



Episode 457: Rachel Harrington on Understanding
and Navigating Sensory Processing Challenges
in Our Kids

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Hello, and welcome to the "Wellness Mama" podcast. I'm Katie from wellnessmama.com and wellnesse.com. It's my new personal care line, Wellnesse with an E on the end. This episode is all about sensory processing. I hear a lot about this from you guys. It's obviously something being talked about much more across a lot of areas of expertise right now. And I wanted to have someone on who was really effective in actually helping families find solutions. And today, that's what we go deep on. I'm here with Rachel Harrington, who is a pediatric certified occupational therapy assistant who works with children with different abilities to learn to feel confident in their own skin. And she began her own sensory journey by designing these little weighted vests that allowed kids to regulate their sensory needs while still fitting in with their friends.

And she's the co-host of the "All Things Sensory" podcast with Harkla, which aims to educate and equip parents, therapists, and educators with the tools and information to understand sensory integration. This is a topic that's definitely on the rise. And the good news that we find out and delve into today is that there are some simple strategies that are also great for our kids and other ways that we can incorporate as parents and as educators that can help our kids have a really solid start in this area and also help them to integrate and work through if some of these challenges already exist. Lots and lots of practical information in this episode. So let's jump in. Rachel, welcome to the podcast.

Rachel: Hi, Katie. Thanks for having me.

Katie: I'm excited to chat with you today because I get a lot of questions on this topic. And I don't have a lot of direct experience. And it seems like this is something that is potentially impacting a lot of people listening and their families. So, we know we're gonna go in a lot of different, really specific directions, but to start broad, walk us through what is sensory processing and why this is so important.

Rachel: Oh, my goodness. Okay, sensory processing, in a nutshell, is basically when a child is working on figuring out how to process the world. And you have your sensory system, everyone has a sensory system. And we all have to process and modulate the input coming in from the world as well as internally.

Now, if we can't process those messages, if they are getting a traffic jam or if they are getting lost, then it's going to make daily functioning very challenging. And even if it doesn't make it very challenging, sensory processing challenges can make it difficult to get through your daily activities, just with ease. And our goal is to have just a well-modulated child or ourselves being well-modulated. And if we have some sensory processing challenges, if those messages aren't getting where they need to be as efficiently as possible, that's going to make your life a little bit harder.

Katie: So it seems like these are definitely things that are on the rise. Any idea why we're seeing a rise? Is it more that we're having more awareness of it now or are there factors that are contributing to an increase in these?

Rachel: Yeah, so I think it's kind of a combination of a lot of things going on. You know, it's very genetic. And so, as I'm working with kiddos, and I'm talking with a family about these specific sensory challenges, the family members are usually like, "Oh, well, I struggle with this too." And we usually have that aha moment where, as an adult, you know, as a functioning adult, we don't necessarily realize that we have these challenges until they're brought up, because we can typically push them under the door and we can typically get through our day fine. But as we have a kiddo who might struggle more, you know, not only genetics, but I'm thinking toxins in the environment, and genetics, and epigenetics, and trauma is a big one as well, especially with birth trauma, I think it's kind of a perfect storm with these kiddos.

And we get a kiddo that has all of these different, you know... I like to talk about as their cup, their cup gets full, and all these different traumas and toxins, and you have genetics in there. And then it's the whole explosion and then you have this child with severe challenges. So, it's a little bit of everything. And I do think that we are recognizing it a little bit more. And we can talk about this a little bit later too, but it definitely goes hand in hand with other diagnoses as well. It's definitely a comorbidity with other bigger diagnoses. And I do think that sometimes it is misdiagnosed as possibly anxiety sometimes or it could go along with anxiety, and it definitely goes hand in hand with autism. Definitely misdiagnosed sometimes as ADHD for some of our sensory seekers. So, I think we have to take the whole child into play and look at the whole situation for sure.

Katie: And when we're talking about sensory challenges, what specifically does this look like? I'm sure there's a personalized aspect, and it's gonna vary from person to person, but what might be some of the things we would see?

Rachel: Yes. So off the top of my head, the most common things we see are kiddos who seek input. So maybe they are seeking movement, they're moving constantly. They seek smells and touches. They wanna touch everything. They're almost like the bull in the china shop. They might seek movement and hugs more and they wanna crash and jump on everything. They're going to be spinning constantly. They're going to crave different flavors like sour flavors, and salty, and sweet, and spicy.

And then on the opposite side, we have kiddos who struggle with... Like, they have too big of a reaction to certain sensory mediums. So they're going to avoid movement, any time their head, you know, is in a different position, they're gonna get uncomfortable. As babies maybe they didn't like being thrown in the air or maybe they were colicky. I think that's a big one that we see. And maybe these kiddos are really picky eaters. They struggle with tolerating new, like, flavors and new textures. Oftentimes, they are avoidant of clothing textures. They really dislike getting their hands messy, their face messy. They're gonna struggle with body awareness.

So it's a whole spectrum of different things that we can see. Kiddos can be over-responsive or, you know, they're just over-reactive to certain input, but then under-responsive or seeking other input as well. So it can be a whole mixture of things as well. It's not just you're over-responsive or you're under-responsive. And I think that's what gets people confused a lot of the time.

