



Episode 238: Using Neuroplasticity to Rewire Nervous System or Brain Disorders With Carol Garner-Houston of Brain Harmony

Child: Welcome to my Mommy's podcast.

This podcast is brought to you by Four Sigmatic. If you've tried their delicious coffees and elixirs you know just how delicious they are, and if you haven't, you are missing out! Four Sigmatic create superfood mushroom drinks that are easy to incorporate into your life. Their coffee packets, for instance, are easy to mix into hot or cold liquid, they taste amazing and have the added benefit of mushrooms like Lion's Mane, Chaga and Cordyceps to give your brain an extra boost and tone down the jitters. They have slightly less caffeine, but I find double the focus from that. As a quick tip, I like to mix their coffee packets into almond milk for a cold brew type taste. Studies continually show the benefits of these superfood medicinal mushrooms for brain health, immune health, and so much more. My favorite is the coffee with Lion's Mane in the morning for a smooth boost without the jitters of regular coffee and I also love their Reishi in the evening for amazing sleep. During the day, I'll often add in a cup of Chaga or Cordyceps for the immune and focus benefits. You can check out all four stigmatic products at foursigmatic.com/wellnessmama and save 15% with the code `wellnessmama`.

This episode is sponsored by Genexa- the first and only line of organic and non-GMO medicines with a homeopathic and traditional over-the-counter line. Created by two dads, I love all of their products and that with their patented system, they don't need artificial fillers, dyes, artificial sweeteners or preservatives. I keep their cold crush, flu fix and saline on hand for the first sign of sniffles in our house. I love that these are organic and can help ease the symptoms while still letting the body fight like it is supposed to. To shop their full line of organic and non-GMO medicines, go to Genexa.com/Wellnessmama and use code `WELLNESS` for 20% off your order.

Katie: Hello and welcome to the "Wellness Mama" podcast. I'm Katie from wellnessmama.com. And today's guest is back for a much requested part two, and is truly one of the loveliest people I know. Carol Garner-Houston is an incredible powerhouse of knowledge, and she is helped thousands of families who are struggling through things like ADD, ADHD, sensory processing, and many other struggles, we're gonna go deep on those today. Carol has over two decades of experience in pediatric and adult neurological development where she has gained widespread recognition from both colleagues and patients.

She currently serves as an occupational therapist and neuroplastician in her private therapy center, Brain Harmony, and she is the co-owner and chief medical officer. You'll often find her applying brain mapping protocols and modalities that are changing IQ scores, connecting speech in adults who have never spoken, and rewiring connections to hemiplegic limbs post-stroke, it's truly incredible. She can often be found in schools, in her clients' homes, in her therapy clinic, or video conferencing with clients around the world.

Her key priorities at Brain Harmony are to accelerate outcomes to support and offer compassion to the families and to facilitate affordable access to care so that patients can find their unique purpose. There is so much more to her bio in her history of awards and accolades, but I'll leave it there and just say that the testimonials and case studies from her patients are truly astounding. And I wanted to bring her back today to address more of the questions that I've received from you guys. So, Carol, welcome and thanks for coming back.

Carol: Thank you so much for having me back. It really has been a whirlwind since we recorded our first podcast together. We've been able to reach hundreds of more families who are struggling with neurological disorders since its release. And I'm excited to report that because of your podcast, we're serving families worldwide in our home rehabilitation program.

Katie: That is truly wonderful news. And I've seen firsthand in my own community the amazing work that you do and I've read case studies from families who are willing to share. It's really amazing. And I think the most amazing part is that for so many families who have a child who has any of those struggles, it can sometimes feel so hopeless and moms can feel so helpless and frustrated, and certainly, there are many things that go along with that that adds stress to the family and so to see those things start to fall away, yeah, I mean it brings tears to my eyes. But to start, let's kind of establish just for background, what are some of the biggest struggles that you see in children that you work with and what are some of the things that people are coming to you to address?

Carol: Well, we are seeing so many families with all kinds of different levels of dysfunction whether it's with children or adults. And it can range from attention deficit disorder, behavior issue, learning issues, sensory processing is a very large problem for our friends these days whether you're a child or adult, and we're seeing that negatively impact so many families. We're also treating adults and children post-stroke, cerebral palsy, Prader-Willi syndrome. Whatever is limiting the brain or the neurological system regardless of diagnosis, we are able to make a positive impact by organizing the brain and the central nervous system with the modalities and the protocols that we use. So whatever a family is struggling with, we encourage them to reach out to us and let us know, and we will let them know how we can help you.

Katie: Why do you think we're seeing such a rise? I know these are all words I hear from many moms who have a child who's working through one of these things. Why do you think so many of these things are on the rise right now or do you think it's a very much multifaceted issue?

