

Dr. Mike T Nelson

Hey, what's going on? Welcome back to the Flex Diet Podcast. I'm your host, Dr. Mike T. Nelson, and we focused on this podcast, all things to increase hypertrophy performance, body composition, and all without destroying your health in the process.

Today, we're going to take a little bit of a tangent, but it's definitely related. We're going to talk about pain. And what should you do if you find yourself in pain, if you're on my newsletter, and you saw that I recently tweaked my low back a little bit just being an idiot in the gym.

I talked about that in the newsletter. And if you didn't see that, and you want to read all about it, I put the article on a simple website so you can find it, which is a sponsor of the podcast today, just go to painfreemuscle.com. And that will automatically reroute you to the [Mike T. Nelson site](#) with the specific article there. It talks about what I did, being an idiot, and how it's going, and then also what modalities and what things you can do to help yourself recover from some tweaks and other things that you may do to yourself in the process.

So today, this was recorded at the ISSN conference. And we initially were going to talk about breathing and some other stuff, but we ended up talking about pain.

The special guest today is Dr. Katie Dabrowski. She is one of the owners of [Old Bull Athletics](#) down near Miami, Florida. I think it's actually in Coral Gables, Florida. And we had a great chat about all things related to movement and pain. So I think you'll enjoy this. And because of the timing of what I did to myself and the newsletters, I wanted to get this one out to you as soon as possible. So enjoy this podcast with physical therapists, Dr. Katie Dombrowski.

So how's it going? Are you enjoying the conference?

Dr. Katie Dabrowski

It's been great. So far, I've been really enjoying especially the last talk about just the considerations for females with research, I always look at things from my practitioner mind. So I'm thinking of this stuff all of the time, we were kind of just off air talking about how there's not a lot of data for injury risk, and all of these conclusions that we tend to make that we think are correct, because of the hormonal cycles of females. So it's kind of cool to see things trending in that direction to better understand how this stuff actually affects women, and outcomes. So it's been great so far.

Dr. Mike T Nelson

Yeah. Who are you? So people listening may not have audio this time? Because we're actually down to the ISSN conference in Florida. So we're recording this in person, which is kind of nice, but no video.

Dr. Katie Dabrowski

Yeah, it's been a while since I've done anything, actually in person. Yeah, it's a little bit different. I'm Katie Dabrowski. I'm a physical therapist and a strength coach, and a private practice owner in Miami, Florida. We and my practice, we blend kind of the worlds of training, rehab, recovery and performance. And that's basically that full spectrum of health and wellness that we try to incorporate with all of our

clients. So yeah, and I'm just here, learning as much as I can from the nutrition standpoint, since those tend to be questions that I get asked. And I have to refer people to, you know, rds, and and nutritionists all the time, but trying to get some gems and clinical pearls that I can help my clients with.

Dr. Mike T Nelson

Yeah, and just for people listening, you can still talk about nutrition with people, even if you're not an RD, you just can't be prescriptive and go outside your scope of practice and say silly things like this will cure your diabetes and all that kind of stuff. Because I'm sure there'll be a bunch of people that write in like, but you can talk about nutrition.

Dr. Katie Dabrowski

And that's why I think there's such a cool push to get more practitioners to this conference in particular, who aren't nutritionist and IDS because, yeah, there's a miscommunication of like, oh, that's nutrition. I can't say anything, right. Um, you know, our education background does afford us understanding of nutrition without the diagnostics and without the prescription based capacity of it. Same thing with personal trainers. I mean, there's plenty of things that like excellent coaches and trainers do that help people with pain, as long as they're not diagnosing the cause of their pain, but it's still I think, The world's blend much more than me allowed them to typically,

Dr. Mike T Nelson

yeah, because I'm obviously not a physical therapist. But if people come in for pain stuff, it's like, I don't know, I'm not gonna give you a diagnosis, not my purview, I don't have a license, I'm not trained in that. We can try to do some stuff, whether that's hands on stuff, or other things to get you to move better. And vast majority of the time, once you move better, lo and behold, your pain usually gets better at the same time. But we're not targeting your pain, per se. We're just trying to get you to, you know, move better, which typically has this result of reducing pain at that time.

Dr. Katie Dabrowski

Yeah, and I mean, I would argue that the world of therapy can get so nuanced with things that I don't think matter as much. And I think studies also show don't matter as much, even with like low back pain, for example, there's a lot of interesting new evidence that doesn't really show that the particular muscle groups that we think are impacting the propensity for back pain, if we strengthen those, only those versus just general exercise, there's not a big difference, a lot of times of people's outcomes, they're just getting better for movement.

And I think it opens the door for a lot more people to help people move better and pain free than just thinking that there's this particular lens that only a therapist can address. I think just movement professionals in general, we have an opportunity to spread that word and help people regardless of practice,

Dr. Mike T Nelson

they're saying, If I had low back pain, I don't need to go on the 16 week program of only training up my multifidus and my low back because that was the issue for my low back pain.

Dr. Katie Dabrowski

Yeah, you know, just doing bird dogs over and over again, just performed horribly. Yeah, exactly, exactly. Yeah, these super low level very specific MultiFit. I can tractions people thinking that's the holy grail for back pain, it's really just make people less scared about movement, get them to move, and barring any structural or traumatic event. They're, they're pretty good to go. But we overcomplicate everything, because that's the nature of it. Right?

Dr. Mike T Nelson

Yeah. So do you use a loaded question, but for your lens of how you view that? Do you looked at more of the biomechanics? Are you more on the neurology side? Or where do you kind of, because those are like in the pain world a little bit. I know, those are like the two heated camps that seem to hate each other for whatever reason.

Dr. Katie Dabrowski

It's such a mess. I mean, I we talk about this so much in our world, especially lately, I feel like everything is pretty dichotomized now and it's like, you can't only have or you can't agree on both sides, you have to have this insane viewpoint on one under the other. And it tends to be like the biomechanical biomechanical lens versus pain science or like bio psychosocial versus just movement.

And I operate in the middle, I think there's a really big push right now to tell people that it doesn't matter how you move, because there's not enough studies to show that the specific position is correlated, or is causality link for pain. But I do think there's no harm in teaching people maybe better ways to move in terms of, yeah, maybe if you put your hips in a different position for your deadlift, you're loading your your glutes and your hips more than your back and prefacing that with like overtime, we want your back to be able to load this position, and we want your spine to be strong and resilient and mobile, but maybe right now, we great into that.

So I think those two camps, I try to meet it in the middle and context matters. And always trying to be more about movement optimism at the end of the day, and showing people that just by virtue of moving, we tend to feel better. But I still think there's important considerations for you know, people who have a history of low back pain, while we know that eventually grading their position to tolerate like spinal flexion under load.

Dr. Mike T Nelson

So like progression regression, like just being not being an idiot and Tom to do a 500 pound deadlift. Maybe it started something easy.

Dr. Katie Dabrowski

Yeah, it doesn't mean that I'm saying there's one perfect way to deadlift, but maybe my first intervention isn't a loaded Jefferson curl just because I want to prove that spinal flexion isn't bad. I think we can still create into it and help people tolerate stuff. So to answer your question, yes, biomechanics and yes, pain science. So I do both.

Dr. Mike T Nelson

Yeah. I got this from my buddy Adam bias. I work with the Carrick Institute and he has a whole course that's, that's really great. And their Prime Minister is it's a neuro biomechanical model. I love that, right? Because if you've got something that's completely blown out and you're low back, you're probably missing some range of motion, you're probably going to have pain.

Again, we've got MRI studies of people who are completely asymptomatic back looks like it's got barnacles growing on it and they don't have any pain. Yeah, but you also have the neurology side where there's many times Were MRI, whatever imaging you want looks perfectly clean, there's nothing mechanically, that at least we could see, at least with current imaging, and their pain is very reproducible. It's like, every time I get to x position, it starts to hurt. So it's the, it's both, it's not always just this one or that one. Yeah, and

Dr. Katie Dabrowski

I think in every field, if you will, that's kind of an absolute a statement. So it's going to go away from my point. But in most fields, if you are really holding on to one lens, you should probably reevaluate yourself and what your decision making processes are looking like. But I agree with that. I mean, I, one of my favorite kind of schematics that I've seen online, and it's talking about the the neurological aspect of pain, absent of any tissue damage, or maybe there once was tissue damage, but it's, you know, the painful event happens. And then we stop moving.

So we become very fear avoidant, and then we get deconditioned, because we've stopped moving, and then we try to resume the activity again. But we've become deconditioned. And we've become fearful. So then we have another pain event. And it's this vicious cycle of that. And if you I mean, from my perspective, working with clients, if I can educate them on that, and I can teach them about, you know, their pain is real.

