

Ep. #355 - Core



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With your host:

Susi Hatelly

[From Pain to Possibility](#) with Susi Hatelly

Introduction (00:00.00)

You are listening to From Pain To Possibility with Susi Hatley. 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 Hatley.

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Welcome and welcome back. I'm really glad that you're here today because today's episode digs in again to this concept of core stability. Now, over the time that I've been running this podcast, we're well over 300 episodes. I have recorded a few episodes on core stability, what core stability is and what it isn't.

Core stability and breathing, core stability and recovery from knee surgery, core stability, and hypervigilance. So I've dug into it from a number of different angles. Now, the reason I'm running this episode now is twofold. One is that the way that many people in the yoga and in the fitness, and even in the massage industries are viewing core is shifting.

And we're starting to see more clearly from a sort of like a, there's a critical mass of people realizing that there is more to core than just the abdomen, which is really, really terrific because that will make such a difference the more people really move beyond a singular muscle focus. And the second is, as I'm running a new program, I've updated my Power of Pure Movement core stability program for 2026, and I'm running that at the beginning of February. So if you enjoy and resonate with what you're listening to today and you wanna join me in February, then do check out functionalsynergy.com/core, and you can read all about it there.

So the big piece about today that I wanna dig into is this distinction between core and bracing, and specifically why over bracing can often lead to less stability, not more. And why it often doesn't lead reliably to a reduction of pain if you've been told to pull in your belly, brace before you move, or hold your core tight so you don't get hurt.

Or if you are a teacher who has said those things—pull in your belly, pull your navel to your spine, brace before you move, hold your core tight—and yet what you're seeing is clientele or yourself still feeling stiff, guarded, and sore. This episode, I think, will really speak with you. So let me start by saying something really, really, really clearly.

Bracing as a strategy is not wrong. In fact, if I was to lift a couch, I would want a brace. If I was to try and lift 450 pounds over my head, which is far more weight than I could ever lift over my head, then bracing would be a strategy that would be helpful. When I'm referring to bracing, though, I am definitely not talking about lifting a couch, nor am I talking about lifting 450 pounds over one's head, but rather I'm talking about it as a compensatory strategy and as a strategy.

In that context, it's adaptive. It's actually an intelligent response, and sometimes given the system and the person where brayson is occurring, it's an absolute necessary next step. It's

important though to recognize the way that I'm using this term is that bracing is not the same thing as core stability.

And when bracing becomes the default strategy, the body and mind often become less adaptable, less responsive, and paradoxically less stable. So let's begin by talking about anatomy in a way that I believe will be really helpful in filling this idea out.

When most people talk about the core, they typically think about the abdominal wall, and oftentimes they think about it specifically as the transverse abdominis.

But functionally, core stability isn't about one muscle turning on. It's really about the whole system and how it manages and responds to pressure and load. And yes, at the center of this is the trunk canister, and at the top of that canister is the diaphragm. The bottom is the pelvic floor, and around the sides is the transverse abdominis with the multifidus supporting the spine segment by segment.

And this system is designed to be responsive, not rigid. The diaphragm needs to move. The pelvic floor needs to respond and not grip and not be held in a hypertonic state. The abdominal wall needs to modulate tension, not locked down.

That is what helps facilitate responsiveness, and that responsiveness is what allows pressure to shift as load changes. So I want you to imagine in your mind this idea of a water balloon versus an iron balloon. An iron balloon is more braced. The water balloon can shift and change, respond.

Let's consider what's happening anatomically with over bracing.

When someone habitually braces pulling their belly in, navel the spine, clamping the ribs down, or even just pulling the ribs down, gripping through the pelvic floor, the diaphragm's movement is often reduced. And instead of it descending and then rebounding, it becomes more fixed. Right? Think about it. If the rib cage can't move, the abdomen can't move, then how does the diaphragm move effectively?

And this can lead to intraabdominal pressure becoming more static instead of dynamic. And then muscles like the obliques, the quadratus lumborum, the rectus abdominis, and often the lats, they take over load management. I often see this like a lock and load kind of position where those lats, like those superficial power muscles, like get in there.

Right. Now I wanna emphasize this isn't bad. It's just that when they dominate, the system becomes quite rigid, and rigidity is not stability.

When we think about stability, how I like to define it, and I'll give different examples of this throughout the episode, is control and coordination over a range of motion.

So there's a few components in there that are important. There's control, there's coordination, and there's a range of motion. And when you've got good motor control and good motor coordination, the reduction of compensation is present.

Let's flip this. If you are compensating, then the likelihood of you compensating over a large range of motion when you're already compensating in a small range of motion is pretty high.