Carol: I do think it's a multifaceted issue. There's all kinds of different factors, there's genetic factors that we're learning so much about. And that's another reason why I love your library of podcasts because there's many resources there on genetic testing, and how you can find out what your whole system is about, and what it will respond well to, and what you need to avoid. In that case, you can find certain genetic predispositions that might not allow for you to process toxins, maybe in vaccines, maybe you've been given many rounds of the antibiotics that were seeing negatively impact balance in the vestibular system. We're seeing a rise in ear infections in our little friends and that can cause the softening of the muscles in the inner ear, which results in auditory sensitivities.

There are just so many factors including the quality of our food and where it comes from. You definitely set me off further and deeper into that path, and your recent book, I super love, "The Wellness Mama 5-Step Lifestyle Detox." Because you hit on so many of those, why is this happening? You're looking at what's in the chemicals in our food, in our makeup, in our water, in our lifestyle such as my favorite portion is how to do a digital detox. You just can't say anymore that the cell phones and the EMFs and the Wi-Fi is not negatively having an impact on individuals. How deeply it's impacting you, of course, it depends on the individual, where you live, what you're exposed to, and how proactive you are at detoxing your lifestyle.

Our families that see really good improvements with us, the ones that see exponential have paired with functional medicine physicians. The ones that go to the cellular level to work on even the mitochondria in the cells to help them function better, and to heal the gut, and then they turn to outside conventional medicine. And they turn to us to retrain the brain and the central nervous system. So we can bring organization and bypass whatever it is in our environment and genetic code that has derailed us.

Katie: Yeah. That's why I love so much what you do because I feel that the natural living site is something I had researched so much and implemented in my own home. And I saw so many readers implement these things, and they would see drastic improvements, as you know, in aspects of their children or their own lives. But it also seemed like if this had been a long term problem where a child had been having to face these environmental stressors their whole life, there was still...even though the child was, you know, a lot better and wasn't still having to face those, there was like a catching up that needed to happen or something that was beyond just the environment and the food and all the things that I had researched. And so when I found you, it was like all the puzzle pieces came into place, and I realized that you were able to do something so unique. So talk us through that. How are you able to accelerate outcomes in such a drastic way?

Carol: Well, we're able to do that because we use very specific modalities that do very specific things for the brain and the central nervous system. With 23 years of experience, I have filtered out and created the cliff notes of the most organizing protocols and modalities to change the brain for the better. And we use sound frequencies and bone conduction to make the connections in the brain that either aren't there or aren't there very well.

We also use protocols such as the safe and sound protocol developed by Dr. Porges, which speaks directly to the vagus nerve, which is part of the parasympathetic nervous system. And it can provide the calming, relaxing effect and decrease the stress response of the sympathetic nervous system by stimulating the small branch of the nerve as it emerges onto the anterior surface of the eardrum and ear canal. Virtually all children who have a learning, attention, or behavior problem or under considerable stress, and in turn, they often lack the resiliency and have little ability to calm themselves. So we provide their brain with organizing input with frequency, duration, and intensity with these modalities and it is calming the system. And then we can activate and pinpoint with sound frequencies connections to very specific parts of the brain.

For example, with a hertz between zero and 750 filtration in the classical music that we will expose the individual to, that speaks to the zone 1 sensory motor portion of the brain responsible for balance, rhythm, coordination, muscle tone, that's a very big one. We're seeing many, many MTHFR friends with super-low muscle tone that's gonna negatively impact everything globally from head-to-toe, the muscles of the face, muscles inside the inner ear. And if those are flaccid or not activated very well, you're gonna see a plateau in development and you're gonna see atypical development, and for whatever reason, that is significantly on the rise.

So we will definitely expose them to the sensory motor frequencies in that area. It also connects the brain to body awareness, laterality, which is innately knowing the right side and the left side of your body, your sense of direction, behavior and emotional regulation. Once we build those lower frequencies, we can then move

the individual and expose the brain into some of the higher frequencies. My favorite zone is Zone 2, which is communication that's between 750 and 3,000 hertz. That's where the speech and language bandwidths are in that area. The music speaks and stimulates the speech part of the brain where the individual can better do phonetic decoding.

We have seen children increase reading skills two or three years by doing a listening folder in this zone. They have better pitch discrimination, intonation, their speed of processing improves. Once we can get that base, that zone is my favorite because of the outcomes that we are seeing that are so drastic. For example, we have adult friends for different reasons who have not spoken in their entire lives. This one case in particular is an adult with an autism diagnosis and he began our program. We start our activation protocol, the safe and sound, we exercise the muscles of his inner ear which help him process human speech better because the mouth cannot produce what the ear cannot hear. In that activation protocol, it connects and stimulates different parts of the brain.