I'm not saying it's not real, but it's this feedback loop of, you know, getting deconditioned over time for being fearful of a movement, and then No wonder you're going to try to resume activity, and you're probably going to have pain because your tissue wasn't ready to tolerate it. And helping people understand that is huge, rather than linking this movement is bad for you, or these mechanics, or the reason you're in pain. It's it's all like interacting together.

Dr. Mike T Nelson

Yeah, and I think people forget that pain is a tiny bit, it's kind of a nociceptive signal to the brain. And it means that there's a potential that you may damage yourself, right? Right, it doesn't mean that you have physical damage, right. So you need some sort of safety margin within the system of like, oh, you're getting too close. Yeah, but you want the like warning light to come on the cars, you can do something different and not blow the engine up.

Dr. Katie Dabrowski

It's a good protective mechanism. I tried to frame it for that way. For people as well were like, it's such a human thing to experience pain, you're not broken, that you're experiencing pain, it's good, we just have to figure out how it's not a maladaptive response and how it's not persisting so much that you can't slightly flex your spine without alarm signals being sent. And reminding people, again, from that

human perspective, being told you're in pain is a safety thing. It's keeping you out of danger, we just got to figure out how to not trigger it all of the time.

And that's hard. I mean, people want an answer. People want to say, Oh, let me just get an MRI and see exactly what's going on. And a lot of part of what I'm talking to patients about, you know, unless there's any red flags that us as therapists are going through to those checkboxes. If you check one of those boxes, then yes, we're referring you for imaging, but nine times out of 10, we don't have to, because you're not presenting in a way that warrants imaging based on really good evidence and clinical practice guidelines that tell us that.

And but a lot of people come in wanting to be told, yeah, let's go get an MRI, let's see what's happening. So it's a little bit of that, you know, meeting people where they're at trying to explain this stuff without throwing pain neuroscience terms at them. And they're like, What are you talking about? Right, but trying to make them feel safe. And, you know, unless it's, it's very, very, very rare that and I use little back pain, because it's a really prevalent issue. But it's very rare that it's something bad. It's usually this kind of stuff that we're talking about these triggered painful events that keep creating that alarm bell. So it's a hard conversation, but we're trying to, you know, bit by bit educate the population.

Dr. Mike T Nelson

So what would you do, like as we stay with low back pain of someone hurt their low back on a deadlift. Now, kind of a little bit nervous about deadlifting, and hip pain that kind of shows up here and there, it appears to be a little bit more random, like what kind of framework would you work within? To change that?

Dr. Katie Dabrowski

Yeah, I think, first and foremost, I'm always just talking with people in general, like their training habits. So I kind of have to get a picture of how, what is their program design? Where are they getting it from? What is their history of progression look like?

Did they just start deadlifting? Have they been doing it for a long time? You know, what does all of that look like? And even just in their training splits, like what kind of movements are they prioritizing? That in itself gives me so much information usually about the big picture of you know, oh, they're completely neglecting a certain movement pattern, or they're completely overloading this and not and not factoring and other important things to strengthen or other you know, aerobic capacity or anything like that.

So that's a big thing. And then just in general, talking about the pain science stuff, but again, at a way that I think is digestible for the person kind of based on the feedback like I'm getting from if our the end of this conversation, you're not

Dr. Mike T Nelson

gonna tell him like, well, it's the neuro biomechanical model with the newest receptor firing into the fourth motor neuron have exactly I just made that up. But

Dr. Katie Dabrowski

yeah, exactly though some people really do think they need to do that or start citing literature where Okay, does my patient know what PubMed is? Do I need this literature? Or can I approach it in just a more conversational way. And then from there, so much of it is talking about the progressive desensitization and then eventual overload of the position that triggered them in the first place.

So the the like sweeping generalization and oversimplification, I tell people, what I do is like, find the thing that hurts you and I gently overtime put you back in that position. But yeah, that overtime is just getting your body more resilient and your tissues to adapt to the demand that needs to be met.

So often, it's not even just a strength issue or because I mean, I get guys who come in, and they can deadlift two and a half times their body weight, that's not a strength issue, that's probably a tissue capacity issue, or how you've trained up to that point to be able to do that way. So it's a lot of just putting them in, for example, the hinge position and a lot of different ways and seeing how we can load it in the meantime to not trigger symptoms, so they get systemically stronger. And then we've reintroduced the exact painful event. It's simple, it's not easy, but it is pretty simple, if you think about it that way.

Dr. Mike T Nelson

Yeah, I mean, that's kind of basically the same model I follow with people, you know, at the end of the day is like, Okay, if you heard yourself doing a deadlift, let's say it was four or five in my head. And I actually started asking people if they would agree with this statement, before we do anything, like okay, if you could deadlift four and five for a single and have no pain during the event, and after, would you agree that you no longer have that issue?

And a lot of times, it's even hard for them to think about the well, I don't know if this is even, I'm just saying, if we wave a magic wand, I'm not saying we can get you there. I'm just saying that. If we did this, would you agree that you no longer have pain? Because some of the stuff I did in the past, I had people like their performance was better than what they were before they were injured. But they almost hadn't like, let go of that story of when I hurt my back. deadlifting Oh, yeah, it's like, but you understand now that you're literally doing more than what you did before when you heard it.

But it was like that. They had spent so much time this thing had sort of become almost part of their psyche. You know, it's going to the whole psychology you know, aspect of it and stuff, too. I don't know what your thoughts are on that. I

Dr. Katie Dabrowski

really like that question to ask with your clients because I think that's so important. Pain in general is so emotional and become a part of people's stories. get so hung up on Oh, but this one time I did hurt my back. Like everybody remembers that. We don't remember that time you kind of rolled your ankle or like those smaller, seemingly insignificant injuries we remember Yeah.

But then this one time, my trainer had me deadlift and I hurt my foot. They're fine now. So yeah, understanding I think to the individual, what does does being out of pain mean progress? Do they are they still scared of the movement? Like that's so huge. And that's tough. I think so much of what I do is

just talking through people the experience of the injury and what it meant to them and how scared they are again, it's so even the strongest people that I work with so many of them still have hesitations about deadlifting or that one time, they did hurt themselves. I like that. I'm gonna I'm gonna steal that question.

Dr. Mike T Nelson

Yeah, I actually, I ended up getting that from was it was a Jill Bolte Taylor, I think I'm gonna get the name wrong who did the pod not a podcast but a TED Talk years ago called The Stroke of Insight. So she was a neuro researcher having a stroke and she was recalling everything that had happened. I listened to her on a podcast somewhere.

And she said that she went back she spent years you know, I remember a long doing all the rehab, everything got to be great. But just that there were certain things that she just felt like she wasn't herself again. But she couldn't pinpoint any loss of function that she had. And then she talked about going, waterskiing I think just slalom skiing one day, and how she everything just felt amazing and she forgot that she ever had a stroke. And then she realized is like hole, but this is the thing I did at a high level before unconscious. And now I just did that thing again. And she realized from that point, like all the rest of whatever symptoms she had went away. Wow. Which I thought was just like, fascinating,

Dr. Katie Dabrowski

like conquered that thing right to be her high level. performance. Right. And that's yeah, that's huge. That's very interesting. And it just with that, like the psychological burden, stopped the rest of her symptoms and shows you that like inextricable link of physiological symptoms and psychology and how important it all is. And yeah, that's so interesting.

Dr. Mike T Nelson

And it was crazy that she knew it wasn't a physical or functional thing, either. But that wasn't enough for her to kind of even talk her way out of it, even though she consciously knew what was actually going on. Yeah. Which to me was even more, like fascinating. Because it's almost like my buddy, Brian Grasso said, this one seems like you, you're just looking for the one thing that they can't argue with to disprove what their current story was.

And he's like, you only need the one thing to disprove whatever their theory was. And I remember like years ago, I pulled both my hip flexors pulled my groin, like, Don't ever do that. I was such an idiot. So it's like years ago, I was at the gym, and my hip flexors that always, like the whole compartment have always been tight. You know, and I had all sorts of other issues at the time, that was like the least of my issues.

So I'm just like, whatever, did a bunch of deadlifts and it was, it was not feeling good, but I was gonna do a powerlifting meet. So I had numbers I wanted to meet. So I've been kind of forcing it for many, many months. And at the end, I said, Okay, you know, I conditioning kind of sucks, you know, I should do really fast sprints on a treadmill at a high incline, right, which you can see where this is going. So great. So I'm in a highly fatigue state with probably all sorts of poor movement patterns.

And I'm gonna now get on a treadmill, that's literally gonna take my leg and whip it into hip extension, which I'm sure I didn't possess at that point. And I'm gonna do it at speed. And I'm gonna do it out with force, and you haven't been doing it. And I haven't been doing it at all. Not even that wasn't even running at the time. Good. Good. Yeah. Great. And, you know, I get off in the car, man, something feels a little funky. Oh, it doesn't feel good.