Katie: And it sounds like this exists very much on a spectrum without, like, very clear black and white, like, "Oh, you know, we can't run a blood test for this to figure out this is exactly what you have." So I would guess there's very much an element of parent reporting, and the parents and caregivers being the ones to kind of figure this out. Is that usually what happens as the parents are the ones coming in realizing there's a problem versus it coming from a medical diagnosis?

Rachel: Yes. So, unfortunately, it's not recognized as an actual diagnosis, a standalone diagnosis by itself. But we see parents, we see schools, teachers as well, those are oftentimes where we will first get like on the radar. Pediatricians sometimes will catch it as well. It's not as common for pediatricians. As far as I've seen, there are definitely exceptions for sure. But it always seems to be the parent bringing it up to the pediatrician, like, hey, let's get this looked at. Let's maybe get them into early intervention because that early intervention is key. But definitely, schools and teachers will be able to say, "Hey, let's notice these things." You know, "Your kiddo is struggling to sit and focus more than the other kiddos" and things like that.

Katie: What are some of those early interventions when it's noticed that a child has some of these signs?

Rachel: Yeah, so the biggest thing is getting them into occupational therapy and recognizing, what is the child struggling with most? How can we modify what's going on? How can we adapt to get an appropriate adaptive response? And then working on just desensitizing if they are over-responsive to certain things, desensitizing...just getting them more input, getting them on a sensory diet. You know, babies can actually benefit from sensory diets as well. And I think that's so important to recognize that we all have that sensory system and we all need to be providing our bodies with a sensory-rich environment.

And so, it typically will start with occupational therapy. And the more intensive therapy we can get for these little kiddos, the better. But even for an older kiddo who gets diagnosed maybe at six or seven, and they're in school, and they're really struggling, OT is gonna be huge, but also so much of it consists of parents carrying over those strategies into the home school community environment. One or two days of therapy a week isn't gonna make a huge difference. You're definitely gonna learn a lot of skills to carry over but implementing those strategies everywhere is gonna make the biggest difference for these kiddos.

Katie: That makes sense. And you mentioned diet being a factor. And with my background in nutrition, I definitely always, kind of, default to, like, let's address diet and lifestyle factors too. What are some of the things that are recognized, that are helpful in a sensory capacity when it comes to diet?

Rachel: Okay. So this is gonna sound a little bit weird, but as far as a diet, I wouldn't necessarily go as far as changing the entire diet. I always recommend gluten-free, dairy-free, soy-free, diet-free, fun-free. That's what I always say for these kiddos. But as far as like a sensory diet for eating, the biggest thing is the different textures of food. So, a kiddo who might seek more input, we're going to give them chewy foods, we're gonna give them crunchy food, something that has more resistance so they can get more input, especially for our kiddos who are maybe oral seekers.

For our kiddos who are struggling to process food in their mouth, we're gonna do more vibration in their mouth and more awareness activities. We're gonna do more messy play food activities. So we're gonna let our kids get messy when they're learning to eat as babies. We're gonna let them get messy and just share with them that it's okay to get messy and we can wash our hands. But it provokes so much anxiety for those kiddos, especially at the first like cake smash. You know, that's like a big monument when you have a cake smash and then you have kiddos who won't get their hands messy. They refuse to touch the cake.

And that, to me, is a big sign that there's something else going on. But as far as diets and foods, we're gonna give a wide variety of flavors, salty, sweet, spicy, sour, different, like, textures like I mentioned, warm foods, cold foods. Those cold foods definitely wake the mouth up a little bit more. Not necessarily ice cream but, like, smoothies and slushies and, like, crushed ice and things they can get more input from. Those warm foods are gonna be a little bit better for, like, interoceptive input and, like, where their body is in space and, kind of, grounding them a little bit more. So it's kind of a whole mixture of things. It's not necessarily the food that they're eating, but it's the type of food and all the sensory properties of the food.

Katie: Got it. So avoiding the, kind of, most inflammatory foods, which is also my recommendation across the board is, like, let's get the best chance at no inflammation.

Rachel: Absolutely.

Katie: Yeah, the texture component is new. I don't think that's a thing... I definitely haven't thought of, as a parent, of like, "Oh, I should give a variety of textures of food. So interesting. So, I know we're talking about this mostly in a capacity of children, I'm curious, does this change over time, especially with intervention? In other words, can children grow out of it or at least learn to manage it well? And some follow-up to that, but can kids grow out of it?

Rachel: Yeah. So the goal is to teach the child... I always say that the goal is to teach the child to grow into it as best they can. We wanna teach them to recognize their environment, we wanna teach them that there are modifications that can be made, we wanna teach them how to properly modulate their own sensory system. And they're not necessarily gonna grow out of it, but we're gonna help them grow into it. And we're gonna teach them the things that they need to do in order to get through their life as easy and as enjoyable as possible. That's kind of the beauty of occupational therapy is, you know, living your best life. And so, with sensory processing challenges, we're not gonna grow out of it but we are going to do our best to help everyone learn to grow into it as best they can.

Katie: What about for adults? Because you mentioned when you work with families or QVC families and then the adults realize they have some of these things as well, that they probably never addressed? So what happens when an adult starts realizing that they've got maybe some sensory things?

