



Episode 585: Patrick McKeown on How to Breathe Better to Improve Focus, Sleep and Health

Child: Welcome to my Mommy's podcast.

This podcast is sponsored by Kion. Let's talk about Amino Acids for a minute. On Episode #561, I talked about how Kion Aminos are the ultimate protein hack. To truly understand just how important amino acids are for your diet, think about your body and what it's made of. You probably already know that it's mostly water. What you probably don't know is that everything else in your body is 50% amino acids. These building blocks of life are essential for health and fitness. This is why Kion aminos is my fundamental supplement for fitness. I drink them every day for energy, muscle, and recovery. Kion Aminos is backed by over 20 years of clinical research, has the highest quality ingredients, no fillers or junk, undergoes rigorous quality testing, and tastes amazing with all-natural flavors. So, if you want to naturally boost energy, build lean muscle, and enhance athletic recovery, you need to try Kion Aminos. You can now save 20% on monthly deliveries and 10% on one-time purchases. Just go to getkion.com/wellnessmama.

This podcast is sponsored by Wellnesse... that's wellness with an e on the end, my new personal care line of haircare, oral care and deodorant. Our newest product that I'm so excited about is our all-natural deodorant that works better than conventional alternatives, without the harmful chemicals or pore-clogging junk. Unlike many natural brands, it uses the right balance of natural odor blockers so that you get the protection you want without any irritation or itching. Formulated with only EWG safe ingredients and EWG and B-corp certified, it's a safe, natural and effective solution for the whole family. Check out these and all of our amazing products at wellnesse.com

Katie: Hello, and welcome to "The Wellness Mama Podcast." I'm Katie from wellnessmama.com and wellnesse.com. That's wellnesse with an "e" on the end. And this episode is all about how to breathe better, and how this can drastically improve focus, sleep, mental health, and so many more things. I'm here with Patrick McKeown who is an international breathing expert and an author based in Galway, Ireland. Since 2002, he has been working with thousands of clients, including elite military special forces, Olympic coaches, and athletes, and many more around the topic of breath. And I know you may be thinking, "I already know how to breathe, I do this all day every day," and that's true. But the way I think of this is that when it comes to the triage of things we can do for our health, food is important, but we can go a long time without food.

And so while we don't wanna ignore food certainly, I wouldn't put it at the top of the list of most important things we can do for our health. Water quality, for instance, we need water a lot more often than we need food. So, I would consider that even more important. And using that same analogy, the way we breathe is extremely important because we can go a very, very small amount of time without breathing, but the way we are breathing can have a really dramatic effect on our brains and our bodies. And there are often ways to optimize this that we may not think of, or that we're not consciously paying attention to. We go in a lot of directions in this episode. He certainly has reinspired me to try mouth taping again at night, which I saw great effects from, and then kind of just stop doing with travel.

But we go deep on the importance of breath and how many of us are inadvertently doing it wrong and some easy ways we can improve it, how to use our breathing to influence our mind and our stress states, why carbon dioxide drives our breathing patterns and how to use this to our advantage. We talk a lot about the importance of nasal breathing, even during most types of exercise. We talk about some simple breathing exercises that you can start to try to pay attention to to improve your health. Why oxygen uptake is higher

with nasal breathing compared to mouth breathing, how to integrate these things with our kids, and how this could even in kids affect things like oral health, facial development, and so much more. And then we go deep on some specifics related to all of these topics. He is extremely knowledgeable. This is something that is completely free to try and to pay attention to that can have really dramatic effects. The research is pretty astounding. So, without further ado, let's talk to Patrick. Patrick, welcome to the podcast. Thanks for being here.

Patrick: Great to be here. Thanks very much, Katie.

Katie: Well, I'm really excited to chat with you about all things breath and breathing. But before we jump into that, I also have a note from your bio that you left school at 14. And you didn't really talk about that much until pretty recently but I would love to hear, if you don't mind sharing, kind of, the impetus for that.

Patrick: Yeah, I suppose, like, I was, you know, a kid... I was born in 1973. And in 1987, 1988, I would've had a lot of issues in school, and I would've had great difficulty concentrating, holding attention. And I suppose there was a number of things that contributed to that. One is I had dysfunctional breathing. Two, I had asthma, which was always there from a young age. And number three, I had sleep issues, which is very common anywhere with kids with asthma. When you have a stuffy nose, you're more likely to have sleep, you're more likely to snore. I was told that I was stopping breathing when I was older. So I couldn't concentrate, and that's normal. Because now when I look back, I can.... Yeah, people sometimes are shocked that I left school initially at 14. I did go back to school one year later, and I did get into university and, you know, I really worked to get there. It could have been a lot easier, Katie.

You know, there's a lot of kids in the same situation, there's a lot of people who are listening to this who are going to identify with it. You know, we are demanding that our kids can hold attention in a classroom environment for six and seven hours at a time, and yet nobody is teaching these kids how to concentrate and nobody is looking at the factors that enable them to concentrate. And if we think it was bad 30 years ago, what's it like today?

Katie: Yeah, I absolutely agree with that. And that's actually one of the reasons I ended up homeschooling my kids is realizing that I didn't think the sitting still in a classroom for that many hours was actually the most conducive learning environment. And that's something I've talked quite a bit about. And you mentioned breath being a component of that, and I'm really excited to delve into this with you. Because it's something I've thought about on a logic level before, of course, that, like, you know, we talk so much in health about food and what we eat but, really, we could go weeks without food, and I have actually done that, and be just fine.

And so in the hierarchy of things, food is, of course, important, but, like, I would put food, kind of, lower down. Water more important because we can go much less time without water, but we can go a very small amount of time without air. Yet from my very just surface level of understanding, many of us are actually not optimized on the breathing side and are, kind of, going without the optimal amount of air in certain ways. And I know you are an expert at this but maybe start us broad, and give an overview of... You know, you said breathing has been undervalued for decades, it obviously is a thing that we must do to stay alive. So start broad and, kind of, give us the background of that.

Patrick: I came across this by accident in 1998. And there were two things that was from the work of a Ukrainian doctor. He said, "Breathe less air." He said, "People in modern living very often are breathing harder, they're breathing faster, they're breathing too much air. And the problem is the more air you breathe, the less oxygen that gets delivered throughout the body."