But it did me like didn't even realize like, ah, whatever, it's fine, fine. I get home. And I'm like, and this is like, not feeling good. And I'm like, oh, maybe it's just early dogs or something. Like all the weird things, you go through your head to justify it. So I'm like, I just went to bed early. I literally woke up at like two in the morning, like, almost like screaming. And like a like two days later, it was just ungodly. And of course, it didn't mean I had to do the MS 150 C two bike ride 450 miles over the course of two days. And so I'm like, Well, can I still ride my bike, because I felt bad that it took all these people money for this donation. And unlike so I went out my garage.

And I found that if I laid my bike down on the ground, and I took my hands and I picked my leg up and stuck it over the bike, hold the bike under me lean to the left side, and literally just like throw my left limb on, lean to the right of the bike, I could get my feet onto the bike. And because my quads were fine, like I could pedal, fine. But I realized, like that stopping thing where you pull your leg out to the side, yeah, but it literally wasn't happening. Like I couldn't pull my leg out to my side and hold myself up. So I had to slow down and jam on the brakes and hop forward off of the pedals. Get off.

Dr. Katie Dabrowski

This is the kind of stuff where people come into physical therapy, and they're like, I don't understand why my body hurts, right? They go through this stuff like you still don't understand. Yeah, what

Dr. Mike T Nelson

happened? Yeah, at this point, I was starting to realize, Oh, I did some pretty bad so I do the ride. Like the night we stayed in the hotel I literally woke up at like multiple times. And I took some Advil which I hate taking but I did. And I will stay with other people asked to stay in the bed because the turnover, because you know all those structures hold your hip in place when you're lying on your sign.

Of course, I sleep on my side. So I couldn't roll over. Yeah, so what I had to do is like pull the sheets out from the other side of my hip to get myself flat. And then hold on to the side of the bed. And then just like grit your teeth and just be like, and like go over to their side transfer, which is like yeah, we do in the house. Literally. Yes. Yeah. For non ambulatory patients. Yep. So I got real nervous, went back into the dock when I got home.

He's like, what are you doing? And I told him the whole story and he looks at me like, You are the stupidest person I think I've seen like all year. And I'm like, you know, I didn't completely rip anything. I had some swelling but didn't have any massive discoloration or anything. He's like, I don't know, just go home and if it doesn't feel better in three weeks, then you probably did completely rip something. That's the advice you were given. Yeah. Which hindsight was horrible. That was like even worse than the stuff that I did. I wouldn't recommend that.

Dr. Katie Dabrowski

That infuriates I was like the rehab Initially,

Dr. Mike T Nelson

I didn't do any rehab. I didn't do anything. Yeah, I didn't do anything. Yeah, I was so dumb. I didn't realize that. And so long story short, I was moving around. I couldn't drive. Yeah, right, because I couldn't lift my foot up to hit the brake, I could grab my feet and throw them in the car. But I literally couldn't transfer from the brake to the gas. Yeah. So I have someone driving to work on this stuff. And then it started feeling better.

And I was remember it was July 4, we're visiting some friends that was walking around, and I hit the side of my leg on a coffee table. And then I just like completely re injured it again, because it was just so fragile, so sensitive. Anyway, like four months after all this happens, it starts feeling pretty good. I started doing some basic exercise again.

And I remember I went wakeboarding. It's the first time I've been on wakeboarding, and probably like six months. And I was all excited. And I was trying to clear the weight from one side to the other. And I missed and I hit the week and I hit my toe edge on the lake of like 25 miles an hour. And just face planted into it. The board got pulled up behind me and like ripped off of my feet. And I remember lying in there in the water has all the wind knocked out of me and I'm like, Oh, wow, that was bad, like trying to fish contacts back into my eye.

And they're like, Hey, where's my board? Ship my boards not even on. And then I went to swim to go find my board. And I'm like, hey, my legs don't hurt. My grind doesn't hurt. Like, I'm healed. Unlike if that didn't completely reinjure it like, I'm good. Which maybe maybe not, but I literally completely forgot about it. Like ever after that. Yeah. Yeah.

Which again, I don't recommend any of the medical advice that not what you should do. But it was interesting that if you because in my brain, I'm like, if that did not completely screw it up, like anything else I'm gonna do, I'm probably going to be fine. Yeah. But once I realized that, I literally forgot that I even never had the injury, you have to have

Dr. Katie Dabrowski

that moment. And I hear it anecdotally, from a lot of clients to where they're like, Yeah, I just did that thing. And I forgot I was in pain ever, right? It's like this mindset shift that opens up the floodgates to them being able to go back to everything they wanted to do, because they almost are holding on to this idea that no matter what they're going to experience that pain again, they're never going to be able to do the thing in the first place that caused the pain in the first place. So yeah, that's, that's a good like anecdote of that for sure. Yeah, that's crazy.

Dr. Mike T Nelson

And then when you're regressing stuff, do you I guess, how conservative Are you on that? Do you look at other markers? Let's like, know that, for example, again, obviously, you would want to get someone below whatever their pain threshold is. But how much sort of compensation Do you allow? Do you allow

him to do a brothel? Do you allow him to add a lot of tension? Do you try to get below that? Or do you have any thoughts around that area?

Dr. Katie Dabrowski

That's a good question. And I don't even this is probably nuanced, but I don't even like thinking of regression versus progression. Sure, because I feel like we're kind of just trying to meet people where they're out for their movement, right? I definitely used to think like, Okay, first we hinge to the wall.

Dr. Mike T Nelson

I'm just thinking like, load on bar, like, just overload.

Dr. Katie Dabrowski

Yeah. So with that, I mean, I like I like using like as like, a little bit of an RPE score. And then also, like the pain scale, which I is obviously highly subjective, but at least working with people, I can normalize it to them. And I, I always preface with, like, a little bit of discomfort is okay, because we're helping the tissues adapt again, there's a difference between discomfort and sharp pain or reproduction of nerve symptoms, obviously.

So I kind of try to talk people and it depends on what we're dealing with, of course, but I talked to people about some numbers to think on that pain scale that are okay, if you feel when you're increasing load, and then where we want to either stay where we're at or not go beyond if we feel a certain level. So that like, and again, it's so subjective, but it depends on the person. And if this is something that is valuable for them, we can we can use it.

But I talk about kind of anything on a zero to 10 scale. 10 being obviously like excruciating pain, zero being nothing to three, maybe even four is sometimes like she's just working again, we're adapting to the position and you might feel it a little bit and there's nothing inherently wrong with feeling things. But when we get beyond that, and the it's turning from discomfort to that sensation of pain, or it's very sharp or there's something different about like the symptom of pain that you're experiencing, that's already back off. So having that conversation and and just like talking to people that you know, it's not bad if you feel something we just need to make sure the intensity relative to your experience is not pushing into the point of unnecessarily inflammatory or irritable especially with nerve stuff.

Nerves are so irritable so we don't want to just make these big jumps without considering wearing To wrap, but it's again, it's not perfect, right? It's so hard for people to rate. And you know this as well, like really highly trained people have a hard time with RPE. and train people have a hard time with pain skills. So somebody who's not highly trained is also that's really difficult.

Dr. Mike T Nelson

Yeah, yeah. That's cool. I like it. Anything else you would add and kind of the pain area from? Here, you could say more of a practical standpoint, for people listening?

Dr. Katie Dabrowski

Yeah, I think getting comfortable, like exploring movements yourself is really important. And, you know, again, this is hard, because it's really tough to I work with a lot of trainers and coaches as well. And a lot of the questions they have is like, how do I know when I'm working with a client? And they say something hurts? How do I know it's okay, or say for or if it really hurts, or maybe they're not used to feeling muscle soreness.

And I think part of it is you just have to experiment a little bit with yourself to and know what different things feel like and getting a little bit less scared, I guess, of feeling something kind of like what I was talking about before discomfort is going to happen. Like there's times I do movements, and I'm pretty highly trained. And I'm like, Oh, that felt a little funky.

And I just try to adjust. In that moment, instead of getting scared and not doing anything. It's really hard and takes a lot of time. I think a big thing that just in practicality wise is pain is a normal part of the human experience. So I think a lot of times people have an injury, and they expect that the opposite of injury is being pain free forever. And I don't think that's correct.

I, we're always gonna tweak stuff, if we're really active people, we can't really stop that from happening. But we can create a program design that's going to put us in a better position for success, we can have sleep and recovery habits better than they mostly are for people to put us in a better position. And we can, you know, understand that pain is a normal part of being a human.

