Ep #264: Bone Health - Reducing Fear and Gaining Safety with Melanie Metrow, Physical Therapist and Yoga Therapy Trainee

Full Episode Transcript

With Your Host

Susi Hately

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You're listening to *From Pain to Possibility* with Susi Hately. You will hear Susi's best ideas on how to reduce or even eradicate your pain and learn how to listen to your body when it whispers so you don't have to hear it scream. And now, here's your host, Susi Hately.

Welcome, and welcome back. I'm so glad that you're here because my guest today is Melanie Metrow. She's a physical therapist here in Canada, and has so much further training. She's also a trainee currently in my IAYT accredited yoga therapy program, and has such a broad base of knowledge.

And in this mini-series that I'm running on osteoporosis… Really, it's about bone health and balance, and supporting you all, whether you're a teacher or not a teacher, in your own bone health and helping others. It's also a run up to the yoga and osteoporosis program that we're running. It's helping teachers be less afraid of working with their clientele with osteoporosis, and really opening the gates to what's possible.

So, today, I'm so glad that Melanie is here, because we're going to be talking about the ANS, the autonomic nervous system, and how vital this conversation is. Because often, there is so much fear. Our world around osteoporosis is just fear, fear, fear, fear-based. "Just don't fall. You've got osteoporosis, so just don't fall," right?

I had an interview that I recorded the other day, that's going to be dropped in a couple of weeks, and it's like no one really plans to fall. So, it's like, "Let's just not plan to fall." Yeah, that's really typically the plan. So, there can be this fear of falling. There can also be a fear of fragility factors that don't involve falling. It's just fear, fear, fear, fear.

Today, I want to address that fear and provide some suggestions, in addition to all the other suggestions that are being chatted about within this miniseries, and that you're going to find also in the program. So, if this resonates with you, and you want to enroll in the program and kind of go deeper with us, you can learn more at FunctionalSynergy.com/bonehealth.

It'll be so much fun to have you with us, and to support you in reducing fear and really helping clientele.

Susi Hately: Welcome, Melanie, I'm so, so glad you're here. When Melanie and I were planning this episode, the big piece is really to drill into the ANS and thinking about what fear really does in our system. And then, the other side to that conversation, which is safety, and what can we do to help promote and encourage, and really build the roots of safety.

So, we're going to be getting into some of the pieces around fear and the ANS, but also move into education, activities of daily living, considerations for when we are looking at movement and exercise, and then also sleep. So, we're going to dig into a lot of different things here today. Why don't we just get right into it? Why don't we first just set the stage where you're describing the ANS to us.

Melanie Metrow: When I think about the autonomic nervous system, long ago, it was kind of thought as this two-tiered system. That it was either parasympathetic, that rest and digest, or there was this sympathetic nervous system, that fight or flight. And through the work of Stephen Porges, he really came up with this amazing lens to look at this through. It's called Polyvagal Theory.

And so, the Polyvagal Theory basically talks about the vagus nerve being kind of controlling, not just physiological responses in our body, but the emotions and stuff that we have as well. And so, our autonomic nervous system is always kind of reading our environment, whether that's external environment, what's all around us; coming in through all of our senses; or what's in our internal environment and the felt sense within us.

So, the exteroception are all the things we're taking from the outside, and the interoception is felt on the inside. And the idea of neuroception is that the body is always scanning the environment, outside and within us, to pick up signs of danger and signs of safety.

And so with the Polyvagal Theory, Dr. Porges came up with this idea that there's the sympathetic nervous system; yes, this fight or flight that causes the things that increase heart rate and respiratory rate and sweating and maybe that flushed response, kind of prepare yourself to fight or run.

But then the parasympathetic response, he came into this understanding that there are different areas of the nuclei that the vagus nerve is coming from in the brain, that is controlling either this more of a shutdown, dissociating response of immobilization. Or the ventral vagal response, which is this more rest, digest, and social engagement. This trend 'tend to be friend' or 'safe and social' kind of aspects.