Once we've activated the inner ear and the brain, we then layer in those sensory motor tracks to ground that individual, and get to the speech and language bandwidths. It is much different than sitting across from an individual and trying to manually create those changes in the brain or trying to manually get them to make sounds. It's an old-fashioned way to go about trying to get speech development. And this family has tried all of that all of his life, and they haven't been able to start the speech process.

But once we expose him to the speech and language bandwidths, he not only began to make sounds, he not only began to say words, he came out with a complete sentence. And the complete sentence was, "I will go in there." And it really is...you know, it does bring tears to your eyes because what a change for the individual and for the family. They were stunned. Mother and father were there when he said it along with the full-time caregiver.

And from there, you begin to understand, the brain is completely neuroplastic. We can create changes in the brain that produce function. The brain does not matter, does not know how old it is. It does not know what diagnosis it's been given. All it knows is how to change based upon the input it's given. So we give it the most organizing and the most intense input over time, and it creates the highway pass of efficiency between all parts of the brain.

So that individual had stagnated, but there were parts that were still paying attention. Otherwise, you wouldn't be able to come out with a complete sentence. You would have started with, you know, the individual sounds of an infant. His brain was absorbing and processing, but it wasn't able to function. And now knowing with the laws of neuroplasticity, we can change all of that. It's just very exciting and thrilling to be able to provide it to so many families.

Katie: Yeah. It truly is amazing, and I love the approach very much takes the mindset that I've often heard moms saying, that I believe myself, that when a child is misbehaving, they're not being a problem, they're having a problem. Certainly, there is, you know, times when children just behave. But when these children who have these struggles and, like you said, they can't calm themselves or they can't focus, it's not that

they're trying to be a problem, it's that they're having a problem and now there is a way to actually address that that's not difficult or painful or just, you know, like you said, talking or something that's hard for them anyway, but it's calming and that they can do in their own home even.

And you mentioned the word neuroplastic or neuroplasticity, I'd love to go a little deeper on that because, I think, you know, so many of us are really only starting to understand that and just how drastic and what that means for all of us, really, not just children who are facing a struggle. What is neuroplasticity, and what does that mean as far as what we're able to do with our brain?

Carol: It's my favorite word. I use it all day long. Neuroplasticity is a discovery that the brain can change itself depending upon the type of input that it's given. The idea originated around the 1940 with Head's Law, which stated that simultaneous, synchronous firing of neurons in different areas of the brain promotes increased neural conductivity between those 2 areas. It's neurons that fire together wire together. And what that means is if you don't have the connections in your brain for whatever reason, it's okay, we will build it.

My favorite book that has really brought neuroplasticity into the mainstream is by Dr. Norman Doidge, a "New York Times" bestseller, and his book is "The Brain That Changes Itself." And I love this book. It's so inspiring as he goes around and meets with all kinds of neuroplasticians, that's actually a term that he taught me that I use for myself and the therapists that work with our clients. And it's the stories of transformation that are happening that are outside of the conventional medical models, even ability to conceive. So with that book, I love it because I actually met him several years ago. And it was at an advanced training and integrated listening system in Denver, Colorado.

And he was speaking to a room full of neuropsychologists, psychiatrists, therapists, and he began to pull up different case studies of before and after with neuroplastic therapy in between. And he pulled up one friend who was severely on the spectrum, very withdrawn, very typical type of characteristics, lack of eye contact, monotone voice, very limited interest. And then he showed the after. And this individual was able to...because of certain parts of his brain that were actually very well developed, he could speak with great inflection and animation in his voice and his face as he recited works from a play. And as he showed this on the screen, I watched the faces and you could hear the individuals gasping with amazement at, "Wow, what kind of changes these are." It wasn't a surgery, it wasn't a medication, it was just neuroplastic intervention.

And at the time I gasped too, not because I was surprised at the outcomes, but I turned to my sister who is also my business partner and I said, "Wait a minute, that's Gray. Gray did that yesterday. And wait a minute, Sister, isn't that Liam? Liam did the same thing." As we sat there in the back of this room, he began to show another case study of a gentleman with Parkinson's who was very limited and he was just becoming into that hard shell with limited mobility. And then he was exposed to certain neuroplastic interventions, and then they showed him skipping over rocks on a beach that were slick and wet. And watching as this gentleman with Parkinson would tiptoe over the rocks with great balance and smooth movements.

