to do. And it's amazing to see these happen.

Katie: What kind of numbers are we looking at as far as people who actually have some form of sleep apnea like percentage-wise? And how might someone know? Because I feel like if it's, you know, someone who's in the same room with their spouse and they're snoring, that might be an easier thing to identify, whereas in kids, especially they move all over when they sleep, you're not necessarily sleeping next to your 6-year-old. How can parents know if this could be a potential issue for their child?

Meghna: So, I'm glad you brought up the point about kids moving all over the place. A messy sleeper, a child that is a messy sleeper is a huge red flag in my practice. That is a question that I ask parents all the time, "Does your child go to bed in one position, and when they wake up...or the bed cover's all over the place, and the pillow's on the floor, and it looks like they've gotten into a fight with the blanket?" That is a huge red flag. As far as numbers, there are more than we think there are. They say 65% of adults have some form of sleep disorder breathing. With kids, we truly don't have the number because kids don't present the same as adults. And a lot of people think they're just gonna outgrow it. So we don't have true numbers of how many. It's more than what we think they have. I tell parents that.

Katie: That makes sense. And I also wonder, you know, with the rise in tracking and data devices, I wear an Oura Ring, and I've also tried all the other devices, and I know a lot of people are getting on that bandwagon. Are there things that show up in tracking devices that can be a potential warning sign of apnea? Like, I know of a couple friends who, for instance, will have like 25 wake-ups throughout the night, and to me, now as you're talking, I'm like, "Oh, they probably have sleep apnea and probably should get that checked." But if someone's tracking their sleep, are there things they can pay attention to, to know, "Oh, maybe I should look into this?"

Meghna: Yeah. A lot of these devices have now gotten super...they're great tools to have. If nothing, just as screening tools. And I have parents ask me this, "Can my child use, whatever it may be, a Fitbit, or an Apple Watch, or whatever it is?" Yes, use it as a screening tool. Look at, like you said, how much sleep are they actually getting? There are some really cool apps on the phone as well. I tell patients this, "Get one of those free apps and at least monitor your sleep. If nothing, you'll hear if you're snoring." That should be the first sign for you to take this to your doc and say, "Hey, I snored loudly for, I don't know, 18 minutes last night." And that gives us the next step to, "Let's look into this further."

Katie: That makes sense. My kids have all done the appliances a little bit at different times, and it's awesome because the younger they are, it seems like the less painful the appliances are and the easier they are to use. And then I also used it for a while and noticed a difference for sure in my sleep score, and now every night, it's

like no wake-ups, three hours of deep sleep, and so I'm like, "Okay. That's probably good. I evolved on that." With home tools, people don't have to just be like, "Oh, maybe I could have this. Even I don't know if I've had it or not. So I'll just go get a sleep study." Maybe sleep trackers are kind of like a, "Here's at least one metric you can look at."

Meghna: Foot in the door. Yes.

Katie: Yes. And at home. And there's so much other good data that comes from that as well.

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Are there any other, like, physiological things that come along with this that someone might pay attention to? Like, I would guess maybe an elevated heart rate at night or, like, low heart rate variability because, if you're in a stressful situation, your heart is like a metronome. Anything else that can be a warning sign?

Meghna: Those for sure. I always caution or tell patients to look into, are you waking up at night to use the restroom? How many wake-ups do you have to...? And it's always the men that fight me on it, "But doc, it's my prostate." I get it, but let's look a little bit further. Let's see what else is going on. That is my huge one. Daytime sleepiness is a big one as well that I always...you know, patients go like, "Well, I slept, I don't know, 8, 10 hours," but yet you're still tired. These are signs that are so easy to pick up on. But on the other hand, a lot of patients don't know that they're feeling not good, for lack of a better word, because that's been their normal for so long. And I just got back from a trip and super jet-lagged, and I was talking to my assistants this morning. I was like, "I can't imagine we have patients that go through life feeling like this just because they don't know better." They don't know that they could actually feel better that they can wake up feeling like a million bucks. And those are things that we're constantly talking to people about.

Katie: That makes sense. Are there other consequences, like, dental-related specific consequences when it comes to sleep apnea, or is this more of like an internal thing that's gonna have down line...like, we've talked about the risk in other health areas, can it also have negative effects in the mouth itself?