Rachel: Oh, that's my favorite part. Because for me, I've learned so much about my sensory system and how many challenges I have. And yes, it can make things a little bit more challenging but I know what's a trigger for me, I know that I'm gonna get really mad if the TV is on, if the baby is crying, if someone's trying to have a conversation with me. So I know how to process that input. And I know what to do in order to successfully get through that without, like, "having a meltdown." Right? So that's the goal is if we can realize we have these triggers, we have these sensory challenges, we can be able to avoid meltdowns. We can avoid anger, aggression, emotional outbursts, by knowing what our triggers are and what's hard for us.

I don't recommend avoiding these sensory challenges altogether. I always say if we can, you know, practice them more and have more exposure and more experience, then it will get easier. It's not the case for everybody. But if we completely avoid this input that's hard for us, we're never going to get better at processing it. So for adults, I say, learn as much as you can. There are lots of sensory checklists out there that you can do and you can, kind of, get an idea of where you're over-responsive, where you're under-responsive. And then you can start implementing different strategies to make a difference.

So, for me, auditory is a big one that I struggle with. And it's definitely gotten worse after pregnancy, which is crazy. But I do this program called the listening program, it's by Advanced Brain Technologies. And it works from the inside out. And I think that's really important, as well as nutrition. It works from the inside out and it helps your brain have more of a positive adaptive response to the sensory input, as well as emotional communication and all of those underlying skills.

Katie: That makes complete sense. And when you mentioned the auditory thing, I think I would probably have misophonia and be diagnosed with chewing and certain sounds. And that definitely got worse after pregnancy, as did some things. Like I don't like being upside down.

Rachel: Yes. So here's the weird thing. Let me just tell you what's weird about that. So, I also had a lot of vestibular challenges. So I struggled with motion sickness quite a lot as an adult, as a child. After I got pregnant, after I had my kiddo, I can ride in the backseat of the car, I can go on the curvy roads and I don't get carsick. And I think after your body goes through that wild change, your sensory system changes as well. And like you said, you struggle with going upside down and movement, but I'm sure there are other things that you've noticed as well, maybe with the misophonia, if it's gotten worse or if it's gotten any better, if you've just been able to recognize it more. But it definitely changes after your body goes through all of that trauma.

Katie: That's fascinating. And from what I've heard from past podcast guests, it seems like there's very much like a vestibular connection. And I think you touched on this a little bit. Can you help me understand what's going on with the vestibular system when there are challenges, and then maybe how some of these things are helping change that?

Rachel: Yes, so the vestibular system helps us recognize where our body is in space. So if we get a head position change, if we're spinning, if we're bending down to put our shoes on, if we're looking up over our head, that's gonna trigger our vestibular system to say, "Oh, okay, this is where I am. I need to right myself and be able to balance and stand up straight so I don't fall over. And if we have challenges with that, a lot of times we'll see, for someone who is over-responsive or they're may be having an overreaction or they're more sensitive to vestibular input, we're gonna see more challenges with movement, carsickness, motion sickness all in general, balance challenges.

Our visual system, our auditory system is connected because of those vestibular receptors that are in our inner ears. We're gonna see challenges with visual-vestibular integration, which is being able to track your eyes and track maybe a ball coming towards you. Or you're sitting in a car and you're watching the cars go by, as you're about to make a turn, knowing how long you have to make that turn before the car comes. So that's more of, like, a functional approach. But for kiddos, oftentimes, we'll see kiddos who are seeking that vestibular input and they want more input in order to feel normal. So they're going to do somersaults, they're going to spin, they're going to run and jump. And those are the kiddos who oftentimes are labeled as the bad kids in school, unfortunately.

I'm trying to change that. But these are the kids who are on the go and they need that extra input in order to just sit like you and I are now. We're able to sit and focus and have a conversation. And those kids can't do that without that added input. And then we have the kiddos on the other side who are avoiding vestibular input and they're uncomfortable when their feet move the ground. And, you know, if they're swinging on a swing, they're gonna freak out when their mom or dad pushes them too high. And we have to be able to recognize that and not push them, and that's gonna cause even more challenges. But it's a wide variety. And that vestibular system causes so many challenges in a lot of different ways.

Katie: And when you're talking about these things that, you know, kids liking to somersault and run and climb, like, to me, as a mom, I'm like those should be the, you know, natural activities that children want to do. And so, I'm curious, is there an optimal aspect of this? Like, is there a chance that in modern society, kids are also not getting enough of those inputs that they just naturally should be getting? And so it's not so much that this is, like, a diagnosable problem so much as a societal problem, like we're not letting our kids have access to a wide enough range of vestibular inputs at a young age?

Rachel: Yes, you hit the nail on the head. Yes, absolutely. So like you said, from the beginning, it starts with babies who are in swings, you know, that same linear motion. They're in swings, they have to be rocked to sleep, they need that movement to sleep. You know, we didn't have that. When I was kid, when you were a kid, those things were very few and far between. So we had to get input by rolling on the floor and being held and carried and we had packs. And then as kids grow up, they're outside climbing trees, they're running, they're on merry-go-rounds, they're swinging, they're climbing, they're jumping, they're playing with their friends outside.