Now, how many yoga classes do you hear of and different breathing instructors, and the encouragement is to take full big breaths and you're hearing students breathing? And it literally doesn't make sense. So back then I practiced sitting down and put one hand on my chest one hand just above my navel. And I started slowing down my breathing, that my breath was imperceptible to the point that I felt air hunger, so I was feeling that I wasn't getting enough air. The temperature of my fingers started improving and I'd also increased watery saliva in the mouth.

And a while afterwards, then I practiced an exercise to decongest my nose and it worked. And I knew then there was something there. Because if you can change your physiology in just a few minutes by changing your breathing... So there's something strange about breathing. There's this, kind of, idea in the Western society but then again, Western society is all about more is better. You know, the bigger, the better, whereas with breathing, that's not the case. So I would say that, yeah, breathing techniques that are involving hyperventilation and long breath holds, these are extroverted techniques, and these are stressors. You're activating a stress response to cause the body to make adaptations. But many of us don't need a stress response, we're already there. We're in a constant state of chronic stress, and our breathing changes as a result of that.

Like if we look at the anxiety and panic disorder population, 75% of this group have dysfunctional breathing, and it's dysfunctional breathing which is feeding into their state of mind. I don't think we can have calmness and a stillness of the mind if our breathing is all over the place. And what I mean by that is, if we are mouth breathing, if we are frequently sighing, frequently yawning, frequently breathing faster and using the upper chest because this is activating a stress response. The autonomic nervous system is going into that stress response. And when our physiology is in that state, we're not going to be operating at our full potential.

It also affects our sleep. And if we look at the individuals with depression, and if that's an area that really needs to be looked at is sleep disorders, and how it's contributing to mental health issues. But how we breathe during the day is influencing how we breathe during sleep, so the mind, and sleep and breathing, are interlinked. And that's the one thing about the human body, we can't isolate one function without looking at the effects it has in another.

And all too often, people will say, "Yes. Well, the reason that you're breathing like that is because you are stressed." Yeah, of course, we get into a difficult situation...now, by the way, we do have control over our breathing even in a difficult situation, and we should know that. You know, kids that are doing exams, how many of them, because of nervousness prior to the exam, they've got faster breathing, they've got upper chest breathing, they've got irregular breathing? And what's the body telling the brain? The body then is telling the brain that the body is under stress, and the brain wants to get you out of the situation. It's not a recipe for performing well under pressure. We have to realize that, yes, our breathing can change in response to a stressful situation, but we have control over our breathing.

And, like, I can delve deeper into this, there's very simple tools. That it's the speed of the exhalation that tells the brain whether we are under stress or whether things are okay. If during rest we have a fast exhalation or during sleep, we have a fast exhalation, the brain interprets that the body is under stress. So a very simple tool that people may have, the next time that you get into a difficult situation, do your best not to hyperventilate. And hyperventilation means that your breathing is going to become faster and harder, which in turn reduces blood flow and oxygen delivery to the brain, but activates the fast fight-or-flight response instead. Take a soft breath in through your nose, and a really slow and relaxed gentle breath out through your nose.

If you can slow down the speed of the exhalation, that you have a slow and relaxed and a gentle exhalation. When you slow down the speed of the exhalation, your body is telling the brain that everything is okay. We know that, but why doesn't everybody else know it?

Katie: So many good things to unpack in what you just said. And you mentioned just making that shift to breathing more slowly, and especially it sounds like the exhalation part of the breathing... And I'm curious, can we train this? You mentioned how we breathe during the day affects even at night. Is this a pattern that over time the body, sort of, learns even when we're not paying attention to our breath to breathe more slowly? And if in a, like, perfect scenario, what is an optimal breathing cadence and pattern if we were gonna train this in our bodies?

Patrick: See when we look at breathing, we need to look at more than just the respiratory rate. But it is typical that when breathing is suboptimal, the respiratory rate is faster. But breathing isn't just about the respiratory rate, it's also about tidal volume. That's the volume of air that we draw in in one breath, and it's the volume of air that we are breathing which will influence the biochemistry of our breathing.

To say it this way, the primary drive to breathe is carbon dioxide, so every breath that we are taking is primarily driven by carbon dioxide accumulation in the blood. The body breathes to get rid of excess CO₂. But we don't want to breathe too much air that we get rid of too much carbon dioxide because it's not just a waste gas. If we breathe too much air and we get rid of too much carbon dioxide, our blood vessels constrict and hemoglobin, which is the main carrier of oxygen, holds onto oxygen more readily.

So when I'm working with somebody, from a breathing perspective, I want to look at their breathing every day. How are they breathing during rest, how do they breathe during physical exercise, how do they breathe during sleep. And the foundation of that is in and out through the nose. The mouth has zero functions whatsoever when it comes to breathing, so the mouth should be seen as a hole. It's a hole whereby air can go straight down the throat, but the mouth does nothing in terms of the breath. So our ancestors would've been mouth breathing in terms of emergency.

And recently enough, I was reading a book, and it was about native American Indians, and the test that they did was to take a mouthful of water, and to be able to run large distances, and get to their destination, and to be able to spit out the water. So nasal breathing was enshrined even during physical exercise with our ancestors.

So it's about nose breathing, first and foremost. And then breathing has a number of dimensions. One is the biochemical dimension, and that focuses on carbon dioxide, that focuses on the volume of air that we breathe. Now, that's very often overlooked, and the emphasis is on breathing from a biomechanical point of view. So people are talking about breathing low and taking in a deep breath. And all that's fine. However, how is a deep breath interpreted?

You know, if I normally say to somebody, "Take a deep breath." If they're straight, then take this full big breath. But what happens when you breathe like that for a number of breaths? You may notice that you get lightheaded. And again, it comes back to it. How we are taught and trained how to relax is counter and probably the wrong thing that we are doing.

And I remember going into an exam. I was feeling a bit nervous beforehand because I was that kid anyway that was a mouth breather, which causes faster breathing and upper chest breathing, so your physiology is naturally in that fight-or-flight response. I'm walking into an exam, before I went into the exam hall, I went for a walk for two to three minutes and I intentionally filled my lungs full of air, taking a full big breath in, a full big

breath out, a full big breath in, a full big breath out. And I remember walking into the exam, and I couldn't focus. I was lightheaded and I was just disoriented. And that's what hyperventilation does.