And if you've got better control, motor control, and motor coordination over a small range, you'll be able to grow that in the long, in, in over a bigger range.

So the idea here is that over whatever range that you're moving, it's the ability to adapt a load, not just resist it, right? You don't wanna be braced against it.

When the system is braced, it might feel strong, but it's often fragile when conditions change. It's why people who brace really, really well often struggle with transitions of movements in, say, yoga poses or Pilates. They often struggle with asymmetry, but also in changes of speed from fast to slow, slow to fast. There's a lot of fatigue, and they can also struggle with unexpected load.

And it's also a reason why pain can persist. Because tissues that are consistently or constantly held, they often don't get the movement, circulation, and variability that they need. And in fact, what we see is a nervous system that's a little more on vigilance, and their protective strategy stay more online.

Like their ability to truly rest and relax is very, very tricky. They can get to a certain point, but not all the way.

So what's interesting about the dynamic is core stability really is, at your core, an inner sense of stability. It's at your core. There is an ability to adapt. There's ability to respond to variability. If you are braced or if you're always vigilant, your ability to do that will be reduced. Your core won't be responsive.

So a way to move towards a more responsive core, consider this question: Is my core engaged? Oftentimes, when people are using that question as one to answer, they tend to be more external, embraced. They tend to think, "Oh no, it's not okay."

Pull navel in, bring ribs in, then more over bracing happens.

Consider another question. Consider: Can I do this movement with five to 10% less effort and still do the movement? Now, I realize that's a longer question. What I'm trying to do here is bring you more intercept and proprioceptively into your body.

So rather than asking a question of "Is my core engaged," leading you to an answer of feeling for bracing, if you are asking the question from an easeful place, a coordinated place of "Can I do this movement and actually have the same result, but do it with less effort?" Can you feel the ultimate effortlessness in even asking that question?

Truly measuring an engaged core is actually very difficult to measure directly. That's why I like to have my clients focus in on more easeful measurements, not as goals, but as indicators. Because when we can pay attention to those signals, now we've got a chance to really tune into: Is our anatomy, are our biomechanics actually working together?

Or is bracing taking over again?

The notion here is enabling our core to become more responsive and not gripped. To enable the movement of the diaphragm, to facilitate a responsiveness of the pelvic floor, to be able to shift from fast to slow and slow to fast, go down to the floor and back up again, and to do that with ease.

With reliability, with variability if necessary, and being very adaptable, bracing is not super helpful.

So a way to play with this is to think about, as you're moving, your jaw and your neck, your ribs and your breath. If your system is bracing, tension often travels upward, and a gripping jaw is frequently a sign of global over recruitment.

A quieter jaw often can mean that a body isn't over solving for safety. If you're overdoing a movement because you don't have the underlying stability or the underlying strength, you might go up to your neck and your head in order to make the movement occur. That's over solving.

So when you move into your next movement, can you do the movement with 10 or 15% less jaw or neck effort and still have the same result?

Notice where the jaw and the neck start to wanna kick in. Can you bring your range of motion to that point so that your system understands and recognizes where the movement pattern is falling apart, and then work there? And as you work there, you're gonna find your motor recruitment getting better and better and better.

This applies to the ribs as well. When we pull the ribs rigidly down, grip them down, keep those lower ribs in, or weave them into the upper abdominal muscles, the diaphragm often doesn't move very well, and pressure can get trapped. Responsive ribs allow the diaphragm to participate really effectively in stabilization.

So a similar question can be asked above the ribs. If you or someone who tends to brace in your ribs, notice as you move into whatever movement it is that you're practicing, at what point do the ribs want to clamp down? Or at the point where you think, "Oh, oops, my ribs are flaring. I better pull 'em in."

And if you can notice what happens prior to that, then you can start there.

I've got lots of clients who feel like they vacate their abdomen when they notice their front ribs starting to flare outward, and then that gives them the signal of, "Oh, I better pull 'em in." But instead, they're now able to tune into when they feel this vacating sensation in their abdomen.

Now they work in that range of motion first. Before that vacating happens and their ribs don't flare out, and they become stronger, more in tune, and more connected. They become more coordinated in control over the range of motion, and that's where they can build from.

The same thing occurs with breath, right?

Notice when your breath starts to become held. Can it be more responsive under load? The idea here isn't about facilitating relaxation, but rather it's feedback.

So sometimes breath can really slim out or become almost invisible. As load increases, it can get held. It's as if the diaphragm has been removed from the stabilization strategy, and probably what's there instead is bracing.

So notice when you move into a challenging movement. You might notice that you are really, really braced. Notice what also happens with your breath. And notice if you just back up the movement a tad for inquiry purposes—at what point does the breath get held? At what point does it brace in? At what point does it sort of vacate your system?