Dr. Mike T Nelson

Yeah, there's also disorders where people don't feel any pain. And they all die early. me literally, their mortality is like 30 or 40 years. It's not like, last a couple of years. So

Dr. Katie Dabrowski

we want pain. Yeah, it's okay. And what you mentioned in the very beginning, it's it's an adaptation, it's a quality to help us avoid getting further tissue damage, or getting to the point of tissue damage if we start to feel pain and a little bit of alarms. So it's like with anything I mean, with stress is an adaptation until it's maladaptive. That's a similar idea, and helping people to get comfortable with those, like human responses to things pain, stress, whatever it is. I think it's part of the job to

Dr. Mike T Nelson

Yeah, I also talk lines that you if you move wrong, you actually want pain. Like if he is example of a deadlift, again, if I deadlift, Goofy, I actually want a stupid blinding amount of pain to make me pay attention. And then the second that I corrected, or I dropped the load, right, get safely out of the lift, and it goes away. That's exactly what I want. Right? And that doesn't mean I damaged anything, right? That's my brain saying, hey, dumbass, that was a horrible idea. You should stop this like now.

Dr. Katie Dabrowski

It's it's going to it's a self protection mechanism. Yeah, the brain is smart. Right? Yeah, the whole point. Yeah, absolutely.

Dr. Mike T Nelson

And you see, like, pattern. So what I've seen with people trying to get out of pain was they would get better. And then they would appear to get worse. So like the oscillations, so they come in, they have you know, pain, let's say 80% of the time, they've got a fair amount of chronic pain or whatever. I first question is, is it ever modifiable? Right?

Do you have good days and bad days? If they say yes, cool. That means there's something modifying it. If they say no, then get like Omni contextual pain. And then that's a whole Yeah, that's a whole different discussion. But what I've noticed is like, I'll tell him that the pattern I typically see and I'd be curious, what do you see is that you your intensity may go up, you may have days that are worse than you've ever had before in your life.

But consequently, you may have days that are better than you've ever had before. Like you may have a very, very more intense periods of time, but they're less in length. Yes. It just seems like instead of this kind of like a low roar, you'll you want. You're injecting like variability back into the system. Yeah. And I think sometimes if they don't know that, or they don't not thinking about it, they'll have like a really bad day because we tend to remember all the negative stuff. Yes.

And then they're like, Oh, my God, just this guy's an idiot. He doesn't know what he's doing so much. It made me so much worse. But if doesn't Alaska, say, Well, how much time have you been in pain? Is that getting better or worse? And most of the time, they're like, oh, yeah, no, I think about it like I've actually been paying a lot less?

Dr. Katie Dabrowski

Yeah, I think that's such a good point. And I'd be interested to dive in a little bit even more and any literature on this topic because I have a few ideas that I'm kind of extrapolating from other things. But you mentioned initially that like the neurological alarm of Oh, shit, don't do this, right, it's quick, and it goes away. When we're in chronic pain, we don't have that, oh, shit, don't do this.

Because everything is that moment, this diffuse, drowned out. Absolutely. And we don't have that heightened response, because we're just doubly experiencing pain the whole time, rather than extreme variations of it. So you could discuss with your client that like neurological adaptation is improving, like we're getting more able to get alarm bells, and then the calming effect instead of just this dull, constant alarm.

So that is seen as a good thing like stuffs working again, you're being reminded of this more intense pain instead of it just being constant, and there's no change in good or bad days. Of course, getting people aware, like you said, of the time of pain, the timeline of pain, like whereas maybe their symptoms, when they were bad took weeks to resolve.

Now they have this intense moment of it, but they're better like the next day. Like that's a huge difference. But people don't think of it that way. Because they just remember the pain of it. And then this is kind of thinking in terms of I can relate it to like a disc herniation or ridiculous radiculopathy or actually like neurological symptoms from a disc herniation or nerve impingement, there's the concept of peripheral elevation of pain versus centralization, central wind, right, so if your foot is an arm and you

can't pick it up, that's more severe than if you just feel the very localized, pinpoint pain in the back. So explaining that to people like they might think that their back pain is worse as their distance healing or as their nerve impingement is going away, because they feel it very localized at the origin of injury, instead of this weird kind of diffuse numbness in their foot that they're maybe not as aware of. So pain spreading out and being more vague, versus it being very pinpoint.

And localized. We see that as a good thing in the rehab world, too. But you have to manage expectations and explain that. Because, like explain it. Yeah. And like feel like it's more intense. And if that could really freak somebody out or make them think that you're garbage at your job. Yeah, experiencing more pain. So I think those are important conversations to have.

Dr. Mike T Nelson

Yeah, I used. I live in Minnesota. So I tell people, it's like, pushing the car out of the snowbank, like, no one goes out and just pushes a car out. Like you have to start generating some momentum, you have to rock the car forward, and then it's gonna go a little bit further back, and it's gonna go forward again. And then eventually, you're gonna get the car out of the ditch. And hopefully, most of your pain is kind of back to normal again.

Dr. Katie Dabrowski

That's not an analogy I can use in Miami.

Dr. Mike T Nelson

But yeah, no. car off the beach. I don't know.

Dr. Katie Dabrowski

Yeah, that's a that's a great point, though. I think, just in general, like more openly discussing pain, I think is really important, because it's so hard to describe pain in the first place. So I think if we talk about with our clients, you know, what kind of pain?

What does it feel like? How would you describe it? How long does it last? You notice any triggers? What can we talk about patterns? That's a whole other part of rehab and coaching that I think gets missed, because it's always like, Oh, you have pain, let's avoid and yeah, different out of fear of, you know, obviously hurting somebody, but we have to talk about it and see exactly if there's patterns.

Dr. Mike T Nelson

Do you do things that are different with? Like, two part question where you're confident that pain is more central and located to where the issue is, for example, like surgery, surgical interventions are easy, because we know what area has the damage?

We know what's going on. So they have a disc issue. They go in, they scrape some stuff out, or whatever they do? Oh, yeah, on the right side of my back's kind of sore versus someone who comes in and says, Yeah, you know, every time I move my right shoulder feels, you know, kind of funky. But I had an MRI and it says that there's nothing wrong with my right shoulder. Would you approach those differently? Or do they all end up being kind of the same, even though they're sort of different origins?

Dr. Katie Dabrowski

Yeah, I think that's a really good question. I think ultimately, what we try to promote in rehab is like, no matter what, when you're evaluating somebody, you're evaluating them on their symptoms and their functionality rather than just like an MRI finding or anything like that. So even if they didn't have an MRI machine, we're still making sure that we're evaluating them in terms of function.

But I think that's it's kind of a good example. And I don't know if maybe I'm interpreting it differently than you're displaying it but kind of like a chronic person versus an acute person with like, how you would treat somebody who has a very evident like, they tore the meniscus They had a procedure and a repair. And now how you're treating that versus somebody who just has this kind of like chronic like, for the past couple years, my shoulder hurts, but there's nothing structurally wrong. Right?

And yeah, that's an excellent question. People with acute injuries, we're thinking a lot more. And this again, sweeping generalization, context matters, etc. But those are the people that we're trying to restore, you know, normal when I say that implications, range of motion, strength, things like that. And going through a more, I guess, what you could say, as a traditional rehab process, and those people are going to tolerate, you know, just the primary indication of getting you out of pain, getting you out of inflammation, and getting you out of that like really acute phase one, like tissue healing phase, and progressing from there.

Whereas somebody who, and we have contraindications, we have things we probably need to avoid. Whereas somebody who just kind of has this random pain that isn't linked to anything structural or procedure, it's so much of like the neuro reeducation process of that cycle I was talking about before, they've probably avoided the thing that hurts their shoulder, like lifting something up overhead, so they become super deconditioned.

And then they've tried to resume and hurts and hurts again. So we're more progressively reintroducing them to the painful stimulus in the first place. And kind of just teaching them that their body doesn't suck as much as they think that it does. Usually, they're just like, I have this bad shoulder.

Dr. Mike T Nelson

And I have a trick knee. I'm like, oh, what does it do? Like do party tricks? Like?

Dr. Katie Dabrowski

Yeah, I was told that bad hips, and that, that is a whole other animal, we have to get it. Yeah, rather than the kind of stepwise progression of an acute injury or post operative care. At my facility. I mean, we've seen mostly non post operative. Part of it's because we're, we don't take insurance. So it would be pretty pricey for people to do post operative care. And we're honest about that. I'm here for some of the other stuff, the later stage stuff. So it's a lot more of that nuance of like the neurological implications of chronic pain or chronic injury or a trick knee. So yeah, that's a really good question, though.

Dr. Mike T Nelson

Do you think there's a difference in those PSA with like, Oh, it's my right shoulder. It's been bothering me for one or two years, let's say the MRI is clean, nobody can figure it out. How often do you find that the right shoulder was literally the source of their pain? Meaning I'm not saying that they don't have pain there. I'm not saying they don't have a loss of function. But do you find that working somewhere else in the body then helps the shoulder because that's what I found?

