Ep. #383 - The Pinky Toe - Not Some Lame Useless Appendage: Everyone ignores the Pinky Toe. Let me show you why you should pay attention.

Full Episode Transcript

With your host:

Susi Hately

From Pain to Possibility with Susi Hately

Introduction (00:00.00)

You are listening to From Pain To Possibility with Susi Hately. You'll 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.

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Welcome, and welcome back. I'm so glad that you're here because today we're digging into the third of three of the foot mini-series. We started off with the big toe, got into the peroneals, and now we are playing with the pinky toe. And what I hope to do is to bring all these three together, because the reality is, even though I can kind of cut up each of these into pieces, bring some connection up towards the hip like I did in the previous two episodes, the reality is all three of these work together to make walking, make foot function, really, really, really effective.

Now, what makes the pinky toe kind of fun is that for so many people, they feel it to be an insignificant piece of the puzzle. And yet, it is one of the most interesting parts of the foot.

So, we are going to get into the job of the pinky toe. We're going to dive deep into some of the anatomy, and then we're going to bring it back to the function of how this anatomy really plays into the way the foot receives the ground and senses the ground. And then we're going to relate it back to the previous two episodes. Then I want to talk about what I've seen between Downward Dog and Plank to Upward Dog.

So, let's dig into it.

So, what's the job of the pinky toe? Well, if the big toe is built for propulsion, and the peroneals help with lateral stability, the pinky toe really helps the foot receive load. It can help, in a healthy foot, broaden the base of support, distribute pressure across the forefoot, and can provide sensory information about where the body is relative to the ground. It really does assist the foot's ability to adapt to changing surfaces and changing loads.

So, all in all, the pinky toe, we can think of it as being less about force production and more about force reception.

So, if we dig into the anatomy of it, we've got really four key muscles to talk about. Now, this is going to be heavy on the anatomy, so if it's helpful, open up an anatomy book and follow along. But I think it's interesting, one of the key pieces that we're going to notice around all of these muscles I'm speaking about.

The first is the abductor digiti minimi. Okay, so it's the first part of the planter layer—most superficial layer. So, it's originating from the back of the foot at the calcaneal tuberosity and the plantar aponeurosis, and it inserts basically into the base of the pinky toe. Okay? Its job is to

abduct the pinky toe away from the fourth toe (think about spreading the toes) and assists in flexion of the metatarsophalangeal joint. Okay?

Let me say that again: and assists in flexing between that pinky toe and the metatarsal—it's called the metatarsophalangeal joint.

The second is the flexor digiti minimi brevis. Now, this one sits deeper, and it originates at the base of the fifth metatarsal and the long plantar ligament, and then it inserts on the lateral side of the base of the pinky toe. So, it's intrinsic. Its primary role is, again, to flex the pinky toe at that metatarsophalangeal joint.

The peroneus brevis—we heard about this in the last episode. So, it lives in the lateral compartment of the lower leg. That's where it originates from on the fibula. Comes around the ankle bone (the malleolus) and inserts on the styloid process of... the base of the fifth metatarsal. So, its action is to evert the foot and assist in plantar flexion.

Then we have the peroneus tertius, and it sits closer to the anterior compartment of the lower leg. And so, when it comes down on the anterior side, it inserts on the dorsal side (the top side) of the base of the fifth metatarsal. So, in that... those connecting points, it helps to dorsiflex and evert the foot.

So, the key here is not so much that it's memorizing names, but two of those muscles attach at the base of the pinky toe, and two of those attach to the base of the metatarsal. So, it's of that... of that fifth, of like the... the metatarsal that connects to the pinky toe. So, that's kind of where I want your... your brain to focus in, because we're going to move into the function piece now, from anatomy to specific kinetic dynamics.

The anatomy here matters because these structures don't exist simply to move the pinky toe. Their larger role is to help the foot interact with the ground—helping the foot widen, spread, adapt, and receive force and load.

So, they work together as a coordinated collective to do exactly that. So, even though I... I separated them out, they don't work individually. They're not isolated. They're a team.

So, how do they collectively work to widen the foot?

So, first of all, the abductor digiti minimi, it helps pull the pinky toe outward, right? And that helps widen the base of support, and that can make the body easier to stabilize.

Then, the spreading of the foot comes from the peroneus brevis and tertius, and it attaches onto the fifth metatarsal, and that can stabilize the outer border of the foot. It gives the lateral arch more integrity and better contact with the ground.

The long peroneal muscles cross the ankle and influence the whole foot's orientation. So, where the small intrinsic muscles below help to control the toe directly, the long peroneal muscles are managing larger positional shifts. So, together, they behave like this micro-adjustable suspension system.

This is where we help facilitate suppleness. We want these muscles to be able to be adaptable, to be receptive. It's not just about having a mobile foot or a stable foot, but to be able to be adaptable and receptive.

So, how does it do that? So, again, as I've mentioned once before, the pinky toe is less about force production and more about force reception. And many of the structures converge around the fifth metatarsal, so it makes the outer foot system a really important zone for receiving load. So, when weight enters the foot, it's not so much "can the foot push?", it's whether it can accept it, distribute it, and respond without bracing. And that, in essence, is a way that we can think of the pinky toe. It's helping the foot do that. And the muscles that support the pinky toe help to broaden support, receive load, provide information for where the body is in space relative to the ground.