So coming back to your question. Yes, you can train your breathing patterns, but probably not the way that people think that you should be doing it. If we were just focusing on the respiratory rate, it doesn't necessarily address minute ventilation or the volume of air that we breathe. Like, one of the exercises that I would always say to people to practice when you want to get to know a little bit about your breathing is try the one that got me into breathing in the first place. You know, you're sitting down, you're gonna have one hand on your chest, one hand just above your navel. You're tuning into the slightly cold air coming into your nose, and the slightly warmer air leaving your nose, and the slightly cold air coming in, and the slightly warmer air leaving, and just gently soften and slow down your breathing.

So as you breathe in, breathe in almost that your breath is imperceptible, that you're hardly breathing any air into your lungs. And as you breathe out, have a really slow and relaxed and a gentle exhalation, just allowing the air to leave the body effortlessly. Do it to the point that you feel air hunger, and maintain that breathing pattern for about three to four minutes.

And all it is is you're softening and slowing down the speed of the air coming into the nose so that you feel hardly any air coming into your nose. You shouldn't hear it, for example. And then on the breath out, you're having this really relaxed and a prolonged and gentle breath out. You're doing it to the point that you feel air hunger. Check the saliva in your mouth, 9 out of 10 people they will have increased watery saliva in the mouth, they will feel drowsy, they will also have air hunger. We practice that breathing exercise to help balance the autonomic nervous system, to stimulate the vagus nerve, and to activate the body's rest and digest response.

There is a very easy way to determine which state we are in. When we get into a difficult situation and we feel stressed, our mouths typically goes dry. When we are stressed, it's not a time for eating food. When we can activate the body's rest and digest response, the body responds with increased watery saliva in the mouth, we feel drowsy. The increased watery saliva in the mouth tells us that the body is ready for the digestion of food. We feel drowsy so that we know that we are ready for sleep. And we can switch this on and off. But if we practice this breathing light and breathing gentle even for 10 minutes twice daily, then you change your breathing from a biochemical point of view and your breathing rate naturally slows down. Your breathing becomes lighter.

And to give you this example. Like yesterday...was it yesterday, Monday. I was talking to two medical doctors in a premiership football club, so these are elite athletes. So here you have highly trained athletes, and yet one of them has hyperventilation syndrome. Physical training doesn't necessarily improve your breathing. But if you can improve your breathing, it will help with physical training. Because the person who is in the habit of hyperventilating, and I'm not saying that they're having a panic attack, but if your breathing is a little bit faster and harder than what it should be, you're going to have a disproportion of breathlessness during physical exercise.

Katie: That's so fascinating. I'm taking notes on these breathing patterns. And you mentioned there's really no need to breathe through the mouth, and it sounds like this is even true during exercise. And I'm really curious to learn more about this. Because it seems like people naturally tend to want to breathe heavier and through the mouth during exercise, but then it sounds like this is something we can train out of, kind of, our patterns.

And I think...last year I did training with some track athletes, and they did something called contralateral training where we were using alternate sides of our body. But the part of it was it was a 55-minute workout, and we taped our mouths the whole time. And I saw a dramatic improvement in my lung capacity after those two weeks of doing that. And it was not something I'd ever done previous to that of taping my mouth while doing pretty strenuous exercise. So can you explain more about what's happening maybe physiologically when we're paying attention to and staying with nasal breathing during exercise? Because it seems like it could be a very rapid way to improve, kind of, lung capacity during exercise even.

Patrick: I think it's a very important way. We were first taping our mouths 20 years ago, 22 years ago. And I wrote all about this in the book "The Oxygen Advantage" in terms of...in training nasal breathing during exercise.

I don't necessarily agree with sprinting with the mouth closed because it can be too taxing, and the air hunger can be too much and it may cause pain to the nose. But for recreational athletes or for elite athletes who are, say, warming up and doing low to moderate intensity exercise, nasal breathing is key. And nasal breathing has so many advantages over mouth breathing. Number one is, we get a better connection or recruitment of the diaphragm when we breathe in and out through the nose. And the diaphragm breathing muscle is not just for respiration, but it provides stabilization for the spine. So functional breathing and functional movement go together. And when you're functionally moving, you're less at risk of injury. So the injuries that athletes can experience can be related to the dysfunctional movement, but you cannot have functional movement without having functional breathing. So that's one aspect of it.

Number two, your breathing is naturally slower and oxygen uptake in the blood, the partial pressure is 10% higher with nasal breathing versus mouth breathing during exercise and during rest. Number three, the fraction of expired oxygen is less during exercise, so the body is utilizing oxygen better, you'll have a better recovery. You could argue that you'll have reduced lactic acid and fatigue because of greater oxygen delivery to the working muscles.

Number four, when you breathe in and out through your nose during exercise, the carbon dioxide pressure is higher in the blood. And carbon dioxide is a catalyst for hemoglobin to release oxygen to the tissues and organs, so you get better oxygen delivery also to the working muscles when you breathe in and out through your nose.

Another aspect of it is that the more you do your physical exercise with the mouth closed, the sensation of air hunger diminishes over time. So initially it's stronger. But if you do your physical exercise with the mouth closed, at the start, air hunger, yeah, it is stronger. But if you continue doing it after about four to five weeks or maybe six or seven weeks, the air hunger diminishes.

So your nose is the only organ that's doing anything in terms of, you know, conditioning and warming, and moistening the air as it comes into the lungs. Between 20% to 50% of athletes have exercise-induced bronchial constriction. If we take cold dry unfiltered air into our lungs, that can aggravate our airways, and it can contribute to exercise-induced bronchial constriction.

So I suppose, Katie, in a nutshell, you've got increased oxygen uptake, you've got increased oxygen delivery, you have more functional movement, you've got greater oxygen utilization by the body, plus you're protecting your lungs. Your mouth doesn't protect the lungs.

Katie: That makes sense. And an extension of that is I feel like mouth taping at night has become a little bit more of a talked about practice in the recent few years, and it's something I experimented with. I'm curious

your take on it. Because I did notice when I started doing it that I saw more deep sleep, and my actual respiratory rate went down at night, which is the thing we actually want, and my HRV increased slightly.

Patrick: Yes, and it's normal. It's not always normal with everybody, but in the main we see it happening. I tapped my mouth back in 1998, and I was using exercise to decongest my nose. I wasn't quite trusting the exercises back then. I didn't have the information then that I have now, so I also used a nasal dilator. So I used a nasal dilator breathe strip to open up my nose, and I used tape across my lip, just paper tape. The first morning I woke up, I don't feel much of a difference. I can't remember it. The second morning I woke up, and it was the best night's sleep I had in many years. We've seen thousands and thousands of individuals taping their mouth. Now we use a tape called Myotape because sometimes people are a little... It's on my own product which I brought out for children.