I guess the important thing to know about this whole autonomic nervous system is that it's not one or the other, it's a continuum. You can have a range of responses that kind of can amp up and amp down. And you can also have combinations of different states as well.

So, people often think about that freeze response. And the freeze response is actually a combination of that sympathetic activation with that dorsal vagal immobilization. It's like a very, very alert but frozen type state. Then there's safe mobilization. So, maybe, while the ventral vagal state, with the sympathetic state, which is involved when we play and when we want to be creative and we want to dance.

And then there's this safe immobilization state and the capacity of this… There's the ventral vagal with the dorsal vagal state, and that's what allows us to be safe in things like meditation and stillness, and that capacity to feel safe when we're still. So, does that give you a little bit of a feeling of what I think about when I think of the ANS?

Susi: I love that. And so, let's just play out an experience where someone is told about their diagnosis of osteoporosis, and then how might that play out in the way that you're describing?

Melanie: When I think about people receiving a diagnosis, it can involve many factors. It can involve how that's being communicated to them. So,

the care provider, how they're communicating to them. And then, the care provider's thoughts and beliefs about osteoporosis. Because that can be translated to the client.

So, if there's a sense of, "There's nothing much you can do here," maybe I'll take medication and go for some walks and see you later. Don't fall. Or is the care provider coming from this really compassionate, more social engagement nervous system? They're listening to the person, they're acknowledging any nervousness, and they're giving them education to empower them. Because education is such a helpful thing.

And then, of course, it depends on the person's nervous state, maybe, depending on how they came into the office and their past history; what is their tendency? Do they tend to go into that sympathetic nervous system when they're going through a stressful event? Or do they tend to go into maybe that more of a shutdown response or worry, anxiety response?

So, of course, there's that whole spectrum. I think that it is quite complex, but it can be that some simple tools can make a huge difference in people's experience of… if they're feeling a lot of emotions around a diagnosis. We can meet them where they're at.

Susi: I love that, because it really shows the power of the healing relationship, which is something that we talk a lot about inside of my program, and that I've shared a lot about on this podcast. Where we can step in as yoga teachers, and health providers who are integrating yoga into their practices, and both recognizing one's own beliefs about osteoporosis, and also meeting that person where they're at. Of recognizing what's going on on the other side here, and how they are taking it.

I remember a client that I had years ago, and she clearly had "white coat" syndrome. She had a whole bunch of different medical things that went on during her life. While she was working with me privately, there were a number of different tests that she had to go through, and the anxiety that

she would feel days before going to those, and then on the day of, she was learning to talk herself down and really settle herself down.

And that can happen. That can occur for people in any circumstance. And so, it's for us to have that perspective of checking in. Check in. You might ask the person, but the person sometimes might not even know that exists. So, it's really being perceptive, on our side of the healing relationship, of what actually may be happening for that person. Yeah?

Melanie: That can play out a lot, and play out in a big way.

Susi: So, aside from tools, like the tools of listening, and of connecting, and being with that person, we've now received the person into our care; They've received the diagnosis and they're now in our care; because we're not the ones diagnosing them. There's this big piece here, these four bullet points that I want to go through. So, if we're thinking about education, generally speaking, and connecting with the activities of daily living, and just how we're moving. Where would you start around activities of daily living? As a PT, where would you focus first?

Melanie: I'm going to back up for just one moment, because I think if someone came to me and they were really in an activated state, I would probably do a few things to just settle their nervous system first. Whether that was a mindful movement, whether it was maybe a more vigorous movement, if they were in that sympathetic state, maybe some breath work. But I would try to find a sense of settledness in their body.

Because if they're really amped up, they're not going to take in what I'm saying. You're not going to, so it won't be as effective. I probably would start with some things to settle them. And then, I would probably get into finding out what their activities are like. What do they do? How do they spend their day? What does their day look like?

And so, I would kind of assess the demands on their body. And then, we would work through what is safe, what is not safe, or what would be better for protecting their joints and their bones. So, one thing with osteoporosis

that can be a risk factor is weakness through the spine. Forward bending can be something that places more compression through the front part of our vertebrae.