And nowadays, there's so many more screens. I don't hate, just screens they cause a lot of these challenges for these kiddos. They are sedentary, and they're not outside climbing. And parents even these days are more hesitant to let their child climb a tree, or, you know, go to the park by themselves and get crazy and get wild and experiment with their body. But so much of the sensory processing, the natural sensory input is gonna help their body learn to have those appropriate adaptive responses. And so if these kiddos aren't having those...you know, they're not climbing up the slide and hanging off the monkey bars upside down, you know... Parents these days we're like, "Oh, no, be careful. Don't get hurt."

But that's so important for these kiddos to learn and to fall down and to get back up and realize, "Well, shoot that really hurt. I'm probably gonna have to do something different or I'm gonna have to practice more so I can get stronger and be able to do that." So it's definitely changed. It's definitely environmental and a societal challenge these days. So to kiddos, get outside and let them fall down and get hurt. And I always say get them out of containers as often as you can, as babies. Let them move, and play, and roll on the ground. And ideally, we'll see a lot less of the sensory processing challenges as they grow up. But there's no one solution for this, unfortunately.

Katie: That makes sense. But it also does make a lot of sense that...because these are things that historically have happened. Like throughout history, kids have been let out to play a lot more than they are now. And I've talked about that, where we're seeing really dramatic changes and how much, like you said, kids are on

screens, how much they're inside. There's so much more that happens in those vestibular inputs. I'm a huge fan of my kids, for instance, being barefoot outside as much as possible, like that's a huge priority in our house. And so I'm, like, very anti shoes, especially in our house, in our neighborhood, backyard, just because they're getting all that input from the ground, from interacting with the ground. And I don't think parents always realize, like, there's a very direct connection to the brain.

Rachel. Yes. Yes. And I mean when kiddos are barefoot, when adults are barefoot, you're getting a ton of proprioceptive input, so you're learning where your body is. Proprioceptive input is like the very grounding, grounding input, as well as tactile input. So I always say, first thing in the morning, if you can wake up and go outside and walk around barefoot in wet grass, it's like drinking a cup of coffee. Like, it's gonna wake your system up, you're gonna be ready to rock and roll. And 9 times out of 10 our kiddos these days are gonna be like, "Oh my gosh, what is this? I can't handle it. This is so uncomfortable." But the more we do it, the easier it will get and the better it will get as well.

Katie: And any other suggestions for just setting up...? I'm also big environment, like, don't change the child, change the environment. If we're setting up a good environment that just puts things in their way to give them chances for this. Like, some examples in our house, we have a gymnastics mat down our hallway so they can do flips down the hall. We have yoga swings in all their rooms and gymnastics rings so that they can balance on, like those little surf trainers, things like that. But are there any suggestions for, like, whether it be outdoor environment, indoor environment, just ways we can put things in our kids' way to help with this?

Rachel: Oh my gosh, I could cry hearing that you have all those things in your house. That's amazing. Oh, if everyone could have those things, it would be fantastic but I realize that isn't a goal in everyone's household and it's not available. I'm a big proponent of obstacle courses. So using couch cushions, using chairs with pillows and blankets, and setting up obstacle courses where you have a function. So you're gonna put a puzzle on one side of the obstacle course, your child has to do a cartwheel or a somersault over the couch cushions on the floor, they have to crawl through the tunnel, they have to do 10 jumping jacks, grab one piece of the puzzle, and then go back through the obstacle course. Those are fantastic.

Animal walks are great. I always suggest doing animal walks to transition to mealtime or to bedtime. Using visuals are really helpful for these kiddos as well. I know it's not necessarily an environmental change but if you have schedules and visuals up to let these kiddos realize what's next, what's expected of them, that's really helpful. But honestly, just getting outside, getting that natural input, I would say put your sensory goggles on, you have eight different sensory systems. So if we can recognize, you know, when a kiddo is outside and they're playing with rocks, you know, what input are they getting? Are they feeling the rocks? Are they holding them in their hands? They're very heavy. Just going outside, getting that natural input. Even indoors, set up your obstacle courses. Just include a wide variety of sensory input throughout the day. Think of movement, think of sound, think of taste. Think of touch, textures, and things to touch. Just increasing the sensory input that a child is getting throughout their day is a big environmental change we can do.

Katie: Is there a sleep component with this as well? Like, do we see sleep challenges in people with sensory processing struggles and/or, like, are there things we can do during sleep to help optimize for the day ahead?

Because I know like so much happens in especially deep sleep with cerebrospinal fluid and brain health. But how does sleep play into this?

Rachel: So it's almost the, what came first, the chicken or the egg? Is the kiddos struggling with sleep because they have sensory processing challenges or are the sensory processing challenges making sleep difficult? So, first thing that comes to mind, a child's laying in bed, whether they have clothes on, whether they're in their underwear, however they're sleeping, they have the sheets and they have the blankets that they have to process. You know, typically, we can't... We're wearing clothes and our body, and our brain, they don't realize that we're wearing clothes. But for a kiddo who has sensory processing challenges, they're going to recognize the sheets on them. They're going to recognize... Every time they turn, maybe it'll wake them up because it's going to elicit that vestibular input and they're gonna turn and get that motion, and it's gonna wake them up out of their sleep.

So, is it what came first? Are they having a hard time sleeping because of that sensory challenge or the other way around? It's hard to say. But I would say as much deep pressure and proprioceptive input you can have before bed, in bed, is going to be really regulating for the nervous system. So things like compression sheets, weighted blankets, can be really helpful, doing animal walks, bear walks, steamroller, massages before bed, warm bubble baths, prepping that environment like we talked about before. That is gonna be really helpful for these kiddos, just to prepare their nervous system to sleep.