Because children who are mouth breathing, it's a scary prospect. And it's a scary prospect because what it has is under the development of the brain. I can send you on a paper afterwards, it was written by a researcher, Karen Bollock. And she studied young children age between 6 months and 57 months. She studied them from age 6 months, sorry, to 57 months, 11,000 British children. Children who had snoring and sleep disorder breathing at age 5, if untreated, they had a 20%... Sorry, they had a 40% increased risk of special education needs by age 8.

Now she talked about the impact that poor sleep quality is having on abnormal development of the brain. The child's brain is growing during their sleep, and the child really needs good quality sleep for proper brain development. But if the child is snoring, if the child is stopping breathing, if there's resistance to the child's breathing during sleep, it's impacting and reducing their sleep quality. And this in turn has a knock-on effect in brain development.

So when we go back to this concentration that I spoke about earlier on. In order to have good concentration, you need to be able to hold attention, you need to have mental energy. You're not able to hold your attention if you have sleep issues. And 25% to 40% of men have sleep apnea. But in 90% of cases, it's not diagnosed. For women, it's about 10% up to the age of 50...50 years of age. But post-menopausal, it increases by about 300%. So women over the age of say 50, 51, 52, 53, 54, 55, there's no specific cutoff point there, post menopause sleep disorder breathing it increases quite remarkably with females.

Now with children, 15% of studied children have sleep issues, 15%. And yet unfortunately, this has not been addressed. So, you know, like, taping of the mouth I know it seems a little bit off the wall. And genuinely, I have worked with about 8,000 clients in front of me face to face, and I've encouraged every single one of them, every single one coming into us. This is my studio here, you can, kind of, see a long training room. And we have people coming in, like we have about 30 people coming in internationally now in two days' time. And every single one will go through the program, and we will request that everybody sleeps with the mouth closed and the tongue resting in the roof of the mouth.

I don't think we can experience a good night's sleep if we have our mouth open. We are more likely to snore, we're more likely to have sleep apnea, we're more likely to get up to go to the bathroom during the night, and we're more likely to wake up feeling unrefreshed.

Katie: So this is definitely something that kids can do as well. I wouldn't probably do this to tiny babies, obviously...

Patrick: No.

Katie: ...but when they're older and able to control their lip. I haven't tried it with my kids yet, but I'm gonna definitely try it now. And also a little bit of a side note on this, I know that there's an oral health component to this as well. I've done a lot of research in the oral health world, and mouth breathing at night drastically increases your risk of both cavities and gum disease.

Patrick: Yes. Again, something that doesn't get mentioned, unfortunately. You know, with oral health, all of the emphasis is on, don't eat sweets, don't be drinking fizzy drinks, and brush your teeth. And there's no mention of breathing in and out through your nose. It's the saliva in your mouth that protects your teeth, but it also protects your gums, and it also protects your lips when you breathe in air through your nose.

If you have your mouth open, you're more likely to have chapped lips, you're more likely to have bad breath, you're more likely to have dental cavities, gingivitis, inflammation of the gums. So, yeah, good oral health. But it goes beyond that. Like my facial structures compromised as a result of my breathing during childhood. And none of this information is new, this has been talked about 100 years ago. I've got a very high narrow palate, I had overcrowding of teeth, my jaws are set back, my nose is crooked, my nasal airway is compromised. My throat, my upper airway would be small. So I'm a perfect candidate for sleep issues, and that was made worse by mouth breathing as a kid.

And there are plenty of dentists and orthodontists who understand this, that it's not just about teeth, but it's actually about the development of the face. And there are some brilliant people, both in the United States and throughout the world, but a lot in the United States that get this and they are pushing it, and they want to see a greater awareness of breathing. But I think in the last three years, we've seen an amazing revolution.

Now I will go back to the one thing. If you are considering putting tape on your children's mouth, don't tape across the lips straight off, because there is always a risk that the child could vomit. So that's number one. Number two, we do have a tape, and it's inexpensive. And I'm not just saying it because I wanted to push it, right, it's not that. Tape surrounding the mouth to bring the lips together. You don't have to cover the lips to get the lips closed. Number three, when you're working with children establish that the child can actually breathe through their nose first of all during the day before you might consider during sleep. And all of the exercises are free, so we've put up all of the breathing exercises for children.

You can download an app called ButeykoClinic app. The app is free of charge, there's no subscription. And when you click on children, you'll see all of the exercises, nine exercises for kids. There's exercises to decongest your nose. There's important information in terms of the child doing physical exercise with the mouth closed, the reasons that they should breathe in through their nose. If the child is anxious, how to slow down their breathing. If they're getting wheezy, how to do small breath holds. How to build up their breathing capacity in terms of doing breath holds for asthma. So that's all there. So that's the only thing I'd say. And you can make a remarkable difference in the life of the child if that child is able to restore nasal breathing with the tongue resting on the roof of the mouth.

And, you know, the whole thing about craniofacial development. You know, the shape of our face is influenced by whether we have the mouth open or closed. If the growing child has their tongue resting on the roof of the mouth and their lips together, the tongue, by resting on the roof of the mouth exerts a pressure and helps to develop the maxilla and drives the forward growth of the jaws.

As human beings, it's very important that we have strong jaws. It's not just aesthetically pleasing. But if we have strong jaws, we've got a more open airway. And if we have a more open airway, we have better sleep, we have less risk to having sleep disorders. But also, we're better at doing physical exercises.

Now, if you look at the faces of athletes in the main, they're pretty good-looking individuals. That's not by chance. They're good-looking individuals because their face has developed the way nature has ensured it should develop. Their airway isn't compromised. You don't have too many athletes with a compromised airway. There is one or two, and it does influence them. But what they're able to do is because they have such tremendous genetics, aside from their airway, they're able to overcome those challenges. I could never be a top athlete. I have not got the characteristics to get me anywhere near there, and I would put that down to my breathing as a young child.

Katie: Wow. Well, I definitely think it will encourage a lot of parents to go through these steps and consider this with our kids. And the thing I love about mouth taping at night is I compare it to how I have, for instance, a ChiliPad on my bed, which sleeping cooler also improves sleep but it doesn't require any effort. Once I've set it up, it's a no-effort solution. And I would guess similar with mouth taping at night since we're spending, hopefully, at least a third of our lives sleeping, and getting enough sleep. Just that one step at night is helping, it's giving you that one-third of your whole day that you're breathing through your nose, and helping train that pattern, which I would guess would have crossover into your daytime breathing over time as well.