Then what is actually stabilizing you then?

So let's play with this and explore these ideas. I want you to come into a tabletop position, so in hands and knees. And if you need something underneath your knees just to give some cushion to your knees, then go ahead. If you are not able to be on your hands because of wrist tenderness, then you can always fist your hands if you need to.

What I'd like you to do is just gently lift your knees off the ground, like by an inch, not very high.

Now, often what happens here is that as someone lifts the knees off the ground, they brace in through their abdomen, their ribs. They might feel it in their neck or their jaw. Sometimes people feel more of it in their wrist, maybe even in their back.

If we break this movement down, what's essentially happening is you're moving from six points being on the floor to four. The six points being hands, knees, feet, and then you start to lift your knees off the ground by an inch, and it's just your hands and your feet.

So by shifting from six points to four points, we need to absorb the load somewhere. Something needs to stabilize us from those six points to the four points.

A lot of times what happens is people anticipatorily brace before lifting up, which is totally fine. You can do it. But if you're anticipator bracing before you even lift, then what muscles will be engaging while you're lifting?

And that's what I see often happening. Those who anticipator brace often the energy can move up, towards bracing in the ribs, even more up through the neck and the jaw, even more in through the breath, even more. Or they land in their lower back.

And often what I'll teach people is just say, "Just peel your knees off and notice how your body responds to the change of load," as opposed to anticipatory bracing.

So the distinction here is, remember at the top of the episode I talked about I would definitely brace if I was looking in a couch. Here, we're not lifting a couch. We're just peeling our knees off the ground.

So if you were to train yourself into a responsive loading, then you would watch what your body does in response to lifting the knees off the ground.

The same thing applies as we move from lifting the knees up into a hovering position, into a plank position. And as you move into plank position, what ends up happening—because now we're stretching ourselves out from that tabletop into that full plank—is what starts to happen with your neck, your jaw, your ribs, your breath, your back, or any other part of your body.

And again, what I'm asking for you to notice is simply to notice and be aware of your body's response to the change of load. If you end up bracing, if you end up holding your breath, if you end up in your jaw, that's the pattern you're ultimately training.

And if you're actually okay with training that, then cool.

But what I found is when people gravitate towards this podcast or into the end of the courses that I'm teaching, their interest is reducing or eliminating physical pain, training their bodies to be more responsive and more capable of absorbing more load. Or they're seeking greater performance or becoming a better yoga teacher or yoga therapist.

So all of those opportunities there require us to pay attention and receptively to what we're feeling and proprioceptively to how our biomechanics are actually moving.

So the idea in summary is whether you're moving into a hovering knee tabletop, or into a plank, or even if you take your plank into a side plank or your plank into a downward dog and into a chaturanga, into an upward dog, and on where we go, can you pay attention to the responsiveness of your ribs, to your pelvic floor, to your breath?

And where does load go? How well does it absorb?

The core takeaway here is that stability is not about how hard you brace. It's your ability to coordinate under a change in demand. We ultimately want it to be more responsive.

Another way I like to say this is I don't wanna willfully make stability happen. Maybe in the early phases of rehabilitation, I've got to be more conscious about what I am teaching and what I am doing. But we ultimately want it to become an unconscious competence, that the system simply responds to the load that is placed upon it.

When bracing dominates, adaptability decreases, fatigue increases, and pain often persists. When coordination and responsiveness improves, pressure has a better ability to distribute.

Tissues respond more effectively, the nervous system becomes less hypervigilant and settles more easily. That's when stability increases, and so often pain reduces.

So as you consider this and you wanna take this into your next training, into your next class, into your next weightlifting session, ask yourself: Can my breath move? Like for real? Is it actually moving? How is the load distributing through my body? Is it getting caught in my jaw and my neck or my lower back?

And remember, it's not your neck or your jaw or your lower back that are being annoying parts of your body. They didn't wake up one day and decide to give you a hard time. They're responding to the way that load is distributing or not, and they're likely letting you know that there's a bracing component happening and not a stability component.

So then where you can go is, "Hmm, can I still do this activity? I bring my consciousness to this with slightly less effort, but still have the same result." And when you build from there, that's when you really grow your core stability. Not by holding, not by forcing, but through intelligent, responsive coordination.

If this has really resonated with you, I would love for you to join me this February in Power of Pure Movement, building a responsive, agile, and nimble core. It's a two-hour online program designed to connect you with your body and experience how to feel more steady and stable throughout all of your being, and you can read more about it over at **functionalsynergy.com/core**.

Have a great day, and we'll see you next time.