And for kiddos who struggle with sounds, maybe putting a noise machine in the background. There's a lot of different modifications that you can make. Classical music, the listening program is a great one to incorporate as well to help sleep and to help prep for sleep, and to make sleep a little bit easier. But if a kiddo is struggling to sleep at night and they're not getting good quality of sleep, then I feel like we're gonna have more intense sensory challenges throughout the day. So, figuring out sleep is a big part of having a more well-rounded child, for sure.

Katie: And I'd love to understand more with the weighted blankets. Because this have definitely gotten really popular lately, and my kids have a couple of them and they really enjoy it. And it does seem to improve how long they're sleeping. I don't think they have really, like, specific sensory things that I would point toward, but it does seem to improve their sleep. And I guess in my head, I've always thought of it kind of, like... My third child was a preemie and he was in the NICU. And when we were finally able to visit him, they told us like, "Don't gently touch him." Like, your instinct as a parent is gonna be to gently touch him, but it's too much for his nervous system. So you wanna like just put a hand on him and not move it, but just let him feel that you're there, feel the weight of your hand, but don't overstimulate him. And so I'm guessing, is that kind of the same idea we're talking about with weighted blankets? It's like that calm pressure on the nervous system?

Rachel: Yes, absolutely. Yes. So those weighted blankets do provide that deep proprioceptive input. And the light touch, like the doctors were saying, is very noxious. So it's very hard for people to process that light touch. That's why a lot of kids struggle with, like, just using one sheet at night in the summertime and they

don't have the heavy comfort around their bed. So, those weighted blankets are fantastic, not only for kiddos and people who struggle with sensory processing challenges but for people who, you know, maybe just need a little extra input throughout the day.

And the cool thing about weighted blankets is there's a lot of different ways that you can use them. You can lay them over the body, just like you would a regular blanket or you can roll them up and put them next to yourself or your child for, like, that input that they can push against and they can feel as well. That grounding proprioceptive input, it's the most organizing input that you can get. And so, it's always a go-to. But some kiddos struggle to process that deep, deep pressure if they're rolling and they're moving out from under it every night. So that's why I say a compression sheet is a great alternative because it's like a lycra compression sheet that goes over the bed and they can push against it. It's constant deep pressure. They can crawl under it. They can crawl out of it on their own. So it's a great alternative for kiddos who maybe can't tolerate that deep pressure, but they can just get that same proprioceptive input in just a different format.

Katie: You've used that word proprioceptive now a few times and I think, like, you've definitely hinted that kind of the explanation of what it means. But just for anybody who's not familiar with that term, can you give us, like, a hard definition of what proprioceptive means and what would be, kind of, the range of things that would provide that kind of feedback?

Rachel: Yes, it is my all-time favorite sense. It is grounding. We have receptors in our joints and muscles and tendons. And it kind of helps to tell us where our body is in space. So typically, people aren't over-responsive to proprioceptive input. People are generally under-responsive, so they need more input. They aren't having those over-reactions to that deep pressure input. And it helps our body recognize where it is in space. And so, all of that deep pressure, joint compressions, massage, weighted items, those are going to help our body recognize where we are in space. And so, often these kiddos with sensory processing challenges, they could feel like they're floating out of their chair, they fall out of their chairs at school. So when we give them more input, like a weighted vest, or a lap pad, something like that, it's gonna help them recognize, "Oh, this is where I am. This is how I feel. This is where my body is. And let me now carry on and I can focus on a different task." So that's kind of proprioceptive input in a nutshell.

Katie: Are there things we can do, even if we don't think our kids maybe have a specific challenge related to this, that just help...or when they're very, very young, to foster healthy sensory development and hopefully avoid some of these issues?

Rachel: Yes, there's so many different things. Honestly, natural movement is going to be the biggest thing for these kiddos from the start. So getting them on the floor, tummy time, rolling, laying on their back, laying on their side. They're gonna work on integrating their primitive reflexes from the start, on the ground, free play, not in a container, not in, like, a bouncer or a jumper and things like that. But that free movement is the best way to work on that sensory input, as well as, like I said, providing a wide variety of sensory input every day.

If we shield our babies from the blender or the vacuum, then as they grow up, they're gonna say, "Oh my gosh, what is that noise? I don't like it because I'm not used to it." But if we can prep them and say, "Hey, I'm gonna..." It sounds weird talking to your baby, but they understand more than we give them credit for. But if we showed them, "Hey, I'm gonna turn the vacuum on," they may startle, they may have a little bit of an overreaction. We turn it off. We talk them through it. Turn it on again. So, if we prep these kiddos for this novel sensory input, if we can get them through this input as babies and young children, the likelihood of them having a challenge processing it later on, it goes down a little bit. But it's a neurological condition so we can't avoid everything just by implementing more as a baby. But we can definitely help them modulate the input a little bit better, the more that we are providing them.

Katie: Gotcha. And that goes back to some of the things we talked about too about setting up their environment so that it's just a natural part of their day. And I would guess, also, like, even with early feeding, like the textures of food, and letting them... I don't know if this directly applies to sensory issues but I'm a big fan of when they're young, letting them learn to feed themselves, even if it's not efficient at first, like, putting things on their tray and letting them, kind of, struggle and not be able to do it at first because they're getting that connection by learning.