Again, my sister and I, we looked at each other and we smiled because at that moment we realized that we were at the frontiers of brain science. What we were doing was producing those types of outcomes every day

for all of our friends, day in and day out. It was a mind exploding type of experience. And from that point we decided we're so good at what we do, we have to get this out to as many friends as possible, as many friends in the country. So what we did is we set out and we now have therapist in 47 states, certified occupational therapists and occupational therapy assistants. And we ship these protocols and modalities to your home. We will train the caregivers or the individual themselves to use them in the privacy of their own home. You don't have to leave to get to a clinic, you're not dependent upon clinicians or leaving your home for these types of changes. We teach you how to roll it into your everyday experience because over time, that's how you'll build those connections in the brain that will overcome dysfunction.

Stroke is another favorite one, right? You have a stroke, the hospital saves your life, you go through a couple of rehabilitation weeks, you get to maximum medical, they discharge you and they say good luck. And you're left with a stagnated brain and development. We have an older client who was in that same experience and once he was discharged from the hospital, he just sat on the couch all day long watching TV. And his wife, who's a rock star wife, reached out and she was looking for everything that she could find because the typical medical model had just said, "That's all we can do." But she knew she needed to find something and she wasn't gonna stop until she did.

And when she found us, of course, we exposed his brain to the activation protocol. We awoken his brain with five days of listening. Then over a three-month period, this individual was exposed to those sensory motor bandwidths that I talked about. Then we exposed his brain to the communication in speech and language. This individual is now able to have great eye contact. He's doing things more quickly. He's remembering things from 7 to 10 years ago. He can recognize his granddaughter on Skype and engage in conversation. If he doesn't have the words, at least he can reflect in his facial expressions and continue to connect to her. He can now go to the bathroom in public areas with no accidents. There's less drooling, and he's initiating doing laundry for himself. That his life, that is purpose. And that's what these types of modalities are doing.

Katie: Yeah. It's astounding, the brain's ability to adapt like that. And I guess when you look at it in a holistic way, like you would look at the body in a holistic way, the body always wants to move toward a state of health and the brain in the same way probably always wants to move toward a state of health and function and all the things it's supposed to do. It's just so encouraging to know that even if there's been a trauma or lack of nutrients from an MTHFR, or whatever the cause may be, that there's a way to help rebuild the brain even if that's already happened. Because I think so many parents, especially, can feel that hopelessness of like, "Oh, well, I think I figured out why my kid maybe has the struggle," but that doesn't fix the fact that the child has the struggle.

And so I'd love for you to speak a little bit to some of the most common ones that I get questions about, you know, moms both with young children and older children. And those would be things like ADD and ADHD and sensory processing and behavior, especially those seem to be very big issues for moms.

Carol: Yes. And we see that frequently. And essentially, you hit on it a little bit earlier when a child is misbehaving or not able to attend. To me, the child is a reflection of the state of their neurological system, and that's how I begin to address the organization. And when you state it that way, it does help the parents to

decompress just a little bit, and to know that, well, this is going to get better because we're gonna organize it in a very specific way from a bottom-up approach.

A simplistic way to understand each one of those areas of deficits that you mentioned is we use something called the pyramid of learning to help us understand why those deficits are the way they are. It's a nice visual pyramid and it shows you the central building blocks of the central nervous system, and how all other skills are dependent upon it. So what we do is we organize the vestibular system, the reflex maturity, ocular motor, and as you build those foundations of function then the other higher levels of skills such as attention, impulse control, behavior, those begin to improve because you created the organization in the brain and in the central nervous system.

So for a friend with ADHD or behavior, we always expose them to the safe and sound protocol. We've got to calm that autonomic nervous system. It's how we get our friends off the ceiling so that they can process human speech better, and then they can better be able to learn. And then we layer in a customized program for them to accentuate and build those connections that aren't there or aren't there very well. So how that will work for an individual can look something like this. I have quotes from this one mom about her six-and-a-half year old son who was diagnosed with ADHD, who had just graduated from our program.

After two months in our program she states that, "His focus is better. He has always been a very intense child," but she thinks the things are getting better. The next month she states that, "He is better able to calm himself when he gets upset. He's having fewer melt downs and goes more with the flow." The next month, "His strong-willed behaviors are continuing to ease, and becoming easier to handle. His social skills teacher is noticing a difference in his behavior in class and how he takes in information." All of those are indicators, inch stones of development as we call them, inch stones that the central nervous system is organized and functioning the way it's intended to.

In the next month, the mom observed him in class this week and saw he was able to focus on the material in class. She felt like the material was clicking better and he seemed more grounded. The mother is thrilled with the progress and then that motivates her to do more listening. The next month she calls us and she is kind of concerned not because anything negative is happening, but she is concerned because how is it possible that not all pediatricians know about this? She says that, "These programs have been a real game changer for him." When he finished our program, they re-did IQ, cognitive, and neurological testing. The psychologist reported that he no longer meets the criteria for an ADHD diagnosis. Are you kidding me?