But to shift a little bit more and talk about that more conscious awareness of breath during the day, and training that slower breath pattern, how often does a person need to do that during the day to start noticing these changes? And about how long does it take before, I guess, our nervous system starts to respond and naturally do that without having to be as consciously aware of it the whole time?

Patrick: We use a couple of measurements. For children, we use a measurement called steps, and that's the number of paces that a child can hold their breath for while walking normally. For an adult, we use a measurement called the bolt score, B-O-L-T. And for an adult, it's comfortable breath-hold time. So the adult takes a normal breath in and out through their nose, they pinch their nose with their fingers. And they're timing it in seconds until they feel the first definite desire to breathe, and then they let go.

Functional breathing is when your bolt score is above 25 seconds. For children, functional breathing will be when the pace is in... it depends on the age of the child, but we'll typically say about 50 paces. So number one is to measure it. Number two, we have to be realistic here. The effectiveness of any exercise is the degree to which you put it into practice, so we need to think about what can you do to bring this into your way of life? Get out for a half an hour walk every day.

I am not athletic, but I'll get in at least 40 minutes a day on light exercise, moderate exercise nose breathing. That's breathing exercises done. I use physical exercises not just as a means of training my body, but also by paying attention to my breathing and altering my breathing during physical exercise. It's also helpful for the mind because you're doing your physical exercise not lost in thought. So you have an awareness in terms of the breath, the body, the mind as well. We don't have time to do physical exercise, we don't have time to do breathing, we don't have time to do meditation, we do it all in one. So that would be my take in it. And that way, then it's part of me and it's, as you said, with the taping.

Now, by the way, not everybody would need to wear tape in their mouth, it's only if you'd wake up with a dry mouth in the morning, and I would suspect that's about 50%. It's 25% to 50% of studied children, and I would expect it's about 50% of adults. If you wake up with a dry mouth in the morning, taping is a support to help to maintain nose breathing. But if you wake up with a moist mouth, you don't need tape, you're already nose breathing. At least you're pretty sure of it.

So in terms of then... Twenty minutes would be good, twenty minutes per day. And you could do a combination of... Like, if you are into paying attention, taking your attention out of your mind and placing it on the breath, and going beyond meditation. Because here you're not just having your focus on your breathing, but you're actively changing your breathing to influence your physiology. We can down-regulate very, very quickly by taking that soft breath in through the nose, and really relaxed and slow gentle breaths out.

Now, there's other breathing exercises that we do to target the area around the diaphragm. We also do paced breathing to slow down the respiratory rate with adults to 6 breaths per minute, about 4.5 to 6.5 breaths per minute to help stimulate the vagus nerve and to bring in balance. And I suppose the biggest thing is we're motivated to do this when we understand what the exercises are about. There's too much woo, woo, and so much left afield. And there has been terrible stuff in the breathing industry. I would say it puts so many people off. There is nothing left afield about breathing. You know, I work with people of all walks of life. I've worked with elite military snipers. These guys are not left afield. But I was brought in to teach them how to breathe while pulling the trigger of a gun, and that's all about changing your physiology.

And we can use the breath but it's not that breathing is all breathing. You know, sometimes people will say, "Well, actually, I know about breathing" but do you really, you know? I use 26 different techniques in terms of altering breathing to get specific changes in the body and mind. I'm not claiming that I know everything about breathing, in actual fact, I've scratched the surface. And that's been 20 years in my work. I'm working hands-on, I'm not just working with breathing from a theoretical point of view. I've made plenty of mistakes with people with panic disorder, anxiety, chronic fatigue syndrome, etc.

So I would say it is a tremendous tool. And if I never taught one person about breathing... I am so fortunate to have come across a series of techniques and exercises because it has given me the ability to change my own physiology. It has gave me the ability to bring a stillness to the mind that goes beyond meditation. You cannot bring a stillness to the mind if you have sleep issues, and if your breathing is in that state of fight-or-flight response. So we need to look at the multidimensional aspect of breathing. And, yes, it is a little bit more complex, but it's simple at the same time. So I think there's just something wonderful in it, Katie.

And, you know, then I suppose the question is, I said 20 minutes a day would be good, well, 40 minutes a day would be even better, and 60 minutes per day would be tremendous. But what can you do to bring this into your way of life? And even if we think about concentration and focus, and attention span, because that very often is something that will motivate people. And, you know, we're talking about concentration as your ability to hold your attention on one thing. Your attention span is the length of time that you're able to hold your attention on. We're not just training breathing, but we're training the brain. And if you can hold your attention on your breathing... And it's a lot easier to hold your attention on your breath when your physiology is in balance. If the automatic nervous system or the automatic functioning of the body is in that fight-or-flight response, the mind is naturally agitated. And I know this because I've trained mindfulness to people.

You know, from 2010 to 2013, I had 3,000 individuals who had come in doing short courses with me. Ninety-five percent of them were female, men weren't turning up. This was functional breathing and mindfulness. And these were primarily females coming in with anxiety and panic disorder. Every single one of them I asked, "Have you meditated before?" And I'd say it was about 5% had done meditation. And I asked, "Do you still continue with that?" And they said, "No," the vast majority of them. And then I thought to myself, "Here is a group of individuals who need meditation more than anybody else, but yet they are not doing it. Why is that?"

Well, you have to think of it this way. When the mind is in a state of emotional turmoil, the last thing you want to do is to be paying attention to your mind. We have to be realistic here. So the success of one in teaching

breathing exercises is, number one, it's the language. Men weren't turning up, that's why I brought out "The Oxygen Advantage." It was specifically a high-performance technique for mental and physical performance. And, you know, the words...

And I remember, like, working with a footballer going back six months or three, I can't remember exactly, a few months ago. And I was talking about pre-match anxiety, which a lot of athletes have. You know, they're going in... These are kids, they're in their 20s, you know, early 20s. They're going out into loaded full stadiums packed with maybe 80,000 people, and there's the pressure there to perform. And I was talking about changing your states that you can access...you can downregulate if you're feeling too stressed about the situation. Because if you're too stressed, it's going to impact your performance.