Dr. Katie Dabrowski

Yeah, possibly. I mean, it could have a lot to do with just their their pelvis and their ribs and a lot of other stuff contributing to your overall movement patterns, it probably also has a lot to do with, like the negative feedback loop of thoughts about pain in general, it could be like a whole kinematic chain thing, because they're changing positions out of fear of aggravating the shoulder, they're probably avoiding entire types of training because of that, or they're just not moving in general, because they haven't been taught that.

This is something I'm really big on. And I'm sure you are to all of the many, many, many ways you continue to train even though you have a part of your body that hurts. All the ways you can train around that. So maybe they haven't even been told that. So it's like a conditioning thing itself. Rather than like this specific shoulder pain. What's your experience with that?

Dr. Mike T Nelson

Like I used to do, I mean, I just saw through Z health back in the day, and so we did a lot of gait assessments and stuff. And if you do any gait assessments, it's you know, you don't need to be an expert, like go to the airport and just watch through the mall. And watch all just a horribly people walk. And the first thing like your brain is drawn to is like the thing that moves too much. Yeah, right. So

Dr. Katie Dabrowski

you see themselves forward. Yeah, what

Dr. Mike T Nelson

I call the yoga arms where the only the elbows tend to move, no rotation, no pelvic rotation, right. So Ron from PRI would say that there be like a snowman with their snowballs stuck together. They can't rotate and differentiate their thorax from their pelvis.

So they kind of wattle sort of, you know, like the right arm is just flailing in front of them all the time. Yeah. And so your, your brain will see all these weird oddities when you look for them. And so for a while, it was like, Oh, well, your right shoulder is moving too much. You should just not move it as much. Yeah, it's like the now you're adding more tension to that side. And when I was doing good stuff, when you would have people do that. I'm like, they move worse now. Yeah, like they look worse. And what

Dr. Katie Dabrowski

I mean, at what cost? Are we changing people's movements so much that maybe a compensatory mechanism has just helped them? Right, what is and this is where we going into that like, existential crisis and what is perfect movement, right, because this lens that we're looking at gait analysis, I mean,

we have these measures of normative values of rotation of the pelvis with each stone Write that but like, if it's not the best for that person, but that's where are we overcorrecting? If they you know, they have pain, that's different. But I think a lot of times we overcorrect and people don't have pain.

Dr. Mike T Nelson

Yeah, no, I think so. And I'm probably guilty early on of probably most people, just like a little bit of knowledge. Like I stopped doing that. Yeah. Oh, their pain got worse. And if I thought about it, rationally, I would realize, oh, yeah, they're actually moving worse, totally.

And so what I realized was that, maybe if we look at gain, it's this advanced movement from one side of the body to the other side, there's a whole bunch of stuff. But I'm like, okay, so if something's moving too much, that's the thing you see. And that's the thing that their brain has figured out as a compensation order to move moving enough.

So that's exactly so it's the thing that's not moving enough. So like in the right shoulder where they're throwing their arm out in front, I can almost guarantee and left hip extension is not happening totally, because they can't get themselves forward. So their brain goes, Uh huh. I figured it out. If I throw my arm in front, I can just throw my thorax out in front of my body and create quote, hip extension.

Dr. Katie Dabrowski

Absolutely. And it's similar to the the thought process of the every other joint stable mobile stable, which again, I think is an oversimplification of it, of course with I mean, I guess that's with everything. But you know, if somebody's shoulder is moving like crazy, how does their scalp move? How does the grass explain move? How does? How does the ribcage move? Like all of that is important to look at? Again, not that that model is perfect, but I do think there's merit? And exactly as you said, if we see this gross over movement somewhere, that it's probably because somebody else doesn't move, and we got to find it in this compensation.

Dr. Mike T Nelson

So would you then let's say if we just keep it something, say the left hip versus right arm, would you then try to increase mobility in the left hip and not worry about the stability in the right arm start?

Dr. Katie Dabrowski

It's a good question. I think I would really look more toward

Dr. Mike T Nelson

Yeah, and these are all hypothetical, there's not a person in front of you. You haven't done any eval.

Dr. Katie Dabrowski

I think I would still try to, like what is the more painful part of the body? And how can I decrease pain in the beginning. So that might mean in the beginning, that I do some stability stuff for the shoulder to help co contraction around the joints are those beneficial analgesic effects of isometrics, all that kind of stuff. And then maybe with that, we've at least given the person an opportunity to get out of pain, and then

look at the bigger picture stuff, rather than day one, somebody's coming over their shoulder, and I'm at their left hip, and there was this woman doing?

Dr. Katie Dabrowski

And explaining the rationale is super important. But I think that I've tried to kind of triage when I'm working with somebody like I because it's so I could pick 15 things I want to work on. Oh, sure. What are the top three, right, my evaluation that day, and therefore, you know, the top three things I'd be working on in the next few sessions. And it might not yet be that like hip extension on the left, and I just be get the shoulder to calm down the pain signal. And then we can get into the deeper stuff.

Dr. Mike T Nelson

Yeah, I always think like you've ever seen, like the old mother used to float the logs down the river, and then see if it was like, go out and walk. Yeah, I don't have these in Miami, I guess. I don't have any other good references. And you would see these videos of people going out and all of a sudden, they would do this big log jam.

This guy would go out and look and he would pull like one or two logs out. And all of a sudden, like, everything moves together. Yeah. Right. So they call it like the that's the phrase Kingpin. That's where they came from. So I'm working on people, I'm always thinking like, what is that? The thing that is the main effect? totally right. And if we can get that thing, whatever it is, we'll probably talk about breathing and some other stuff. Going on.

The nice part about having someone who has pain that you can recreate is that automatically gives you the eval to repeat again. 100, right. So it's like if your right shoulder you can only get this far out, like 30 degrees, it's painful, cool, if we can get 5060 degrees, whatever wackadoo thing I did to do that most of the time, if you can demonstrate that to the person, they'll they'll kind of sign off on whatever, right because you're showing them in a concrete example that it is better even though it just seems weird.

Dr. Katie Dabrowski

Yeah, absolutely. I think that's really important for for buy in, in general and just to like, Give somebody a little bit of hope or sense of control of their situation, because I think with chronic pain, or like weird injuries and your pains, so much of it comes back to this person feels entirely out of control, and they don't know what triggers it. They don't know it makes it better.

They just feel like there's nothing they can do about it. So even which is your wheelhouse even more than mine, talking to people about breath and all of that as a mechanism of just like controlling the pain response is huge too. So sometimes that is that one king pin thing. And it might not seem to some people outside looking in that it's not that big of a deal.

But for that person, it might be if they're able to curb their pain response. But yeah, if you're able to reproduce pain, show them in real time that you can change it, or you can change range of motion, or that measurable thing gets better by the end, like people like data, people want to see them better at the end of your assessment. And it's not always possible, because sometimes I'm just like, we need to do more digging, like there's a lot going on here. But I think that's the goal has shifted. And I think a lot

of therapists and chiropractors and people in the rehab world can attest to this in PT school or as my experience. So in PT school, we have this like mental checklist of everything we need to test when a patient comes in. Yeah.

And you think if I don't check this exact thing, I don't get a picture of what's going on, where you're just inundated with this person, like poking, poking and prodding. Whereas I'm like, now I'm going to find the three best things that make a difference today. It's just the paradigm shift of being, and I'm not even that experienced of a practitioner. But I mean, more experienced does give you that,

Dr. Mike T Nelson

but I bet you would be able to find those things really fast. Right? I think with just enough experience and like with how many athletes and stuff you've seen, like do you watch, I watch people through my windows and watch them walk in and stuff? And I idea? I have an idea, I still try to go through somewhat of a process. Yeah, but they're good, because they give us Yeah, you probably have a pretty good idea. Just by the, you know, I feel like Malcolm Gladwell, the whole book, blink on, how do you you know, subconsciously all the information you take in? But that's not always right, either. It's sometimes not correct, which is why you need some type of system to follow to

Dr. Katie Dabrowski

and I think in all honesty, if you're screening for red flags, then that's the most important thing. And then from there, yeah, like the whole point of that, like, we see patterns now. That's our, that's our job. We see everybody who comes in, we see patterns of movement, and that does start to add up over time to give you that clinical picture of Yeah, I probably kind of know what's going on with this person. But I'm gonna assess, I'm gonna make sure without having a blanket statement. But absolutely, I mean, the more and more you dive into that stuff, the better it gets.