Avoiding things like those forward folds is actually a good idea. So, keeping our spine more straight when we're bending down to lift things off the floor. Some simple things like that. If we're maybe bending over to brush our teeth, instead of coming into it with a rounded back, we're going to hip hinge and lean forward.

It's training them in the things that they do every day, how to do it safely, and coming from this place of creating more safety in their system instead of fear of “what if”.

Susi: Which really moves quite seamlessly into this notion of interoception and proprioception. Because what you're teaching them in those activities of daily living is really seeing where they are in space, and feeling where they are in space. And when you're thinking about movements to help improve their interoception/proprioception, as a PT, where does your brain tend to go? And when you're integrating yoga, the yoga theory and yoga, just generally, does that change the way you think at all about it?

Melanie: I think when I want to cultivate that sense of… I’ll start with proprioception… I often think about loading the joints. Weight bearing is, especially with the osteoporosis piece, when you load the joints, you're stimulating bone growth. Instead of when we're not loading joints, when we're very sedentary, then we're not stressing the bones. And the bones want that good stress, that loading them through good alignment.

And so when you're loading joints, when I think about yoga postures, they’re so great because we move in all different directions. We're loading the joints in a mindful way. We're creating, often, this co-contraction. Not that we're bracing, but to hold.

Say you're in Warrior Two position, you have your hips in different positions, but you are loading them and you're finding this stability through

all the muscles. The muscles are contracting around those hip joints and around your knees, and are going to create a little more awareness of where those are in space.

But I can also use things like, maybe hands on the body for different areas. I'll tune people into, “Oh, yeah, that's what that is feeling,” in that area. And that can sometimes bring more awareness to that spot.

And then, for the interoception piece, I really like doing body scans. So, at the beginning or end of a session, we'll often kind of check in. And then sometimes throughout, as well. Because it doesn't mean that we don't have that felt sense within us all the time. But cultivating that is so important. And that really ties, as well, tightly to that autonomic nervous system state.

So, can you become aware of what breathing is like? Are you really holding your breath? Are you maybe bracing through the ribcage? Are you clenching in other places? And then, can you create more ease through the breath. And the effect that that can then have on the autonomic nervous system is amazing.

Susie: Where for you does balance fit in? And before we got into our recording, we were talking a little bit about pelvic floor and balance. So, how does balance fit in? How does the pelvic floor weave into that for you?

Melanie: So balance, of course, is huge. Because we want to keep people upright. We want to keep people safe. And so, I guess in terms of weaving the pelvic floor piece in, there is a big component of stability with that inner core, when we have a really good functioning pelvic floor. And I'm not trying to say that we want to be doing these big, strong strengthening, tightening exercises to the pelvic floor.

You want to develop this beautiful awareness of the pelvic floor, and then that synchronous movement with the respiratory diaphragm. So, this movement, as the diaphragm, respiratory diaphragm, descends, the pelvic floor descends, and then they gently come back up together as you exhale. There's this synchronous movement that can be really, really helpful.

And when you have this optimal function of your inner core, it translates to more stability through your whole system. You can absorb forces in a better way, and you can move with more ease. And so, when we're thinking about balance, if we're coming from a really rigid or held place, there's less ability for dynamic movement.

So, there can be an increased likelihood of, when you're really prised, of not being as fluid in your movement. Think of an ankle, for instance. If the ankle is really rigid, and you're walking on uneven ground, it's not going to accommodate the surface that you're walking upon. And so, there could be more likely to fall.

But that can translate up the system. If there's holding throughout the system, that can increase the chances of being more unstable on your feet. And what we're trying to create is more easeful movement; more strength, absolutely. But more flexibility and ease, so that there's more fluidness in your ability to absorb those forces. And then, there's going to be with that, naturally, less risk of falling.

Susi: So interesting. It's a bit of a paradox, isn't it? Where there can be fear present, which often accompanies a bracing pattern. And then a bracing pattern can limit our ability and our breathing. And then, it can also limit our ability just to be a little more nimble. So, if we do lose a bit of balance, it can be harder to right ourselves.