And then he said to me, well, he said, "It's almost as if you're telling me that I have pre-match anxiety." And that was the pushback that he gave me. So I had to draw back and I said, "No." I said, "No, it's not about that." I said, "What I want is..." I said, "I want you to go out on that field as if you're ready to go through a brick wall. That's what I want. And for you to access this flow state, that you're in a state of total absorption of what you are doing. That you're not lost in the past, you're not thinking in the present, but you have 100% of your attention on the task at hand. This is going beyond meditation, this is going beyond mindfulness. This is the ability to understand how you can change your physiology to change your states." And he took that on board.

So I suppose there's a few things in it that I've learned, you know? Number one is, how do you generate habits, and bring it into people's way of life? Number two is the importance of actually understanding what the exercises do, and forget about the woo, woo. There's enough woo, woo. I want to get away from woo, woo, so far away from it because I think it's made a mess of breathing. Number three is the language that we use because we have to think of it. We're all human beings, and we have no time. Many of us have no time to be doing anything. There's so many things that are competing for our attention, and I don't want breathing being the next thing that's competing. So you'll do something when you understand that there's benefits in it. And I always say to people, "We cannot afford not to do it."

But here's the best thing, it's very cheap. And in actual fact, I've put most of the exercise up on YouTube anyway. You know, like, their books are all out there, but books are cheap, books are what, \$15, \$20? And even for Atomic Focus, the book is there but I put two video presentations out in YouTube with all of the exercises. You know, there's Atomic Focus 1 and Atomic Focus 2. We don't even have adverts. So we want to have it that I want to get breathing out there to the people, and that's my quest. And for children as well, that's why we did everything free for children.

Katie: I love that. And, definitely, so many practical tips already in this episode. I'll make sure I link to your books and your resources as well so people can find those if, like me, maybe you're listening while you're walking or driving kids around.

This podcast is sponsored by Kion. Let's talk about Amino Acids for a minute. On Episode #561, I talked about how Kion Aminos are the ultimate protein hack. To truly understand just how important amino acids are for your diet, think about your body and what it's made of. You probably already know that it's mostly water. What you probably don't know is that everything else in your body is 50% amino acids. These building blocks of life are essential for health and fitness. This is why Kion aminos is my fundamental supplement for fitness. I drink them every day for energy, muscle, and recovery. Kion Aminos is backed by over 20 years of clinical research, has the highest quality ingredients, no fillers or junk, undergoes rigorous quality testing, and tastes amazing with all-natural flavors. So, if you want to naturally boost energy, build lean muscle, and enhance athletic recovery, you need to try Kion Aminos. You can now save 20% on monthly deliveries and 10% on one-time purchases. Just go to getkion.com/wellnessmama.

This podcast is sponsored by Wellnesse... that's wellness with an e on the end, my new personal care line of haircare, oral care and deodorant. Our newest product that I'm so excited about is our all-natural deodorant that works better than conventional alternatives, without the harmful chemicals or pore-clogging junk. Unlike many natural brands, it uses the right balance of natural odor blockers so that you get the protection you want without any irritation or itching. Formulated with only EWG safe ingredients and EWG and B-corp certified, it's a safe, natural and effective solution for the whole family. Check out these and all of our amazing products at wellnesse.com

And just to echo a couple of things you said. I found it really interesting that you mentioned training the military and people who were shooting. I'm by no means anywhere close to that level, but I did used to shoot competitively. And that was maybe the first time I noticed just how important my breath was. Because if I was nervous or breathing quickly, it was impossible to line up the shot correctly. And so that was probably my first exposure to paying attention to the importance of breath.

And I love that you also mentioned for parents, so many tips there. I would say even I've noticed with my little, little ones when they were babies, before you can train them how to breathe or get them to consciously follow you, I've noticed, as a mom, if a baby is upset or a toddler and I slow my breathing, they very often try to regulate to my breathing. And this is still helpful even with older kids. If I have a kid who is upset about something, if I just calm my voice and slow my breathing, very often, they mirror that. And then as they get older, like you said, to be able to do these exercises with them is a great family time that also... From a mom's perspective, if we can calm everybody's nervous systems down before bed, that's a huge advantage in the house.

You've also mentioned the mental health side a couple of times, and I think this is one I'd love to go a little bit deeper on. Because, certainly, I hear from listeners and readers who have things like anxiety or depression that they're working through. And I think, to your point, breath is a very under-talked about component of this, and that often conventional treatments go straight to medication or toward more extreme measures.

And not that there's not a time and a place, of course, for conventional medicine. But I think, like anything, if we can triage this and start with something that's free, that we do already, like breathing, and see an effect, even if you end up needing to go down those other avenues, they're gonna be more effective as well. So can you...you mentioned it's mostly women who come at the beginning for a lot of these things. I know these things affect women in higher numbers, so what are maybe some practical baby steps we can start with for addressing the mental health side through breathing?

Patrick: Yeah. I suppose females were coming more to those classes because females are two to three times more likely, or it's more common for them to experience panic disorder than men. And there's also a relationship between changes in hormones and changes in your breathing. So younger females as a result of the monthly cycle post-ovulation, mid-luteal phase, there's an increase in the hormone progesterone. And progesterone is a respiratory stimulant so it's going to make your breathing faster and harder. And carbon dioxide levels can drop by as much as 25%. And this can bring on pain and fatigue, anxiety.

A lot of people with anxiety, in my experience, have difficulty focusing on their breath. And even just focusing on their breath can make them anxious. So we give them exercise starting off with, that don't necessarily involve focusing on your breath but the goal of the exercises is to help stimulate the vagus nerve. One very helpful exercise is to do small breath holds. So to do a small breath hold, I'll have the individual sitting down...

And this also gives them a slight sensation of air hunger because it's very often air hunger or the feeling of suffocation which is feeding into their symptoms, especially if they're prone to panic disorder. So I give a controlled dose of it, but I also want to stimulate the vagus nerve. And also when you do small breath holds, you're gonna have to increase blood flow and cause a calmness to the mind.

So it goes like so. Take a normal breath in and out through your nose, and pinch your nose and hold. Five, four, three, two, one, let go. Breathe in through your nose, and you breathe normally for 10 to 15 seconds. And, again, you take a normal breath in through your nose and out through your nose, and pinch your nose and hold. Five, four, three, two, one, let go and breathe in through your nose.

So when you take a normal breath in through your nose, and out through your nose and then you hold your breath, it's the same as having a prolonged exhalation. But you don't have to focus on your breathing to do that exercise because all you're doing is counting, and that can help to stimulate the vagus nerve. So that's one exercise.