Dr. Mike T Nelson

Just a curiosity, do you use? Like, I know, you probably do range of motion, do you do active versus passive range of motion? Do you use like manual muscle techniques? Or what do you kind of sort of use as part of the eval? Yes, um,

Dr. Katie Dabrowski

obviously, it depends. But for sure, I'm not a huge proponent of manual muscle testing, unless somebody has, you know, like neurologic symptoms. dermatomes of myotomes. But by like, we use, like a rig of dynamometer setup for for things like that. functional strength testing, like single leg, heel raises, single leg, squat toolboxes, just general movement assessments, all of that tends to be what we look at most, if I watch somebody squat, I have a pretty good idea from that, where their strength issues are, rather than me pushing into their hip flexor and saying, Don't let me move, you know, that's probably changing throughout the day.

I use it sometimes, especially if I see something in a squat that I want to kind of confirm and, and to really show a patient, like, if people are having, you know, low back pain, and I determine I'm assuming, and just looking at them by all my testing that it's probably because some weakness in their hip abductors, it's good to show them when I test that, like, wow, you can't even resist gravity on your left

side, you can on your right, that's pretty big for a patient. They're like, Oh, God, you're right. This is crazy, versus me saying, Well, you have a little hip shift in your squat. And this is what I'm seeing that doesn't that's not as meaningful to a person. As her range of motion, I'm looking more unless it's post operative or less. It's really where numbers matter a ton. I'm not busting out my goniometer I'm looking more big picture. Because that tends to be the clientele that I see. Bigger post operative, like caseload where the little ranges of motion. Yeah,

Dr. Mike T Nelson

but you're trying to look for small changes over usually more frequent appointments to Correct,

Dr. Katie Dabrowski

correct. Yeah, I'm looking at a lot of just bigger picture stuff that tends to be more of my lens, and just bigger movement patterns, I'm lucky that I get to have a pretty active population. So it's usually like a CrossFitter, who, you know, they have pain with some overhead position. And I'm able to go through an assessment that puts them in positions that look like their CrossFit movements and better able to see what's going on from there. You know, special tests don't have a ton of reliability and validity. So a lot of that stuff with, you know, with a few obviously, like the Walkmans test for ACL is pretty good. But other than that, there's not a ton of really good evidence that special tests are as special as we were taught. So it's a lot of bigger picture stuff.

Dr. Mike T Nelson

Yeah. What's the next question about how How do you? How do you manage the use of data and research versus the sort of art of being a clinician? Right? And I think manual muscle testing is probably the perfect example. Because I know I've gotten all sorts of hate mail because I do use manual muscle testing. And all I see is it the main thing I use know is strength testing, I can usually get a pretty good idea just by watching the person walk having to do a couple things. But I have found that it can be incredibly diagnostic to the person experiencing it totally. Because if they don't feel different, they're not going to believe anything that I say, like the

Dr. Katie Dabrowski

hip abduction example. Right? They don't see that. And you're just telling them quality of right, here's what I think is going on. That means nothing to them if they can't lift their leg on the table, but the other side can. They're like, Oh, this is meaningful.

Dr. Mike T Nelson

Yeah, it's like, Here, hold your leg here. I don't even have my hand on you. Like if you're like, drop so you can fit in. So as test and it drops two inches. Yeah, I can just have I just have them hanging out there for a little bit. And they're like, you know, trembling, and you do the other side. And you could like, almost stand on it. It's like, we're not looking for small differences here.

Like I'm more interested in. Could you feel the difference there and do whatever intervention you do? And oh, yeah, wow, that feels a lot more solid, no, cool. They're probably more bought in to what you are going to do, because they can feel a difference now, like most of them, like hip shift is a great one. Like how many CrossFit athletes come in? And they're like, Yeah, I definitely have a little hip shift to my

left. Yeah, they probably do. But I don't know how many of them could be able to detect that. You know, so even if you made it better, and then went away, they're like, Well, I couldn't, I couldn't feel it before. Anyway. So great, thanks. Hey, you know,

Dr. Katie Dabrowski

yeah, clinicians, we know what an important metric is. But it's not necessarily what it is for them. Right. Yeah. I mean, I think that's also what makes you good at your job. Because you also can critically think of when maybe it MMT is better for somebody and when it's not a muscle test, right? Yeah, manual muscle test.

And also, I mean, I think, especially when it's your own grading scale, and you are the rater every time, right? Like so much of the bad research about MMTs is, you know, inter rater reliability gauge r&r, right, so, but for me, like I'm using it and documenting it for myself, because I know what my like four out of five or five feels like, versus me, and you tried to maybe communicate that we'd probably just talk about their strength a little bit differently than that number.

But I think that it's very useful for sure still. And that's where you have to be able to appreciate the importance of evidence and the importance of the studies that back the interventions that you're using, but then also, that experience drives the questions to be asked and research in the first place. So that experience component of it isn't such a negative thing. If you're only doing things because you are using anecdote. Yeah, maybe reassess.

But also, if you're only doing things because you found, like a study about it. I mean, I think that there's a lot of in between, and there's a lot of need in our world to be able to talk about the importance of like experience is still on the hierarchy level level of evidence, right? It's not as high as a meta analysis or systematic review, but it's still there. It's not worthless. And I think it's a really tricky time right now, because the those two camps are pretty hostile to their experience only and you're, well I can lift 700 pounds, and you can't sell him right, more. Yeah, but I've scoured PubMed every single day for the past six years, and therefore I'm right.

Dr. Mike T Nelson

Yeah, it's my dad was 25 pounds. Right?

Dr. Katie Dabrowski

Exactly. So it's a mess. I mean, I think, like with everything, there's so much nuance, and there's so much context. I try to and that's what I think in PT school. It's getting better a lot of it and and like chiropractic programs, especially. There's a lot of stuff that's just been snake oil. And it's just been, we think this is happening, therefore, we're going to do it versus really rigorous good evidence based protocols. So I understand where we need to be better at that we need to make sure that we're not just doing stuff because they PTS have been doing it for years or cars have been doing it for years. But that doesn't negate the importance of experience. What are your thoughts on that?

Dr. Mike T Nelson

I mean, a lot of it I think just depends on you know, because I get hate mail from both sides. I get hate mail from researchers I hate mail from like experience people and it's always them arguing the other side. Yeah, you know, like for Marco resource people. It's like you haven't done enough publications and you need to do you don't teach full time anymore and You don't have your own lab. And it's like, okay, but I publish stuff. I've gone through the training, blah, blah, blah.

And then from the experience, people, it's certain coach would say, Well, you don't have 20 years of experience, like I do. Yeah. And one way 100% Absolutely correct. But if I started training people today, you're always gonna have 20 more years of experience, I mean, that's not going to change. And again, there's a time and a place for that too. But there might be some stuff that you've missed along the way. And it doesn't mean just because you've been doing something that's going to be 100% The correct way, either.

So I think again, it comes back to context that nobody wants to discuss anyway, right. So it's like, if I'm designing the test to look at manual muscle testing, I'm going to do everything possible to have a sham intervention to have it be randomized, and some of these things that that intervention are not going to be possible, but you're gonna do all the good things to set up a research study to actually try to avoid any effect of the placebo, or at least account for that as best that you can.

The weird part is like if you're a clinician, like people, you're in a cash business people pay you literally for a result. And your job is to deliver said result in a nice and safe efficacious way. If there's not a single study on it, but there's no downside. And it appears to help people, is there really any negative to doing that? So in some ways, I will placebo the shit out of people when they come. And I charge them 250, a session and all sorts of other stuff. Because when I initially started, I just movement sessions, I said, I want 30 People just to see if anything I'm doing works.

And I want half of you to be like, that sounds like the biggest bunch of bullshit I've ever heard my life perfect. Come on over. Because of if it works in the face of a no SIBO event, again, this is not a research study, I least have some internal data, that there's probably something more going on than just the placebo effect. Right. And we all know the placebo effect can be pretty powerful from paying to be up to maybe 70%. Yeah. But I've often joked that no matter how much I think I can fly, and just flap my arms real fast, the physics is gonna win every time.

Yeah, right. So belief is powerful. But at some point, even the placebo effect, there's there's going to be pretty hard limits on it, too. But you tell research person that you're trying to placebo people that are coming into your place, and they lose their mind, because they think you're trying to do a research study, right? And I'm like, No, it's not a research study.

And then, you know, trying to test what you think your assumptions are grabbing a different case or doing something that you didn't think would work. But you're, you're still left with if you're doing, like clinician type viewpoint. To me, that's more of an art. Right? You're reading the research, you're trying to do evidence led practice. But that doesn't mean that if the data didn't say this, that you can't do that. And that's where I think people lose their mind.

Dr. Katie Dabrowski

That's where I think one of the biggest issues is exactly as you articulated it really well. It doesn't Yeah, if just because there isn't something saying don't do it. It's not going to ruin everything like exactly, as you said, I think also, the art side of it, too, is allowing for the human element of rehab, enter the picture. I don't think I would get a whole lot of people trusting me if I just sat there and cited evidence and didn't appreciate the human component of pain, the human component of rehab.