There's an interesting cycle where I think yoga can be so helpful; or mindfulness, or any of these gentle practices. Even Qigong or Tai Chi, or any of those types of practices. Which helps us to, I'd use the word "settle", but breathe easier, connect, tune in. Blending interoception and proprioception and downregulating through it all, so you can get a lot of different aspects all at once that can help so many components cultivate safety.

Melanie: Absolutely. And that's what we want to do. We want to cultivate that sense of safety. And even empowerment for them to feel strong and capable.

Susi: For people who are listening to this, the miniseries, we've got other episodes that we'll be dropping of stories of people who have improved their bone health. And so, I think that's the other piece too, that can help shift mindset. And also to know that this is not just a "game over" situation; where someone received a diagnosis, and then that's it. Those things can shift. It's the beginning of the process, as opposed to the, "Now you have to deal with this thing that you've got." There are many stories of people who have improved their bone health.

Melanie: Yeah, I would urge people to lean into possibility. I mean, that's the name of your podcast, all positive. But I do think that there's always potential, right? And we don't know. But I do know there can be a difference.

If someone is diagnosed, say with osteopenia or osteoporosis, when they're 50 versus when they're 80, the risk of having fractures is much greater as you're older, when you're in your 80s. And so, just knowing that if you have a diagnosis earlier, in your 50s or 60s, there's still lots of time you can do to affect that and see what happens.

The other thing I just wanted to mention was the postural piece. Because that also is a component of balance. And so, I know that posture, as of late, is maybe not as big a thing, and people are just finding a relaxed state which feels comfortable in your body. So, with osteoporosis, there is an importance in stacking the bones.

Because when you think about a spine that tends to be more kyphotic or forward bent, forward flexed, hunched forward, there's more pressure going through the front of the vertebrae. As the pressure is increased there, it can increase the chances of those wedge fractures that we're trying to avoid. And the beautiful thing with yoga therapy, the way you're teaching it, is you're not giving the goal that we're going to increase posture.

But people's posture, it starts changing and it's incredible. They're not coming at it from a braced, held position. Which as a physiotherapist for many, many years I have… "Okay, let's work on shoulders, back, lining up

or stacking shoulders with hips." And so, yes, that's ideal posture. But it's a different way that we're going into it with the piece, versus going into this braced pattern.

And so, when we can set people up with better postural alignment, then we're going to also have better balance, because you're not in this forward position initially. More falls tend to be from a forward fall, so I do think there's so much to be gained with a yoga therapy piece.

Susi: Good. Let's cover sleep. We haven't spoken about this yet. And I haven't interviewed anyone about the sleep piece as it relates to osteoporosis. I'll be fascinated to hear your view on this piece, because it is so important.

Melanie: Yeah, sleep is super important. If you think about somebody coming to you that has a diagnosis of osteoporosis, and you're asking about how they sleep, and find out they're not sleeping much at all; maybe they have insomnia, maybe there's sleep apnea; there are different things that they don't know, they just know they're not sleeping well.

And so, usually, I'll start with some different questions. There are different questionnaires that can be used. But we really want to foster deep sleep. And if someone's not sleeping well, there are a lot of things that can be done about it. There are a lot of different sleep hygiene things, and things that probably a lot of people on the podcast may have heard about.

Having awake times and sleep times be regular so that you're not fluctuating all over the place, or on the weekend staying up later hours and then dealing with that through the beginning part of the week. And then, using your bed just for times of sleep or times for sex, and not having it be about lying in bed watching TV, reading for hours on end, waking up in the middle of the night and feeling like 'I'm going to lie in bed and toss and turn.'

And then, having a devout relaxing bedtime routine can be super helpful as you're down regulating; avoiding the screen time, and having exercise in

your day is very important. Maybe not just before bed because you might be ramping up your system. Getting outside in the morning for that hit of natural light can be super, super helpful to establish that circadian rhythm.

Looking at things that you're putting in your body, like caffeine, alcohol, and things that can disturb your sleep patterns. And then, looking at other medications and stuff can also play an impact on sleep. So, that's something that is outside of my scope of practice, but it's something to look at with your doctor.