Another exercise that I do to help improve blood flow to the brain, and we've used this quite a lot with people with panic disorder. I'll have them take a normal breath in through their nose, and out through their nose, pinch their nose and hold and walk 5 to 10 paces holding their breath. And then to let go, but to breathe in and breathe normally then for a half a minute, and repeat. And, again, this helps to increase blood flow to the brain.

So those would be exercises that we would do when we were introducing people to the air hunger, those people with panic disorder. And our goal is to improve blood flow to the brain, increased oxygen delivery to the brain, which is focused on carbon dioxide. And you can also use these exercises for people post-concussion. So say for example if a person gets concussed or traumatic brain injury, there's often a reduction of blood flow in the brain for months, but that's not good for brain health. And this is just about using normal physiology. If you Google the effects of carbon dioxide, carbon dioxide is a vasodilator. So we don't want to do really long breath holds because that goes into a stress environment. We do short breath holds so we can get a stimulus, but the person can stay relaxed.

And then, I think it's very useful then to realize that whenever you're going through today and things go wrong, and things do go wrong, and you're feeling a little bit tense, if you want to calm down, just simply focus on the exhalation. In other words, don't hyperventilate. And take a soft breath in through your nose, and just have a slow relaxed exhalation.

Now, I don't necessarily have people count it but if you wanted to count it, you could be breathing in, two, three, four, Out, two, three, four, five, six. However, the problem with counting breathing is that one there is slowing down the breath to six breaths per minute. It's a 10-second cycle, 4 seconds in, 6 seconds out. Somebody who's anxious they could feel very overwhelmed by trying to slow down their breathing. If their normal breathing rate is 20 breaths per minute and then I say to them, "Listen, I want you to go from 20 breaths per minute down to 6." It's too much of a gap, it's too much of a drop there. So what you could be doing is breathing in for two seconds and out for four, or breathing in for three and out for five. So always think that your exhalation should be about one and a half times longer than the inhalation.

Now, it's not that you need to go throughout your day focusing on your breath because I don't want breathing then to become...people become obsessed about it. But those other times then, why not go out for a walk for a half an hour to an hour, out into the fresh air, and only breathe through your nose? That's an exercise in itself. Get your mouth closed at night because I don't think we're going to address mental health issues if we

have continued sleep apnea, I really don't. There is such a strong link between depression and obstructive sleep apnea. Why is it that so many people with depression have obstructive sleep apnea? These people are tired as well. And, you know, these people are going to their counselors, they're going to their medical doctor, sleep doesn't get addressed, and breathing doesn't get addressed.

Now, if anybody is into the science, there's an article that I wrote with two ears, nose, and throat doctors. It's in a peer-reviewed journal called "The Journal of Clinical Medicine." And I go through the links of why we need to have functional breathing during the day, and how that can improve our sleep. So I would say to people, you know, if you're starting off, make a concerted effort to have your mouth closed all the time. Your nose is the only thing for breathing. The nose slows down breathing. With slower breathing, you're gonna have to bring a calmness to the mind. If breath is agitated, the mind is agitated. Do your physical exercise with the mouth closed. If you get into stress, or if you have difficulty focusing on your breathing, if it makes you anxious, don't do it.

But do small breath holds, do small breath holds. So you could do small breath holds sitting, we call it breathing recovery. You could do small breath holds walking, we call that walking recovery. You know, so there's a number of different exercises. But from a biochemical point of view, I would also be really focusing on slowing down the exhalation. And it can be pretty quick. You know, I do a podcast with Dr. Jay Wiles, and he's an expert in HRV, "Hanu Health." And we were having this conversation, because I was thinking to myself, you'd want to be slowing down your breathing for about 90 seconds before anything happens. And he said no, he says he can see a change... Because I'm not really into technology, so I don't know. But he says he can see a change in 30 seconds. So even 30 seconds, you know, something has gone wrong, bring your attention to your inwards. Take this soft breath in through your nose, and really have a slow and gentle breath out through your nose. That prolonged exhalation.

And, of course, ideally, it's driven by the diaphragm, but don't even worry about that, just focus on the exhalation. And start bringing it into your way. It's a great tool. Sometimes I'm not the most organized. I should be in one room but, of course, I'm in the opposite room and I dunno how to get from this and that and the other. And, okay, and what do you do? Normally, you start feeling the heart rate is getting up, their breathing is getting faster. It's not gonna help the situation. I bring my attention on my breathing. You kind of do it naturally anyway once you're working with breath, and you have that really slow explanation. And your body is telling the brain that things are okay. And then it's easier to get the decision.

You cannot find a solution when you're into that fight-or-flight response. Because when we go into that fight-or-flight response, the brain just wants to protect us and get us the hell away from the situation. So at the very time that we need to have calm and composed and, you know, good thinking, we can't have it because the brain is trying to protect us and wants us out of the situation. That's the thing, we have some control over our breathing.

Katie: So many good tips. And for those of you listening, I'm making notes of all the different exercises you mentioned in the show notes at wellnessmama.fm, and I know you have many more resources for this as well, more than we can cover in one podcast episode. So for any of you guys who are hearing these things, and seeing the benefit, definitely check out your website, Patrick, and you have so much more there. It seems like there is still much to learn and much to come in the research side of breathing and breath, where do you see the future of this going, and what are you hopeful for, as we continue to learn more and more about this?

Patrick: I think it's going to be driven by the grassroots efforts. I don't think it's gonna come from the medical community, unfortunately. I say that even with working in my early days with people with asthma. You know,

we were teaching people with asthma, which is a condition of the lungs, to breathe in and out through the nose, to breathe light or breathe slower or breathe lower. The physiology of that is that your nose is the only organ that does anything to help the lungs in terms of improved gas exchange and all of that. So you don't necessarily need a clinical trial to understand that because it's just based on normal physiology, but yet we couldn't get the research. We've had 20 clinical trials. And in order for something to be accepted, we need 500 studies up in PubMed. It's not going to happen in my lifetime. I've had 20 clinical trials in 20 years, you know I'm not going to be around for 500 years, put it that way.

I don't know what drives... In terms of what's driving research, I think there's very dedicated people out there but I think the space that breathing is occupying is awkward. You could have a medical doctor and, of course, they want to advance their careers, they put so many years in training. And if they do their research in breathing, there's a risk that they're going to be poo-pooed by their peers. So I think there's pressure on doctors to only focus on the areas that are going to be accepted by their peers. And that is a problem.