Meghna: Yeah. Absolutely. A couple of things that I do notice, which is big red flags for me, is these are patients that tend to clench and grind their teeth a lot. So these are patients that have teeth that are like they're flattening them out. They're constantly breaking teeth. They're breaking crowns or fillings. And the clenching and grinding is not normal. It is your body's reflex to open up the airway. A muscle that is tense occupies less space than a muscle that is relaxed. I always make a joke with patients. It's like, "You know when your wife or...the women, we pose with our arms up to the side because we want them to look skinny, well, that's exactly what your neck muscles are doing. We're tightening them up so that you have a wider airway than what you do otherwise." So that is a big one for me.

And mouth breathing as well is another one, both adults as well as children. When you aren't able to get the oxygen that you need through your nose, for whatever reason, we start to breathe through our mouth. Think about it, when we have a stuffy nose, what do we do? We breathe through our mouth. Well, a lot of these people that don't have that ability to get that oxygen at night through their nose start breathing through their mouth, and it dries up your mouth. These are patients that I see end up with more periodontal disease. You're more prone to decay because saliva, which does the magic that it does in our mouth, isn't able to.

Katie: I'm glad you brought up mouth breathing. I know there's been a trend in the health world recently of paying more attention to that, and there's a whole book about it. People are taping their mouths to keep them shut while they're asleep, which I would guess if you have sleep apnea may not be the best thing to do until you resolve that. But is there a benefit to kind of training the body to not mouth breathe if this has just kind of become an ingrained habit?

Meghna: I always caution patients. You know, being able to breathe...not breathe through your mouth is amazing, but you have to make sure that you can breathe through your nose. We have to establish nasal breathing first before we can consider taking away mouth breathing. Think about it, if I were stuffy, had a cold,

and yes, I taped my mouth, well, that's not going to stay too long, or even if I do persist and breathe through my nose, I'm not quite getting enough air that I would need otherwise. So we wanna make sure...this is where working with the ENTs comes into play. Make sure you can breathe through your nose. Sometimes it's adjusting your diet. Sometimes it's stuff that your ENT needs to help you with. But making sure we establish nasal breathing first is key.

Katie: Yeah. It was interesting for me to see the effect of that. I actually trained it first while awake. I was doing an athletic training protocol, and one of the blocks of that had you tape your mouth during pretty low-level aerobic exercise that was cross-body movement, so you had to breathe through your nose, and seeing how much more difficult it was to keep heart rate in a certain zone, but also how much drastically it had a good aerobic impact. Like, my lung capacity went up really drastically just from being aware of and really conscious of my breath and training it that way. And so for only a few weeks of doing that, I saw my lung capacity really increase, and I could run a mile without getting winded, which I'd never been able to do in my life. So it made me realize, wow, like this is a huge factor that most of us never even pay attention to. You know, as much as we all literally breathe all day long, and it's one of the most important things we do, we never really pay attention to that very much.

Meghna: Yeah. No, for sure.

Katie: Are there any other supplemental things people can do that help? Especially if they're doing interventions, like whether it's the machines, whether it's the appliances, whatever they're doing on the medical side to resolve the apnea, are there other lifestyle interventions or, kind of, tips that can go along with that just, kind of, speed the process up, or to help health in other ways alongside it?

Meghna: Yeah. Sleep hygiene is huge. We wanna make sure that is part of everyday routines that we do. So, having a set sleep schedule, I cannot tell you how important that is. And the benefits are amazing. Making sure you go to bed at a certain time, and you're waking up at a certain time instead of, "Oh, I'm going to stay up until 2 a.m. on Friday and Saturday," and then try to get everything back to routine over the week. So, having a set routine is key. Limiting alcohol before bedtime is another big one for me. Alcohol depresses the respiratory centers in the brain. So we wanna make sure that you don't have that last drink too close to bedtime. Caffeine use, so much that so many people that drink caffeine all the way right up to late evening. No caffeine after 3 p.m. actually gives your brain a chance to get to where it needs to.

Blue light in bed. All of us are so...all, and I say me too because there's times when we absolutely have to check what's happening on Facebook right before we go to bed. Not. And I tell patients that, too, like avoid even reading on the phone or your computer. You could be reading a book. Just the blue light blocks release of melatonin, which is our sleep hormone. So keeping these things in mind and actually making it part of our bedtime routine is...a hot bath before bed. Hot bath, cold room, keeping that room cool enough to getting that drop in body temperature. Again, release of melatonin helps us sleep better and actually stay asleep, get better quality sleep, too.