Rachel: Yes, absolutely. I refuse to feed my child from a spoon. I will pre-load the spoon. I'll put the food on the spoon and let him bring it to his mouth. If he misses, that's fine. He's gonna learn the next time, "Oh, that's not where my mouth is, that's my cheek. And so I'm gonna hit the target next time." As well as finger foods. And as long as they're getting messy and they're getting their hands messy, they're exploring that texture. I always like to do vibration for little ones too because that vibration is a lot of tap talent proprioceptive input, which is so helpful for these kiddos to learn where their mouth is, where their tongue is, their cheeks are until we can get that input.

From a young age, that's gonna be helpful. I also like to just get inside the baby's mouth. So, my little one, you know, he was a month old, and I start putting my finger in his mouth and touching his gums and his cheeks and his tongue so he can recognize, "Oh, I have, you know, other things in my mouth that I have to move and feel." And that's really helpful for babies to prep them for feeding solids, prep them for just being able to tolerate different things in their mouth, different textures, different foods. So, definitely a proponent of self-feeding and learning through making mistakes and getting messy.

Katie: I love the idea of letting them get messy, letting them get dirty. I'm a big, big proponent of everybody having a garden in whatever way possible, even if it's a container garden on the balcony, but letting kids get in the dirt. Like from the nutritional side, there's so many cool things that happen when we interact with obviously a clean source of dirt. But from the bacterial side and the microbiome side to the way our bodies creating iron..and there's so many, like, nutritional and complex pathways there, but it sounds like there's also a very real, like, vestibular and sensory integration that's happening when we interact with our environment in ways like getting dirty. And that's the thing that they're learning to process early, hopefully, right?

Rachel: Yes, absolutely. I love that. And it is, it's so important for these kiddos to play in dirt. And there is definitely a lot of research behind therapeutic gardening for older kiddos as well and adults. And I don't

typically think about it from a microbiome standpoint, but that's huge. And that will make a big difference, especially in that gut-brain health for these kiddos who probably already have a hard time processing that as it begins. So, that's fantastic. I love that.

Katie: Yeah, it's more and more... Like, just we've learned so much about health and I feel like there's all these really cool, like, cutting edge therapies and they can feel so exciting and trendy. But also, it can be very expensive and complicated. And I always just go back to the idea that it's so often subtractive not additive and that so much of these things, it's going back to how we used to be. And I know they talk about that in diet, of getting back to a cleaner diet, but certainly also how kids used to play, how adults used to play. And I love the topic of play, it's actually been a recurring topic on this podcast recently. And you've made a strong case for the sensory and vestibular reasons behind unstructured play and even, like, getting upside down, climbing things. I'm curious, can these things still be effective as effective for older children and or adults? Like, I'm thinking for myself, like, can I train my vestibular system to, like, being upside down again?

Rachel: Yes, absolutely. I think the more we can do it, the better. And it will be hard at first. But there are a couple of different strategies, especially with the vestibular system. So if a kiddo, maybe they're 10 and they're working on this, and they're going upside down, they're hanging upside down from the monkey bars, and they're getting really dizzy or nauseous or angry... That always happens to me when I spin I get angry afterwards. But if we can follow that input with proprioceptive input, then it's going to help calm and ground the nervous system. So a simple way is to just suck the tongue to the roof of the mouth.

You know, if you're driving in the car and you're getting motion sickness if you can just suck that tongue to the roof of your mouth, push it, give your body some input. There, you've got some really powerful nerves up there that are gonna get stimulated and that's gonna help, kind of, override that over-reaction to the vestibular input. So, a big part of implementing these different activities is knowing how to, kind of, ground your nervous system afterwards so you don't struggle with, you know, processing this input for the rest of the day.

I kind of think of it as a sandwich too. So if we start with proprioceptive input, we do that challenging vestibular tactile auditory activity and then we follow with some more proprioceptive input, then we're gonna have a much better job of processing that input going down the road, and our body is going to recognize, "Oh, okay, I'm safe. I'm not in that fight or flight response. I'm calm. Now I can carry on with my day."

Katie: Okay, so you just mentioned fight or flight. I'm guessing then there's also a sympathetic, parasympathetic aspect to the sensory challenges. So if someone's not getting enough input or too much input, is that keeping them in a sympathetic nervous system state at times or could it? And so, this is also like those proprioceptive inputs are helping the body regulate down back into parasympathetic?

Rachel: Yes. So these kiddos, they can be in that fight or flight state, and that kind of work comes along with the primitive reflex integration as well. So if these people have...people, kids, adults, if we have these retained

primitive reflexes, we can be in that fight or flight state. We can, in addition, to have those sensory processing challenges... It's all connected. And I think if we can recognize and empathize with these kiddos who are having these big reactions to what we might see as, you know, not a big deal, if we can recognize, "Hey, they might be in that fight or flight state right now, let's provide some more input to get them grounded so they can get out of that fight or flight state," which it's not gonna happen overnight. It's gonna take a while for them to learn to have those adaptive responses to get out of that fight or flight state.