We have to realize that mental health is really falling short of the mark, and breathing has got a great inroad there. But yet, psychotherapists in the main don't understand the connection between breathing and mental health, nor do they know that cognitive training is not going to change your respiratory physiology. You know, in a very simple way, people who were having a panic attack in the past they were sometimes told to breathe in and out of a brown paper bag. But that's about normalization of the pressure of carbon dioxide. It's not a great thing to do. The idea is good because when you're hyperventilating, you're getting rid of too much carbon dioxide from the blood through the lungs and the carotid arteries, which are feeding the brain but blood flow constrict. So the idea was perfect. But because you're just breathing in and out of a brown paper bag, you're not getting enough oxygen in. So that's just a downside. But the physiology is there.

You know, I think it's gonna happen, Katie. Like, we've seen a tremendous growth, and I'm delighted to see it, I have to say. And it's going to continue. I think James Nestor's book, who has written about a lot of the stuff that we've been talking about for 20 years, has really put it on the map. And I would say he's done more about breathing than any of us have. We were working specifically with the individuals on the ground, whereas he was able to delve into the research as well. So we've got a lot of helpful things coming to us, and I do think it's starting to have a... But I don't think it's going to be driven by the medical community, no.

If any community is going to drive this, it's the dental community. Like even this morning, we had a meeting with one of the university lecturers in dentistry, looking about researching breathing for sleep because many dentists go into the whole realm of sleep medicine, and they work with mandibular advancement devices. And we can improve the efficacy of treatments for sleep apnea by changing breathing patterns. And there's more science coming out on that. Because, ultimately, obstructive sleep apnea as being the gold standard of treatment is the CPAP machine, but the problem is non-compliance. So you've got 50% of the population, where do they go? So there's a gap there, and breathing can help there.

But even if we look at children who undergo adenoidectomy and tonsillectomy, this too is the gold standard of treatment for children with sleep issues including sleep apnea. And the efficacy of it was first determined in 2010, that was a study of about 600 children, and it was published by the journal of respiratory and critical care medicine. Only 27% of children had their sleep apnea completely cured by having their tonsils and adenoids out. So there's something missing there, and breathing can play a role.

And the other thing is Dr. Christian Gamon he said that children who undergo tonsillectomy and adenoidectomy they must restore nasal breathing, otherwise, there's a 65% relapse within three years. How many people do ENT, they go to an ear, nose, and throat doctor to have their turbinates reduced or deviated

septum, or nasal polyps are children? They're not taught to actually breathe through their nose post-surgery. It's not enough just to treat the nose, we need to go beyond that.

So I think, definitely, we're in the right direction, but we definitely need more research. And, you know, that's the only way for the medical community to validate it or not. So we do need high-quality research. It's just a pity that breathing is still seen a bit left field. There's nothing left field about this. This is for the common individual. And, you know, this is for...regardless of the occupation of the individual, we should be able to change our state as individuals. I think this should be taught in schools.

Katie: Yeah, I agree with you. It seems like the change would come from either the dental community or... I've said many times on this podcast, I think moms have the most power to shift something within society very quickly. And so I could see, very much, moms teaching this to kids, we can make a big change within a generation. And I think you've given us so many practical suggestions on where to start with that today, especially with our kids and incorporating this as a family practice.

I know as a mom myself, anything that improves sleep and nervous system stuff, and mental health is a huge advantage when you have kids, especially multiple kids. So I know that you've given us a lot of great resources today.

And, very quickly, a couple of questions I love to ask at the end of interviews. The first being, other than your own, if there are any a book or books that have profoundly influenced your life? And if so, what they are, and why?

Patrick: Well, I suppose there's always one book whenever people might ask me the question, and it's my most favorite book is "The Power of Now" by Eckhart Tolle. It was absolutely a life-changing book. It ties very well with what we're doing. And I suppose it was a book that was written from presence that when you read it, you're not just reading it for the words itself but you're reading it that it will bring you into stillness. And earlier on you were talking about that when you slow down your breathing, you help to slow down the breathing of your child. And I think it even goes beyond this, Katie.

I think if we are in a state of stillness of the mind, that we transmit something. And even if we're making presentations, or working with students, or working with clients, our state of mind will impact the state of mind of the student even if we said nothing. So there's something else that's going on. I know that sounds a little bit left of field, but that's what I've been experiencing. And certainly, when I read that book... I know if I was to pick it up now again, I haven't read it in a while. But at the start, I read it onto a cassette tape, and I played it over, and over, and over, and over in my car. This is back in 2000. And I immersed myself so much in it. It's a tremendous book. So "The Power of Now" by Eckhart Tolle.

Katie: I love that book as well. I'll link to it in the show notes as well. Lastly, any parting advice for the listeners today that could be related to everything we've talked about or entirely unrelated?

Patrick: You know, I'd really encourage people... I'll stick to the subject, and really encourage you to experiment for this and, you know, check in with your breathing. Start nose breathing during rest, during sleep, during physical exercise. Go beyond nose breathing, and gently slow down your breathing to the point of air hunger. If you do suffer from anxiety or panic disorder, be careful with the air hunger because you don't want to have too long air hunger, too much of an air hunger or too long a duration then it tips you into a fight-or-flight response.

So I'd always say to people, "I'd like to give you a teaspoon of air hunger so that you can desensitize your body's reaction." And there's something about it. You know, when you slow down your breathing to the point of air hunger, your mind is anchored onto your breath. But it's almost that you are surrendering to a feeling of discomfort, and you're training your brain not to react to uncomfortable situations. So when we work with the breath itself, we can get benefits there that we carry into our everyday life. And one of those is a quieter mind. And, of course, the quieter mind is going to contribute to happiness.

Katie: I think that's a perfect place to wrap up for today. I've learned so much in this episode, and taken so many notes for everybody else to hopefully continue learning from you, and all of the resources you have online. Thank you so much for your time and for sharing so willingly today.

Patrick: You're very welcome. Thanks, Katie.

Katie: And thanks as always to all of you for listening and sharing your most valuable resources, your time, your energy, and your 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."

If you're enjoying these interviews, would you please take two minutes to leave a rating or review on iTunes for me? Doing this helps more people to find the podcast, which means even more moms and families could benefit from the information. I really appreciate your time, and thanks as always for listening.