I mean, that's a real change that families are looking for. Right now, the typical medical model, if you have these issues, so many of the physicians they don't know what to do except for write a script pad. And the script pads making me very anxious, they are stimulants, it is amphetamines, many of them. There are, of course, other choices, but we are seeing sometimes seven-year-old children on two or three amphetamines at a time. And it's not as if the dosage decreases, it just increases or they changed to another one. And that's not teaching the brain to function independently of itself. It's a compensatory strategy for disorganized brain. So using these types of protocols can help you understand how you can impact the entire brain and neurological system with some of these modalities.

Katie: And especially from home, that's also helpful for moms because it's not the driving back and forth to an office all the time or to appointments. You mentioned the word vestibular system, can you give us a little primer on what the vestibular system is and what it does?

Carol: Yes. The vestibular system is a primary building block of the central nervous system. It's right there at the very bottom of the pyramid of learning. It's the first one to develop in utero. And all other skills including speech, attention, and coordination are all dependent upon that solid foundation. In layman's terms, it could be your sense of balance or knowing where you are in space, but you have to be grounded and to be able to be to connect all these other sensory pieces and motor coordination and higher cognitive functioning skills to the vestibular system to function, sometimes with our friends on the spectrum, and they're very disorganized.

And an easy way to explain the vestibular system is they're very floaty, they walk on their toes, they're floating, their eyes aren't there, engaged with you, they're just floating around in space as if they haven't been grounded yet. And then once you start to give the input with some of these modalities such as the bone conduction and the sound frequencies that speak specifically to the vestibular apparatus inside the inner ear, it begins to ground them and they'll stand there and pick their head up and look at you, and it's if they've just arrived in the universe. And it's a fantastic process to sit there with a mom and say, "Oh, welcome, I'm so glad you made it." This individual may be three or four years old, but for whatever reason, it wasn't developed very well. And now it is, and now we can get to work and build more of it.

Katie: That makes sense, it's so cool. So I mentioned in your bio that you've actually seen people begin to have movement in limbs that were previously paralyzed. Can you explain how that works?

Carol: Yes. So I have two little friends both who had strokes in utero and were born with cerebral palsy. And so they definitely had one side of their body that was negatively impacted and the typical medical model, you know, they'll give you splints to help and build up the bottom of their shoe so that they can compensate for these deficits. But I hadn't seen anyone be able to return function, yet, until we started to use our modalities along with some of our protocols. the constraint-induced therapy where you take the functioning arm or leg and you put it in a cast. And then you dawn some of our modalities, which is stimulating the brain to make connections where there aren't any or they aren't there very well and we ask the individual to go through exercises and activities with the affected arm. We can have their arm try to make shapes and shaving cream, we can have them start to build large blocks. And it is forcing the brain to build those connections in the affected arm. And what we see is function returning.

I have beautiful videos of a mom who sent us pictures of her child when she brought her for swimming lessons. And to watch this child post-stroke in utero, and I mean, you know, that's deep in, you know, primitive human development was interrupted very strongly on multiple levels. And to watch this individual begin to use both sides of her arms to do the crawl across the pool and to kick both of her legs, it's amazing and astounding to watch. I know that these outcomes are there, we do it all day long, but to see it expressed in each individual is still so wonderful because it's unique to that individual, and you watch what it does for that human and for the family.

And then as they send us more pictures of that individual then being able to sit in a kayak and use both hands to paddle on the right and left side, those are the changes that are building hope for these families. And that if you're stuck or you're stagnated in where you are and you feel like you have no options, just reach out and know that there are changes out there that can be made and we're happy to connect you with the ones that will.

Katie: Wow. That reminds me that you mentioned the mirroring the arms and it may not be related but I'd love to have you talk about it. One of the times when I visited you in person, you talked about a test that you do with kids where you have them turn their feet outwards and their hands outward and then walk, and see if they could walk moving their feet without moving their hands. Can you explain why you do that and what it tells you?

Carol: Absolutely. It's a basic building block of the central nervous system for you to have reflex maturity. And as infants, we are all born with reflexes that help us survive outside of the womb. You have the rooting reflex where you brush an infant's cheek and they'll turn to breastfeed. You have the Babinski that's teaching you how to lift your leg to walk. But those are intended to be there for only a short period of time, and they should be integrated by year one. The trend, for whatever reason, is that we're seeing much older children and even adults who have these very infantile reflex patterns that are still present.

And you can imagine how infantile movement patterns will negatively impact everything from coordination, physical development, and emotion regulation. So, of course, any good therapist is gonna test for primitive retained reflexes in their therapy protocol. And what you're speaking of is specifically to test for the Moro reflex. It's very easy to do, you can do it in your own home. We have videos that we can share with you to show you how to do it. But essentially, you have the individual just stand with their arms loosey-goosey at their side and you take their toes and they go out to the side like the first position in ballet.