And maybe as long as I'd like to think of as long as we're explaining our intervention methods, with good faith and like trying to be as real as possible with the hands that we have as to what's happening. It's like the the debate of manual therapy versus no manual therapy. Yeah, I'm not huge on manual therapy. But there's some cases where I think the temporary dampening of the nervous system is going to help that person to do more in the gym that we need to do.

So maybe I will do a little bit more hands on stuff, but I'm explaining it to the person that that's what I'm doing it for. Not that my hands are magic. If you don't come here and get this specific movement with my hands on you, you're not going to get better, right? That's the problem when we're selling ourselves as only I can release your trigger point, or whatever we're saying. Versus like, yeah, we're just going to do some hands on stuff to kind of put you in a better position for when we get out into the gym. And if that makes someone feel better.

What's the problem with that? Yeah, like I'm not hurting that person. I'm also not creating a false narrative of why it inclusion works, right? But I also think like you People as you said, people come to us for answers. So if I have somebody who has experienced pain with like low back pain with deadlifting, and they're now scared of it, and my flippant answer is well, actually, the most recent evidence says that while death doesn't cause pain through like, what what?

Dr. Mike T Nelson

Yeah, I don't know. Did you not listen to a single word I told you

Dr. Katie Dabrowski

completely discounting their experience, because there's some evidence coming out now that spinal flexion is okay. Yeah. Yeah, shocker. There's such a delicate way to give that information to somebody who's asking looking for an answer, because of their flexion. intolerant. Exactly, exactly.

You know, there's a, there's an art to that there's an art to say, you know, the good news is our spines are way more resilient than we ever thought. But it's going to take time for your body to adjust to that will get you there. But you know, the pain that you had, we can really curb that by, you know, helping with some mechanics, and then over time getting your spine more used to a position that it's not used to right now, there's such a different way to explain that than just shutting somebody down.

Dr. Mike T Nelson

Yeah, even like, I mean, I'm guilty of doing hands on work in the past, where I was convinced that I'm the only one who asked to, quote, solve their problem. And it was okay, like, it worked pretty good. But then people kept coming back. And so then my resolution was like, if I can figure out and try to recreate

what type of pain things they have, then I'll get a better answer. And sometimes, but then I realized that people I was left with a lot of people that I quote, unquote, couldn't fix. And then that didn't do well. And so I just stopped doing all of it for probably like five years or longer.

And they just said, all I'm doing is making myself worse, the logical conclusion of this is I'm going to be left with all the people I can't help, who are not going to be happy, because I'm no longer helping them. And I'm driving myself insane. So I started doing it again, probably seven or eight years ago, it was through RPR be activated training through duck Hill. And their system was yeah, you can work on people, if it's okay, in your state, which Minnesota it is, etc.

But then the person, all the targets you are working on, they will go back and work on them themselves. So the model is you hand off the model to them, just like you would hand off any other type of therapy or whatever you would do with them. I was like, Oh, shit, yeah. So then autonomy

Dr. Katie Dabrowski

does that create for that person instead of feeling like, a lie on you? More stuff done in the clinic? If they're maintaining whatever feel good stuff they want to do?

Dr. Mike T Nelson

Yeah, yeah. And so then I realize like, oh, okay, so now it's like, yeah, come in, we'll, I'll do the best I can to figure out and help you as best as I can. And most time, it works pretty good. Not all the time, it's gonna work. And that's all I can do, like, literally there that, you know, that's all if someone comes in and sees you, you're literally going to do the best you can. And at that point in time, that's all you can do. You know, because I think a lot of times as deeply want to help more, it's easy to end up down this path of beating yourself up and feeling bad that you can help that person and you get very wrapped up in their issues. And not, I don't know, I went down that path, and it did very poorly.

Dr. Katie Dabrowski

Yeah, because you take little pieces of everybody's experience with Yeah, that's what happens in our type of field, which is like one of the coolest parts and worst parts about Yeah, I think like, being a good educator with your clients, which I know you are, like, that's what I try to hold on to, even if maybe my intervention isn't as successful as I was hoping.

But chances are, they have for sure learned something about the resiliency of their body, maybe a little bit about how their brain impacts all of this stuff that's going on. And that's still a win, in my opinion. Or maybe you're the first provider who's ever told this person that like they're not crazy, or that their pain isn't real, or all of these things, or we've dispelled some myths that they had before where they thought, you know, bending over was going to herniated disk.

And they should never do that again, or that weightlifting is bad. Those still like little pearls that you can leave people with, even if your intervention wasn't perfect, like you hoped it would be. I think that's important to hold on to.

Dr. Mike T Nelson

Yeah, and that's a lot of you've probably seen research from Lorimer Moseley, who's out of Australia, you know, a lot of stuff with neuro tags and how we associate movement, but a lot of his big thing is just like you said, is education, my explaining like, here's, you know, how stuff works, here's how your body prioritizes things, here's what may happen, and here's what may go on from there.

Dr. Katie Dabrowski

And somebody coming to you. I mean, chances are, you're probably one of the first people that has spent that much time to sit and talk with them about their pain. Oh, yeah. Whereas, I mean, how many times do you get somebody in where their physician didn't listen to them? Their previous provider had a six other Patients at one time, so they couldn't talk to them. They only saw their provider for 10 minutes. They did lab tests that came back normal, therefore, they're fine. Like all of those things were this is probably the first time that they've been able to sit face to face like we are and talk like humans about their experience. And like, you know, actually make them feel heard. Yeah, if we're doing that we're doing something right, even if your intervention isn't perfect.

Dr. Mike T Nelson

Yeah. Cool. Last question. We'll wrap up. And we'll have you back on again later, at some point to talk more about breathing since we ended up down this path instead.

Dr. Katie Dabrowski

So what are we talking about?

Yeah. Oh, this topic? Oh, we'll get to the other one. Oh, problem, maybe another day.

Dr. Mike T Nelson

When you're queuing clients, because you actually do physical therapy and actually train clients? Do you use a lot of internal or external cues? Do you have any preference either way?

Dr. Katie Dabrowski

Yeah, I this is a good question.

Yeah, this could probably be its own podcast. Yeah.

Dr. Katie Dabrowski

Um, as I've gained more experience, I've realized how helpful external cues are. And simplifying cues, I used to oh my gosh, think that I needed to go joint by joint for, I keep using the deadlift example, because I just feel like it's pretty easy for people to think about, but yeah, it used to be Oh, my gosh, over cueing like crazy. And now I'm like, tap your butt to the wall, don't let your knee get away from my hand, giving them those external cues, chances are, this person is already so internally focus on what they're doing that another internal cue is going to just drive them insane. So I've shifted a lot more to oversimplifying the queue, picking maybe the one thing that's like the most important, rather than, like,

some very, very simple thing that are like the minor thing that isn't gonna matter in the grand scheme of things, and then a lot more of external stuff, for sure. Do you? How do you feel about

Dr. Mike T Nelson

that? Yeah. Do you want to play explain internal and external cues for people who may not be

Dr. Katie Dabrowski

Yeah, I think, internal cues and this is my, this is kind of how I think of it too. So if you have some other things as well, but thinking about how something feels or thinking of like a very personal viewpoint for what movement that they're doing, versus something like to tap their butt into something. So they're getting like an outside stimulus, or thinking a little bit more of like the world around them instead of their own feeling of the movement. That's kind of I don't know if I'm explaining that super well.

Dr. Mike T Nelson

Yeah. I think of like, like in bodybuilding and be like, Okay, I want you to do this lat pulldown and really feel your lat Yeah, you know, versus bring your elbow.

Dr. Katie Dabrowski

Yeah. That's a way more succinctly

Dr. Mike T Nelson

than Tony gentle core. When I like for deadlifts. Does you know squeezed oranges in your armpits? Totally. Right.

Dr. Katie Dabrowski

Yep. Spread the floor apart with your feet. Yeah, stuff like that. Yeah. And I think that's so important, because you'll find what person other than nerds like us who love knowing Yeah, what fiber over muscles that we feel things really feels their lats

Dr. Mike T Nelson

or even knows where their frickin light is.

Dr. Katie Dabrowski

So I find we have the luxury of understanding that sensation and knowing like and you probably are the same way I can really in my own head nerd out over the lift that I'm like, Oh my gosh, I just totally felt that and that exact portion of the fiber I wanted. The average person doesn't give a shit or they can't do it either. So yeah, like squeezing the oranges. I love making it much more simple and external is huge.

Dr. Mike T Nelson

Yeah, the big one I use I just sent a client this other day was doing some more gymnastic stuff is in for plyometrics it's like, make it quiet.