Avoiding things like daytime napping, because that can certainly affect how we sleep at night. And then, just make your environment, your sleeping environment, comfortable and cozy. Giving yourself as many pillows or supports to be physically comfortable as possible. All of those things can be really helpful. They make a huge difference for a lot of people.

And if that is not working for you, there is always the option of doing what's kind of the "gold standard" for something like insomnia, which is cognitive behavioral therapy for insomnia. Which can be provided by someone that's been trained in that process.

I have gone through this myself, because I have struggled with insomnia in the past. It was a game changer. It was a huge, huge improvement. It's a very challenging process, so having someone lead you through it that's actually been through it themselves can be wonderful.

And then, screening for sleep apnea. If there is some sleep apnea, you've got your whole Mechanics of Breathing course that can actually address some of the physical, structural underlying problems with that. There's Restless Leg Syndrome, I would be referring them back to their doctor.

So, allowing people to get the sleep they need is huge. Because then they can come to therapy and feel like, "Oh, yeah, I actually can do the exercises." If you're giving them this exercise, advice and program, that for osteoporosis is really, really important, we do want to load the bones and

we want to do strength training and weight bearing exercises in a variety of different ways to build that bone health.

But if they're not sleeping, they're not going to have the energy to do these things.

Susi: Yeah, yeah, there's an important piece around getting restorative rest when we sleep. Because you can sleep, and get the hours that they say you should get, but if it's actually not a restorative rest, it's not a restorative sleep. Then you're not going to feel rested during the day, and that's going to have an impact on whether you do what you need to do, or how you do what you need to do.

So, it can be a piece that's important. And it really does seem that more and more people are having an apnea type of scenario. They're having a disordered breathing scenario. It's really common; it's more and more common, it seems. So, it wouldn't be surprising at all if someone's having difficulty sleeping, that there might be something like that happening.

And the good news is that sleep studies are very, very accessible. They can be found. So, if that's something that you need support with, that would be a recommendation you can seek with your doctor.

Anything else that you're thinking would be helpful for people to hear, related to ANS, a PT view on supporting folks who have osteoporosis and improving bone health, and anything else you would add to that?

Melanie: I think we've covered it all. But I really think I want people to have hope. Because I think there really are things that can be done. Now, there are things that we can do to downregulate the nervous system, so that we can just be in a better state all around emotionally, physiologically.

Because physiologically, when we're in a better state, that's better for bone health as well. Right? And education is so important. Getting people the education they need around this diagnosis; which a lot of people don't have a lot of awareness of. They just think, “Oh, I've been given this diagnosis

and there's nothing I can do. I'm kind of resigned to this. So, maybe I'll do some walks."

We really didn't even get into the walking piece. Walking is okay, but really, we want to stimulate the bones even more. We want to really create as much diversity in the movement as possible. So, moving in different ways, and shifting different directions, whether it's backwards, side circles, we really want to mix it up. And that's why yoga can be so helpful.

There's lots of standing on one leg, potentially. There are lots of different things that can stimulate bone growth. And so, finding someone that is knowledgeable in osteoporosis, and working with them to really empower you to feel strong and capable and safe.

Susi: Really great. And for the teachers who are listening, the professionals who are listening, any final words for them before we sign off?

Melanie: I do think that there is a role to be played in knowing the problem. With lots of teachers, we don't necessarily know if someone has osteoporosis unless you have asked them. So, if you are someone that has a health questionnaire, I would place that on the questionnaire.

Because when you know that someone has osteoporosis, you can make accommodations in yoga class for them. Keeping them with a more straight back, instead of coming into that forward flex posture, and some different things. Adding a little bit more of that extension piece to really strengthen the back of the body can be super, super valuable as well.

Susi: Really great. So, if this has resonated with you, and you want to dig in more to this program we're running on yoga and osteoporosis, you can learn more over at FunctionalSynergy.com/bonehealth, it'll be so great to have you. Melanie, so great. This has been terrific chatting with you and really, really helpful.

Melanie: Thanks, Susie. Glad I could be here.