You ask the individual to walk forward about 15 feet and you're watching to see if the upper body imitates the lower body. If you have an integrated reflex, you should be able to walk with your toes out and your arms are just swinging forward by their side, you walk backwards. But if you still have a Moro reflex pattern, when you put your toes out, the hands come up and thumbs come out to the side and they begin in this full body contortion pattern trying to walk forwards and backwards. It's really quite striking to see and it can worry some families but we say it's okay, we just identify it, and then we have a protocol that can integrate it.

Once we integrate some of these infantile movement patterns, you will see a drastic improvement in bilateral coordination, ocular motor control, and emotional regulation. Because the Moro reflex is also known as the startle reflex, that's where that full body movement comes from. So when you had your infant on the bed and somebody dropped something and they would do that full body shake and startle, that's what essentially the individual is still stuck in, a full body movement pattern. And for evolved human development, you need to be able to separate your extremities from your core, your eyes from your head. And those infantile reflex patterns can constrict development significantly.

Katie: Got it. That makes sense. It's so cool that that's able to be rehabilitated.

This podcast is brought to you by Four Sigmatic. If you've tried their delicious coffees and elixirs you know just how delicious they are, and if you haven't, you are missing out! Four Sigmatic create superfood mushroom drinks that are easy to incorporate into your life. Their coffee packets, for instance, are easy to mix into hot or cold liquid, they taste amazing and have the added benefit of mushrooms like Lion's Mane, Chaga and Cordyceps to give your brain an extra boost and tone down the jitters. They have slightly less caffeine, but I find double the focus from that. As a quick tip, I like to mix their coffee packets into almond milk for a cold brew type taste. Studies continually show the benefits of these superfood medicinal mushrooms for brain health, immune health, and so much more. My favorite is the coffee with Lion's Mane in the morning for a smooth boost without the jitters of regular coffee and I also love their Reishi in the evening for amazing sleep. During the day, I'll often add in a cup of Chaga or Cordyceps for the immune and focus benefits. You can check out all four stigmatic products at foursigmatic.com/wellnessmama and save 15% with the code `wellnessmama`.

This episode is sponsored by Genexa- the first and only line of organic and non-GMO medicines with a homeopathic and traditional over-the-counter line. Created by two dads, I love all of their products and that with their patented system, they don't need artificial fillers, dyes, artificial sweeteners or preservatives. I keep their cold crush, flu fix and saline on hand for the first sign of sniffles in our house. I love that these are organic and can help ease the symptoms while still letting the body fight like it is supposed to. To shop their full line of organic and non-GMO medicines, go to Genexa.com/Wellnessmama and use code `WELLNESS` for 20% off your order.

Katie: And you mentioned that that's a test that parents can easily do at home with their own child. Walk us through a little bit more how you've been able to take these therapies that you also do in person at your location, but how you've been able to take those and reach parents all over the world and how you are able to work with them and still get the same results?

Carol: Well, we've taken the most powerful modalities and protocols and we ship it to the family in a box, and it comes to their home. We coordinate the opening of the box with one of our certified therapists. They help you open the box, they help you put the protocols together, they're very easy and simplistic to use. The evolution of technology has made all of this portable, and we give you the tips and the tricks of how to get started.

Then we follow you weekly with therapeutic appointments to keep you motivated on your listening program. And we customize this listening program by using an online tool called the "Measure of Foundational Abilities." This is a comprehensive online questionnaire that provides me with a very good summary of the state of your neurological system. The questionnaire differs for different ages, pre-school, grade school, adolescents, and adults. And from there we customize a listening program and help you to deliver it to yourself in your home through the hands of occupational therapists. We meet with you weekly, we will also do an essential skills screen that we can do via video conferencing. And the image comes up and we meet each other online, and we walk you through a series of exercises from ocular motor to some vestibular testing, to definitely those retained reflexes, we're always gonna test for that, and looking at your grasping pattern on your writing utensil.

So then we have very specific goals that we're gonna be able to achieve that are essential for function. And that customized listening program that you're listening to whether it's daily or three to four times a week is making those long standing changes in the brain coupled with the very specific protocols delivered by occupational therapists that is spring boarding the outcomes into a mass amount of outcomes that haven't been seen before. It's a beautiful pairing of modalities and skilled intervention.

Katie: I love that. And I think I'll make sure the links to that are in the show notes, or you can actually find the post we've written about it in the two podcasts by just Googling Wellness Mama and Brain Harmony together, those will come right up and links will be in the show notes as well. Also, I'd love to touch on another side of this because we've been focusing on the side of the person who's going through this experience or the child who has this thing that they're working through.