So, how does this orient now to the previous two episodes—the peroneals and the big toe? Well, this is where it becomes kind of interesting.

The big toe is like the lever, and the peroneals are like the stabilizers of the system, and the pinky toe helps the foot receive and distribute load. So, when any of these pieces are offline, the whole mechanism can change. The big toe—it's not effective with propulsion without the stability underneath it. And the peroneals can't effectively stabilize a foot if the foot's not sensing the ground well, if that lateral border is not connected. And if the foot's become rigid, if it's not able to receive, then the pinky toe can't really be effective.

And this is where the plantar sling—that stirrup—comes into play that I talked about in the second episode. It consists of the tibialis anterior and the peroneus longus, right? It's a stirrup that provides support, and it can't function well unless that outer foot is anchored, right? If the lateral border is not stable, then that cuboid can't work in a coordinated way, the peroneus longus can't provide tension to the system effectively, and we won't have a great counter-tension across the sole.

So, I've said this now in a few different ways, that really what we're doing here is we're enabling that big toe to be great at propulsion. And in order for the toe to be great at forward propulsion, it needs the lateral foot to be an anchor, and the plantar sling—that stirrup—to be able to coordinate all of those pieces together.

And when we have that, we have a really healthy system for moving forward.

Now, in the previous episodes, I spoke about some of the impacts of when, say, the big toe isn't functioning well, and what can happen through the calf and the glutes. And the outer hip and the

peroneals in the second episode. So, now we're going to explore something similar, but with Downward Dog to Plank.

This all started way back, early in my career, when I was teaching a workshop, and a longer-termed teacher—I think she was maybe already 15 years into teaching by this point—and she had been... she told the group how she had seen pinky toe function really starting to drop off over a period of time. That when they were in Plank, that pinky toe hovered.

And it's true! And I've seen that more and more and more. And the important thing is, is that when you really dig into it, and you really look at the function of the foot, there's nothing happening that's specifically wrong. It's not because they're weak. But it does become interesting to see that there is a lack of spreading through the foot, a lack of an ability to receive load through the foot. There's more either an over-supination or an over-pronation. There's sort of a less of a... a bounce in the step, a heavier footedness, more gripping and bracing. Almost a slumping through the spine—not like a slump-slump, although that does exist, but more like a lack of springiness, or like the turtle's head has come into its shell. Right? There's... the receptivity and their response overall is less.

And it's not necessarily because there's any one particular muscle that's tight or short. It's an overall responsiveness that seems to be less.

So, what becomes interesting is not to just go right into the foot and change up the suppleness, although... although that can help. Going in manually and working with the foot, going in with a ball and working with the foot, going in with tools like Graston Technique and Active Release Technique and other passive, hands-on, actual work can do an amazing job at freeing up tension and bringing aliveness into the foot.

But how do we help support the foot in a retraining process, where feet become more able to soften and spread, receive, and distribute load?

That's when we can really begin to play with how the foot is at the bottom of a kinetic chain. That, yes, the foot is the foundation on which the whole of our body stands upon. But when you see how the pelvis is a platform on which the leg bones swing when we are walking and running and hiking and climbing stairs and descending stairs and climbing hills and descending, if there isn't a solid connection between that pelvis being a platform and how the leg bone swings, then how that foot is placed is going to be limited. How we load over top of that foot is going to be limited. How we transfer load from one side to the other is going to be limited.

And it's not just the platform of the pelvis on which the leg bone swings, it's the way that pelvis is connecting with the ribcage, and how the inner workings of breath play with the overall system, and not just through our nervous system, but how our muscles are receiving and distributing and transferring load and effort.

Now, that all might sound quite complex, but the reality is, is when we can work initially very deliberately and specifically with the foot and bring that awareness up through into the pelvis, and to the tissue around that pelvis, and then connect it to the feet and then with breath, some remarkable retraining and transformation can happen between the foot, the pelvis, and the whole of our body and being.

It really can change the dynamic of the way that our feet feel.

Much like I mentioned, I believe it was in the first episode, Lisa—who is now a graduate of my certification program—when she took the Therapeutic Yoga Intensive, we didn't actually work with the feet at all in that particular training, but her feet felt amazing. She had had years of just assuming that her feet were going to be sore. And over a six-day period, that was no longer the case.

Or Angelique, who took the Power Up Your Movement: Strong and Supple Feet and found freedom through her back and her SI joints, and how her walking gait became so, as her words, "whoosh, whoosh, whoosh, whoosh," smooth and clear and easy.

See, that's what's possible. It's not just one single part. It's the integration of that part. Yes, being deliberate with it, being deliberate with the feet, being deliberate with the pelvis, and bringing connection to the whole.

If this is interesting to you, if you want to explore your big toe, your pinky toe, the sling, the way your peroneals work, and how that all interacts with your glutes and your calves and your pelvis, and yes, your breath, your ribcage, and probably even your jaw, I would love for you to join me at Power Up Your Movement: Strong and Supple Feet. And you can learn more over at **functionalsynergy.com/feet**. I'd love to see you there.

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Susi Hately: Hey there, is this whole foot-to-pelvis conversation interesting to you and sort of lighting you up inside? Well, come and join me this July for Power Up Your Movement: Strong and Supple Feet. I'd love to show you what I know about really making changes to the way that your feet feel and what you're able to do once your feet feel so darn good. You can learn more over at **functionalsynergy.com/feet**.