But the ultimate goal is to get them out and to get them processing it. So if we can work on reflex integration, I know we didn't touch on it a ton, but it's a big part of sensory processing challenges. If we can get those reflexes to go away so they can have those higher brain level functions, their brain to be a little bit more mature, then they're going to be able to get out of that fight or flight and they're gonna be able to have a more adaptive response to different input.

Katie: Let's go a little deeper on that than the reflex integration. What does that look like at different developmental phases and/or even for older kids and adults maybe?

Rachel: Yes. So when you have a primitive reflex, you have a reflex that you're born with, they start in utero and they're supposed to go away. And they don't go away for whatever reason. There's a lot of different reasons why. It could be birth trauma, it could be the way that you're born, it could be toxins, it could be genetics. It could be just a ton of different factors. But if you hold on to those reflexes, your brain isn't going to mature as it normally and as it should from a biological standpoint, right? If you're not able to go through those developmental milestones, those patterns, you know, you start on your back, your tummy and you're rolling, and you're crawling, and you're walking.

If you're not going through those patterns, then likely your primitive reflexes aren't going to get integrated in that normal way. And so, as we have those retained reflexes, it's going to cause a lot of different learning motor challenges as well. So, I always say you can get misdiagnosed with things like anxiety because you're going to be in that fight or flight state if you have a routine motor reflex, that startle reflex, right? You're going to maybe have some learning difficulties. When people have a retained ATNR, asymmetrical tonic neck reflex, you're gonna struggle with reading and writing, and being able to identify your left versus your right.

For a Spinal Galant Reflex, we oftentimes see bedwetting beyond the normal age. And that reflex is crazy because it's the one that, kind of, helps to corkscrew the baby out of the vaginal birth when they are giving birth. C-section babies sometimes, that reflex doesn't get integrated because they aren't able to naturally go through that movement. And if we stroke the side of the infant's body, it's going to elicit urination. So, if we're tossing and turning in bed as an older kiddo and we are getting that stimuli on our body, then we're going to wet the bed. But I mean, we wouldn't think to rule out reflexes for these older kiddos. You think that they're, you know, just not able to do it and there's a different reason why but I would say find that why.

So these reflexes cause a lot of underlying challenges that maybe we wouldn't necessarily look at but it's definitely starting from the roots and then building on those roots, getting those reflexes to go away, so those higher brain functions can take over and, kind of, create those better pathways in the brain, those more mature responses.

Katie: I love that. And I love your tip about just pushing your tongue on the roof of your mouth. I feel like that's a simple one I've heard from... I have a daughter who used to have motion sickness. I've had motion sickness in the past, that's such a simple one. And good to have in your pocket. Are there any other little quick, like, proprioceptive resets like that or things that parents can try, especially if kids are, kind of, in the midst of maybe something that could be, like, sensory related struggle where all those emotions are flaring...little tips like that, that can help?

Rachel: A couple little tips, I do love essential oil. So, smelling essential oils, like peppermint, is really grounding. Chewing gum is a big one as well because that provides a lot of proprioceptive input to the gums, the jaw, as well as things like chair push-ups. So if you're in the car, if you're at school, just pushing your body up in your chair, as a chair push up, pushing your hands together in the middle, pushing against another person, trying to have a little competition, pushing your hands against a person is a great one. I do love just deep breathing, just smelling the roses and blowing out the candles. It's so simple, but it definitely is a fantastic reset button.

Katie: I love it.

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So for anybody listening who maybe is... I know, there's a lot of awareness about this. I hear from a lot of parents who already recognize sensory challenges in their children. And I think we've given some good starting points for people to, kind of, go deeper from there. If someone's listening and maybe realizing for the first time that they are recognizing some of these things in their children or maybe even in themselves, is there a good pathway you can recommend for them to start to figure out, what are gonna be the inputs and outputs in the process of that? Are there good resources available for this?

Rachel: Yes, lots of good resources. One of our favorites is the SPD STAR Institute. So that's a great website. They do therapy. They offer a lot of consults. That's a great resource. We actually have a podcast where we talk about all things sensory. It's "All Things Sensory" by Harkla, go figure. And so we've got that podcast which we just share tangible tips and tricks. And so we break it down so it's easy to understand. That's the biggest thing for us, is to make it easy to understand for people. Harkla is also a great resource as well. They've got tons and tons of blog posts and we have digital courses there as well. If you wanna dive deep into primitive reflexes, sensory diets, that's a great resource. And even just searching Google Scholar. I really say, like, instead of just searching Google for information, you just go one step further and just search for some research articles, you're gonna find a lot of good information there as well.

Katie: Awesome. I'm making notes to add. Also like we got a tangible example, from the research before this podcast, I have read that you hated pickles before trying some of these therapies on yourself and you now love them. So that...

Rachel: I know.

Katie: Is that true?

Rachel: That is 100% true. And I laugh... I use it as an example when I'm working with kiddos who struggle with trying new foods. Because we always say, if you try the food 20 times, you're gonna have a better idea if you actually like it or if you don't like it. And, you know, if it's not meaningful for you to try new foods and to increase your food repertoire, then it's not going to work. But my husband would always give me such a hard time, he'd say, "I wish you would just like pickles so we didn't have to put pickles on the side and pull them off." It's like okay, I'm gonna try them 20 times, different ways. I love them. Now I actually will buy them on my own. They've got great ones at Costco that are fantastic. But I think it's really helpful for parents to have this information of, you know, recognizing not only in themselves, they can do this with their kiddos. Maybe they have a picky eater, but they will go at it together and say, "Let's try this food 20 times. We'll keep track and then we can identify if we actually like it or if we don't." And either way is fine. You have that opportunity to say, "Yes, I like it" or "No, I don't" but let's try it together and, kind of, make it a fun experience.