Katie: Yeah. 100% agree with all of those. I actually had a neuroscientist on who had studied brains and had done thousands and thousands of brain scans. And he had his own training protocols that they specifically dealt with the brain, but he said, "Honestly, the best advice I can give you for the brain is free." And that is exactly what you said, limit alcohol, limit food for the few hours before bed so you're not digesting when you go to sleep. Cut caffeine off early in the day. Get sunlight and exercise. Like, you know, all the things we know we're supposed to do anyway. And he said also wake up if possible before the sun comes up. He said actually like that's really important for that cortisol melatonin thing. And that was the one I was like, ah, of all of them. But it's amazing how those little changes can make such a drastic difference, and then you see those shifts in hormones and in lab metrics. Do you see that in your patients as well like when they resolve sleep apnea? Are there measurable changes, I would guess obviously in their sleep scores, but also in hormone levels cortisol lab metrics as well?

Meghna: For sure. It's not unusual for my cardiologists that we work with to reach out and say, "Hey, we finally got this patient's C-reactive protein levels under control. You know, they've been struggling for so long." Just even low T levels in men, making sure all of those get addressed. Absolutely. But it's connected, and I tell patients this, "The head is connected to the rest of your body, believe it or not. So what happens here, sleep apnea, does impact the rest of your body, too."

Katie: Can there also be, probably less common, but like, actual anatomical things that were caused by like injury or something that can lead to sleep apnea as well? I'm thinking of a particular friend who is an athlete, very low body fat percentage, in great health, lab levels are great, but seems to have some of these things that we're talking about and has wake-ups during sleep and had a nose injury. And so I suspect this person has a collapsed part of the nose. Is that a possible cause as well? And if so, in those cases, could something like reconstructing or fixing that passage actually resolve the issue?

Meghna: Yeah. No, for sure, that can certainly contribute to it. Deviated nasal septum, like you said, these injuries can play a big role. It can contribute to how these folks are sleeping. Between being, you know, normal to just having snoring without any sleep apnea, or all the way to sleep apnea, there is a condition called upper area respiratory syndrome, too, which that classic patient is it's not your adult overweight male, it is actually your slender female patient. These are patients that sometimes have chronic pain, and you're going, "Well, you don't quite fit that mold, but yet you show all the signs and symptoms. What's going on?" Again, these patients need that sleep study to be assessed, evaluated. And a lot of times, yes, that anatomical irregularities can contribute to that.

Katie: Got it. I've taken so many notes from this podcast. Are there any other areas specifically related to sleep apnea that you feel like are either not well known or misunderstood largely that people might have misinformation about?

Meghna: The biggest one I hear and that I think I battle with on an everyday basis is a lot of people think that snoring is just snoring, you know, "Oh, my dad has snored all his life," or, "I've always snored and I've never been...My wife hasn't said I stopped breathing," or, "I only snore when I'm tired." And understanding that that is potentially a symptom of something more severe. It's like me telling you, "Oh, my blood sugar's only high when I eat a cupcake." Well, unless I get blood work, I don't know what my baseline is, or is it truly just then that it rises, or is it elevated? So always making sure they get evaluated is key.

Katie: Got it. And as we get close to the end of our time, another question I love to ask is if there's a book or a number of books that have had a profound impact on your life. And if so, what they are and why? They don't have to be related to apnea or dentistry but books that have impacted your life.

Meghna: Yeah. So the biggest one has been...So I grew up in India. I'm born and raised in India, and the big one for me is the "Bhagavad Gita." That is a book that we grew up learning every possible lesson you could want to learn from. So I'd say that has been my biggest influence.

Katie: I will link to that in the show notes for anybody who is not familiar. And any parting advice for anybody listening today? And also how can people connect with you if they wanna find out more about sleep apnea and/or think they might have it?

Meghna: Advice would be, ask questions. If something doesn't quite feel like you're getting the answer to what your concerns are, be it yourself, your child, do not be afraid to get a second or third opinion or to ask more questions. This is a field that is so rapidly evolving. You turn around, you blink, and there's more research coming out, and you never know what provider is going to have those answers for you. So don't be afraid to ask questions. That would be my advice. As for how people can find me on my website, meghnadassani.com is the best way to connect with me. And there's a form they can fill out to request information, or if there's questions, concerns, anything that we can help guide them into getting help.

Katie: Awesome. Meghna, thank you so much for your time. I definitely learned a lot in this episode, and I think anybody who might be resonating with some of these symptoms will hopefully have a path to find answers. Thank you so much for being here.

Meghna: Thank you for having me. It was a pleasure.

Katie: And thank you as always to all of you for listening and sharing your most valuable resources, your time, energy, and attention with us today. We're both so grateful that you did. And I hope that you will join me again on the next episode of the "Wellness Mama Podcast."

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