But I'd also love to talk about the mom or the parents and the family, because certainly this is not something that only affects one person. And I know I hear from moms who understandably are completely exhausted and overwhelmed with just the logistics of taking care of a child who has these things. I know you've worked with many of these people and also their caregivers, so can you give us some tips for how these moms can help pick themselves off the floor when they're probably also depressed and anxious, and they still have to do all of the things that go with being a mom like groceries and work and then they're still taking care of a child as well?

Carol: Yes. Care for the caregivers is a passion of mine. I'm sensitive to that. I have 2 children with autoimmune-based disorders, which meant that for probably about 4 years my husband and I were doing 24-hour medical care for about 4 years with 2 children under the age of 5. It was devastating financially, emotionally, spiritually. But from that experience drove my passion to deliver accessibility to care, of quality care, and deliver services to families to help get them off the floor.

So one of the things that helped me get off the floor definitely was connecting with a functional medicine physician. Because of the amount of stress we were under, I had blown out my adrenal glands, my thyroid levels were completely off. Which at the time, you can feel like it's a character flaw. You can feel as if it's because you're not good enough or because what's happened to you is too much for you. But what if your body is not producing the chemicals enough to make you feel good? What if you don't have the thyroid that gives you that energy level to be able to, you know, multi-step process to manage all of these things?

So I would encourage any caregiver to make sure that they're getting that type of support. There's lots of great functional medicine, your podcast, beautiful, beautiful people to connect you with that can help you in that regard. There's Dr. Lana and Dr. Leah at Docs Outside the Box, which is a holistic urgent care in St. Pete. They can get you feeling better from a chemical standpoint.

But what I wish I had access to, which I now give to all of my caregivers, is a tool called the Alpha-Stim. The Alpha-Stim generates a unique and patented wave form that once you take these little ear clips and clip them to your ears, it produces the alpha waves in the brain, which combat anxiety, insomnia, and depression. And it

is an instantaneous type of production in the brain. And the brain says, "Oh, wait a minute. This is what it feels like to feel good." And it's on a timer, you can do it for 20 minutes, 40 minutes, 60 minutes, you put the little contraption in your pocket and you get yourself up off of floor, and continue to do the things that you know you have to do. But you don't have to fight through the static and the exhaustion and the mental...static is a good word...where you have to fight so hard just to do basic function.

What's nice about a tool like this is that not only does it train the brain in that moment to be able to function better, it trains the brain to produce and recognize the alpha waves when you're not wearing the unit. So that means that you are...it's another neuroplastic brain training type of tool. This tool is also incredibly helpful...I wish I had it when I was in that dark space, but I'm glad I have it now...is that you can wear it during the day. But at nighttime, if you're having difficulty sleeping...I do like your chapter on, you know, the sleep detox, which I think is very important, in your book. But if that's not quite getting it for you, you can add this same tool and you knock up the dials a bit, and I fall asleep.

I wake up in the morning, the timer will turn off the unit when it's done, and I'll wake up in the morning. The ear clips are still on my ears, but I had fallen asleep and I did not have to take anything that would give me a hangover the next day. So that is another great, fantastic tool to show you that the neuroplasticity of the brain can be quickly achieved with small modalities that you can layer into your life that can get you up off that floor so you can call and connect with a functional medicine physician. And then, again, of course, to continue to connect and reach out for help for your child even if you feel like you haven't been able to find anything that works. There is always hope, and I believe that nothing is impossible becomes I see it every day.

Katie: Yeah, it's amazing. And, of course, all that is available at brainharmony.com, but I'll also put links to all the specific ones you mentioned so people can find those. And those will be in the show notes at wellnessmama.fm. I know a question some people may be wondering, and I know I asked you before, is for especially a mom who maybe has a child that's gonna through one of the struggles but also has neurotypical children, is can these things be beneficial to all children? Even those who don't have a diagnosed struggle, like could all kids who we like, you know, want to make sure their reading is on track or they're able to calm down, can all kids use these things?

Carol: Absolutely. There is usually an individual in the family unit that initiates the phone call to us. And once we get these tools and protocols inside the family's home, we encourage the family, all of the family, the caregivers, the mom, the dad, the sisters, the brothers, why not use these tools? There are the most powerful tools in the world, and can create lifelong connections and more robust development and optimal brain performance for you.

We're also seeing executives now contacting us because of the static and the stress, they don't have a specific diagnosis. They're just entrepreneurs and all that just, you know, the kind of pressure that can come with that. So we layer in these tools for them too, absolutely, the Alpha-Stim, the dream pad. For some, we can walk them through the safe and sound protocol, and then layer on these very customized listening program to help them function at the highest level possible. So you don't need to have a diagnosis or something negative, you could just have that feeling.