Dr. Katie Dabrowski

Yeah, totally, like shock absorber and feel your foot. Right. Like they don't know what that

Dr. Mike T Nelson

means. It's like, I don't want to hear you. Yeah. And they look at you like, you're like the worst trainer ever. Like what are you talking about? I remember years ago, I was doing this with my buddy Adam. And we had another guy friend Dave came over and was doing kettlebell snatches. So bring the kettlebell up. You can hear where the kettlebell you have to kind of release your grip a little bit to let the kettlebell spin around. You got to kind of sneak your forearm underneath.

Otherwise, it makes this horrible screeching noise and just slams into the back of your forearm. You will be bruised all the time. You'll be bruised. I beat the crap out of myself so hard trying to learn kettlebells Oh, yeah. The Rite of Passage. Yeah. years ago, buddy, Adam comes up.

And you can just hear the screeching of the skin like on the kettlebell. And in my head at the time. I'm thinking like, oh, you know, you gotta do this cue and I try not to feel he was like, Dave, I don't wanna hear that noise. And he looked at me, he's like, you know, that screeching hellacious noise you're making with your hands. He's like, I don't want to hear it. He's like, and it took him a while to figure it out. But I mean, literally, within five minutes, you have figured it out. Yeah.

Dr. Katie Dabrowski

And just figure it out. And you've inundated somebody with a list of cues. Right now. They've actually just figured out how How to adapt and move their body in a way that this horrible noise doesn't happen. It's so much more valuable. I think we all start over cueing. Yeah, correcting. I think about this all the time. The stuff I used to say to him like that was so obnoxious. Yeah. And over a couple of years in scares people away from the movement, because they're like, What are my shoulder blades doing? Just pick it up off the floor? Yeah, there's anything I want you to change. Like,

Dr. Mike T Nelson

yeah, figure it out. But I still think like trainers, like the whole internal, because most of the training is like derived from bodybuilding, which has its pros and cons. I think one of the negative cons is that internal cues are just like the still like sort of the assumed way to go for like general population, which I think is just not correct.

And it's mostly because trainers haven't been taught what else to do. Like, there's this thing where you, you're in front of the person, you want to feel like they're being more useful. You have all this knowledge, and you just gravitate to internal cues, because they've fulfilled that bucket.

Dr. Katie Dabrowski

Yeah, that's a great point to it, I even think of when I used to watch somebody in an assessment, and they're squatting. And I'd be like, on one knee, looking at their hip joint, their knee, joint, their ankle, and I'm like, I'm trying so hard to make it look like I'm really right moment, because like they're paying for this, I gotta be really in it. I'm just kind of taking a step back looking at the big picture. So similarly, with with cueing, like, we think that we're supposed to throw all these things at the person, because so they feel the value in what you're doing. And it is exactly just feel this and feel the tension there. And people have no idea what they're feeling.

Dr. Mike T Nelson

And so yeah, it's tricky. Do my bias is that I think if you're biasing people towards internal cues, you're purposely making them search for sensation, which I think may bias people to actually create in more pain. Oh, like, what is your thoughts on that? Yeah, I think it's only that's a horrible idea.

Dr. Katie Dabrowski

That's a really interesting take the or just in general, that you're biasing yourself toward that, like the feeling something is a measure of correctness of a movement, right will get so frustrated with not feeling their certain muscle group when they're doing something that they think they're doing it wrong. And you're going to be hypersensitive, then am I feeling this? Pain? So I feel the stretch? Do I feel the tension? Do I feel the contraction? Or yeah, do I feel pain? I think that's a really, really good point. I haven't put it in that. Maybe with that lens. But that makes a lot of sense to me. And my biases, for sure.

Dr. Mike T Nelson

Yeah, that's everybody, Frankie and Adam, again. Because if you think about like, we're in one, like the best you've ever had, like your best session in the gym? Or for me, it'd be like, kiteboarding, or what do you know, whatever sports you're doing? It's like, do you have more sensation or less? Like your best days you had?

Dr. Katie Dabrowski

I think, almost maybe less, because you're in like the state of just moving well, and I and again, maybe this is my bias. And maybe this is our high training age bias, where I measure progress of like, that. The quality of my movement was excellent. Yeah, like the position that I wanted to get I hit everything just felt natural and effortless, versus like feeling a certain sensation. So maybe that's our bias.

Dr. Mike T Nelson

Yeah, but I think that's something that can be easily taught. Yeah. And it's not that like, sensation isn't important. It's not what we're saying. It's, I don't think you need to go looking for it. Yeah. Right. And if I want a different sensation, I'm going to mechanically change something in their setup via an external cue first, instead of being like, come on, bro, feel you're a lot more feeling a lot more.

Dr. Katie Dabrowski

Sometimes all it takes is, you know, there, I keep going back to hinging but they're using and they're slamming their knees back into extension and just getting a crazy hamstring stretch, just like put something in front of them and say, keep your knee there. Like we're not we're making it so simple for them that they can just focus on movement, instead of feeling stuff and, and trying to create this this highly sensitive, like training experience. Yeah, I like that. The that question, though, that that changes. I think that if I would have heard that, like years ago, that would have changed so many things with

Dr. Mike T Nelson

ptosis off a lot of people, but it's like, I

Dr. Katie Dabrowski

don't know, I'm not working with bodybuilders. So yeah, it's just making regular active people enjoy movement. So I'd rather them come out of a training session and then be like, That was so fun, and I enjoyed the movement and I felt like I was just in the zone versus I felt this sick lat pump. Yeah, different.

Dr. Mike T Nelson

Yeah, and I Yeah, and even bodybuilding. There's like one, maybe two studies that show internal cues may be better, but again, you're talking about like if you're doing done dumbbell preacher curl, you're in such a highly isolated position with artificial stability that, yeah, maybe in that case, it's okay. And I don't know, I'm probably one of the rare people where I'm still like, not completely convinced because even just changing the mechanics sometimes in their supinating, more, whatever changes the sensation. Yeah.

So again, my workaround is, I'm going to change the mechanics of it to I'm still kind of looking for a sensation, but as a byproduct, not the sensation first, I want to use that as just feedback of how do you think, you know, the the session went, right? So if someone's doing a dumbbell bench press, I'm gonna watch their movement and ask them and they're probably going to be using an external cue, okay, when you get to here, I want you to think about pushing there or whatever.

And at the end, yeah, I'm gonna ask them, like, where did you feel that? Like, I still want that information. I'm not completely discarding it. And if they're like, I mainly feel it my upper pectoralis cool, then we're probably right. Yeah, if they're like, Yeah, I felt it my right pec and not my left. Okay, now, there's something weird or I didn't feel it at all. Maybe that's okay. If we're going for a pure performance standpoint, but even then there's still some feedback. That'll show up, but it's just more in the background. I think, too.

Dr. Katie Dabrowski

Yeah. Just because we as practitioners and researchers are good at began with our training age, we're good at feeling it. Maybe it's not as important of a metric for the like you said, I don't really feel it at all, but they're moving weight. Well, it's not dangerous. All right. Well, is it that big of a deal that they don't feel like their pecs or the target muscle? Maybe not?

Dr. Mike T Nelson

Yeah. Cool. Awesome. Where can people find out more about you?

Dr. Katie Dabrowski

On [Instagram](#) or at [Old Bull Athletics](#) in Miami, Florida.

Dr. Mike T Nelson

Cool, awesome. Well, thank you so much for all your time. I really appreciate it. Awesome.

Dr. Katie Dabrowski

I'm glad we completely pivoted

to a different Yeah.

Dr. Katie Dabrowski

Worked. And I think it was actually a really fun topic.

Dr. Mike T Nelson

Yeah, that was fun. Thank you so much. Thank you. Appreciate it. Thank you so much for listening to the podcast today. Really appreciate it. Big thank you to Katie for coming on the podcast. And during the discussion while you were at the International Society sports nutrition conference down in Florida. You may have noticed that sounded just a little bit different.

But it's always nice to do a live podcast whenever possible. So big thanks to her make sure to check her out on Instagram, she's got great stuff. And if you're in the Miami kind of Coral Gables area to Florida, definitely go and check out her gym there. Or if you need physical therapy services in that area. If you want more information on what I did to myself and different, crazy things, I'm doing everything from movement based stuff to collagen to some red line, even some other little bit more woowoo stuff. I go to [pain free muscle.com](https://www.painfree-muscle.com).

Thank you so much again, as always, for listening to the podcast. Really, really appreciate it. Again, big thanks to Katie for coming on and sharing all of her wisdom. So if you have someone who has pain, please send this podcast over to them. And as always, you can leave us whatever stars you feel are appropriate. Any reviews on your favorite podcast platform is always greatly appreciated. Thank you so much. And we will talk to you next week.