Katie: That's so great. Because I definitely hear from parents...the picky eating thing is kind of a big topic amongst parents. But I hear that from adults as well. So yeah, I think that's a great non-pressuring perspective

and an easy way to get kids to hopefully integrate. And with my kids, I'm yet to see a food that they can't, over time, learn to like, especially with that kind of gentle approach. So...

Rachel: It makes a big difference. Yeah, keeping it positive, but also not having the positive pressure. You know, "Yay, you ate it. Good job. How was it?" You know, that's pressure as well. So, letting them go out at themselves and interact with the food, and touch the food, and lick the food, and look at it, and just engaging with the food and getting used to seeing it and feeling it and touching it... I always say kids aren't going to be able to process the food in their mouth if they can't process it on their hands and on their skin, because we have those tactile receptors in our mouth. So they can't even touch the food, then they're not gonna be able to eat it. There's no way. So it starts there. It starts the very basics of just playing with your food and getting messy.

Katie: Yeah, definitely. I love that so much. And I love that you mentioned, you know, don't praise them for trying the food. And I wonder if there is a mindset, from the parent side, a mindset component to navigating sensory issues as well. Because I've talked a lot about just, in general, parenting mindsets with kids and not praising innate talents or things that they're not able to change, but praising effort or praising the thing that they have control over. I'm guessing that could even be actually even more important when you're talking about a child who's already struggling through inputs and outputs and has more things to navigate. But are there mindset components of this that are helpful for parents to just understand and keep top of mind when they're interacting with a child who has sensory issues?

Rache: I always think that we need to empathize, first of all, empathize with these kiddos, if they don't wanna go down the slide, and then they eventually go down the slide. Instead of making it a huge deal that they went down the slide, if we can talk about, you know, how they felt about it and, you know, what they did to feel brave enough to go down the slide, even though maybe they were scared the first time. And not forcing them to do these nonpreferred activities that, you know, to an outsider, it's a nonpreferred activity but to a kiddo with sensory processing challenges, it's a big deal for them to go through these motions and try these new foods.

So if we can... You know, this is kind of on the opposite side of the spectrum, whereas... When we were growing up as kids, we were forced to finish the food on our plate, we were forced to eat everything, use our manners. And a lot of us now as adults, we have, kind of, negative associations with food, and we have these bits of trauma from feeding and eating and all those experiences. And I think that kind of shift to parenting now of not forcing a child to finish their plate, you know, not forcing them to try these new foods, just to offer it. And if they try it, great, if they don't, don't make a big deal about it. Both ways, don't make a big deal about it. Just let them be and let them force...like, create their own opinions about the food and about the experience. It's not just food, but creating their own thoughts. So instead of saying, "Yum, it's so good," you say, "What do you think about that food? How does it taste? How does it feel?" And talk about the sensory components.

Katie: Oh, and I think that there's crossover from that into so many aspects of parenting. I think when they're having an emotional response to anything, instead of trying to project on them what that emotion is, you

know, ask them how they're feeling and try to not give judgment toward that emotion. Which also, I feel like crosses over to adult internally is, like, when we feel strong emotions, we don't have to judge that. We don't have to feel like sadness equals bad. I'm going to feel bad now. We can actually just experience the emotion and let it go.

And, like, giving that same resource to our children from a young age, not trying to give them a negative association or even a positive association, directly with those things and letting them navigate it themselves to, kind of, develop that emotional response.

Well, you've mentioned so many great resources. I have been taking notes, and those will all be in the show notes at wellnessmama.fm for anybody listening, who wants to go deep on any of those topics. Another question I love to ask toward the end of interviews is if there is a book or a number of books that have had a profound impact on your life, and if so what they are and why.

Rachel: Yes, okay, I have three that came to mind. Sounds kind of weird but coming out of school, the first sensory books that I read, were *The Out-of-Sync Child* and *Raising a Sensory Smart Child*. And they totally changed my outlook on the sensory system and just treating these kiddos and adults with sensory processing challenges, as well as *Reflexes, Learning and Behavior* by Sally Goddard. That's another fantastic book to, kind of, dive deeper into primitive reflex integration and, kind of, understand the child from the inside out. So those three books, it's kind of nerdy, but I love them so much. And they're always the books that I recommend to families who are new at navigating the sensory world and the reflex world.

Katie: No judgment on nerdy for me. I've been reading physics books lately for fun. But I love those, those are all new recommendations. I'll put those links in the show notes as well, so you guys can find those and keep reading. And I'm so glad I finally got to talk about this topic. And it was a great conversation with you. Hopefully, gave some very practical resources to parents. Hopefully, we encouraged lots of parents to let their kids play outside barefoot and get messy with their food and hang upside down. And I'm excited to see the ripples of all that in all of these families. Thank you so much for all the work that you do, and with all these kids and these families, and for your tremendous heart. And thanks for being here today.

Rachel: Yes, of course. Thank you so much for having me.

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

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