Because we don't want a family not to reach out for help because they don't have a diagnosis or they're scared because if they go to a physician that they might get a big scary one. And that's just delaying care. That's just stagnating the development for the entire family. We can start just with very benign type things such as lack of full speech development, or lack of attention, or poor regulation. Those aren't scary, those are just concrete things that you see in everyday life.

You roll these tools in the privacy of your own home with licensed therapists. And you watch as an individual begins to organize and to feel better and to function better. And that's when we get to see more of that unique individual that they're intended to be and they can find their purpose. So we definitely suggest that the caregivers do their listening because they've been carrying the deficits or the injuries and illnesses of their family unit, and they can be in as much distress as the people they are caring for. So together, they all move into a new chapter of function and better communication with each other.

Katie: It's so cool. I can't believe our time has flown by again. I think we'll have to make this...we'll have to have you back on again for a third time because I have still so many more questions. But a few I wanted to make sure we got in before the end that I love to ask are, is there a book that's really changed your life and why?

Carol: Yes. It's definitely "The Brain That Changes Itself," and that one, it's just fantastic. The way that he explains and walks through the evolution of neuroplasticity and the friction that a lot of these neuroplasticians were fighting off very early in medicine as they began to create these changes in the brain. And the typical medical model said, "No, you're wrong that can't happen. That shouldn't happen. We don't have the science that says it happens so it's not happening."

So it tells you about their stories of triumph through that. And all along the time, you know, it really does spark as he goes through different ones. One, a story about a woman whose vestibular system, again, we all just learned about that, your sense of balance, was completely disrupted after a series of antibiotics. And she was completely disoriented and disabled, felt like she was falling through the floor, couldn't stand, could walk, of course, she can't work, you can't care for yourself. It's a terrifying state to be, and then how they retrained her vestibular system through input through her tongue.

And he also talks about a physician post-stroke, how he returned to function by rehabilitating his brain with neuroplastic ideas. So it is beautiful stories that include hope and really sparks the interest in, hey, neuroplastic tools are something that can change your life. And it encourages...he speaks about integrated listening systems in his book. They are the pioneers, Dr. Minson, Kate Minson, and Dr. Porges, they have packaged these neuroplastic tools in such a way that we as therapists and as the specialists can deliver them to you in your home.

So it's very exciting and I'm hoping to add my own, you know, stories that we're experiencing in our clinics and in our home programs to continue to motivate families to not feel that that's all there is to their development, that there's so much more, and development can go on your entire life. Even into your 70s and 80s, you can continue to gain and retrain your brain for function.

Katie: Absolutely. Also, what are a few areas that you feel like are not well understood or misunderstood about your area of expertise?

Carol: Well, that we can do what we are doing. The physicians don't know. Now, the ones around here where I live, they're learning. They're learning because families come in and they complain of these issues, attention, behavior, learning, different scary diagnoses. And the physicians say, "Well, okay, you can try this OT." So they come to us and they start working through these programs. But it's not like anything that the family or the community or the world has ever seen. And then they go back to this physician, and the physician is like, "Wait a minute, what?" Like look at this person, you can see it clinically when they walk in, from their balance to their eye contact to their social skills. And then, of course, when the parents are bringing in the standardized assessments of academics, then the physicians begin to refer clients to us because they've seen it firsthand.

But there's a whole world out there where the physicians don't know about us, don't know about what's happening. But that's what's so wonderful about your podcast and what you do is because you're collecting not only practitioners such as myself, but all kinds of different areas and giving the families access and the power to be advocates for themselves, to find out what's gonna work for them, and to start getting to work to heal and recover because it's out there regardless of age and regardless of diagnoses.

Katie: And lastly, if there was one piece of advice you could spread far and wide, maybe especially to families who are working through this, what would it be and why?

Carol: If you feel that everything may have been stripped away, that you may have been forsaken, that you can't find a way out, it could be time to look into finding a spiritual base or a spiritual purpose. It can help you through those dark times and help you find what you need to get up off the floor, to reach out for help. Help is out there, and sometimes when you feel like everything has been lost, you can still have this faith that can pull you through and give you purpose in your suffering.

Katie: I love that. Carol, this time has flown by. Like I said, we'll have to do it again. But thank you so much for sharing and teaching today and for your mission and all that you're doing to help families.

Carol: Thank you so much, Katie. It's been a fantastic experience knowing and working with you, and I look forward to many more times together.

Katie: Likewise. And thank you, as always, to all of you for sharing your most valuable gift and your time with us today. We are very grateful for you and that you chose to spend time with us. And I hope that you'll 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.