

Ep. #358 - The SI Joint - Where Sacred History and Biomechanics Meet



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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 so glad that you're here because today I'm gonna dive into a topic that's deeply anatomical, deeply historical, and deeply human. The sacrum, you might have heard it described as the keystone of the pelvis, the foundation of the spine, or the bridge between the upper and lower body, and all of that is true.

But long before biomechanics, before imaging, before anatomy labs, many cultures called this bone something else entirely. They called it the "holy bone". They revered it, they protected it, they mythologized it. Some even believed it was the one bone in the body that could not be destroyed. And I love this because long before technology, humans felt something important about this part of the body, they sensed its significance.

So today with this episode, I wanna bring you through some of the story from both sides, the mythic and the mechanical. Because when we understand some of why the sacrum mattered so deeply, and when we understand how it functions in movement, breath, and coordination, I believe something changes. The sacrum stops being a problem area, it stops being fragile.

And starts to make sense from a place of deep intelligence. So let's dig into why many cultures called it sacred. Let's start with the word itself. The English word sacrum comes from the Latin Os sacrum, meaning the sacred bone. But the Romans didn't invent this idea. They translated it from the Greek phrase hieron osteon, meaning sacred bone, holy, or temple.

Meaning bone, the sacred bone, and this idea appears again and again across cultures. In Greek and Roman traditions, the sacrum was used in sacrificial rites. It was believed to protect the reproductive organs, which were considered sacred because they were tied to fertility and creation. The location of the bone, its density, and its durability gave it a mythic quality.

In Hebrew tradition, the sacrum was known as the loose bone, LUZ. The loose was believed to be indestructible, the seed of resurrection. There is a story where Emperor Hadrian asks a rabbi, from which part of the body will humans rise again? The rabbi answers from the bone called loose. He describes it as unbreakable, resistant to fire, crushing, soaking, hammering.

In Islamic tradition, there is a similar idea, a bone at the end of the spine, known as Al Ajb. I hope I pronounce that properly. This bone is described as the first part of the human body created and the last part to decay. At the end of time, it is from this bone that the body will be reconstituted. Some interpretations identify Al Ajb as the coccyx, others as the sacrum.

But either way, the meaning is consistent. There's a part of the spine that endures, a part that is protected, a part that carries something essential forward.

In ancient Egypt, the sacrum was associated with the God of rebirth. The djed pillar, symbolizing stability and continuity, is believed by some scholars to represent the sacrum itself, the backbone of resurrection and eternal life. So across civilizations, Greek, Roman, Hebrew, Islamic, Egyptian, we see a similar pattern.

This bone is special, powerful, and it endures, and long before biomechanics confirmed it, humans knew something mattered here.

So now let's move into anatomy. The sacrum is a triangular bone made up of five fused vertebrae, S1 through S5. In most people, it sits between the lumbar spine above and the coccyx below, forming the back wall of the pelvis. It connects to the two ilia on either side through the sacroiliac joints, the SI joints, and this places the sacrum at the crossroads of the body.

Shape matters. The wedge shape, wide at the top, narrow at the bottom. When you stand, the load travels down through the spine into the sacrum, splits into the pelvis, and moves into the legs and the ground. And when you sit, the load travels through the pelvis and into the sit bones. So whether you're standing, walking, bending, or lifting, the sacrum is consistently receiving, adapting to, and redistributing force.

It's not passive. It's not static. It's a mediator. There's also a lumbosacral angle, that angle between L5 and S1. Changes here affect forces and often play a role in lower back pain. And S1 at the top of the sacrum contains some of the highest trabecular bone density in the entire spine.

Trabecular bone aligns along lines of force. So this density tells us something important. The bone is designed for load. It's meant to bear weight and it's meant to participate. So now I want to get into muscular control, real movement patterns, and things that I consider when I am working with clientele with SI joint issues.

I also think it's important for us to see the context from within which I am talking about this. When I first began consciously and deliberately working with people and their SI joints, it was around the time of Andry Vleeming's work with the SI joint, talking about form and force closure. The principles of form and force closure were introduced to describe the mechanism of sacroiliac joint stability.

Where the form closure is a theoretical stable state of a joint with close-fitting articular surfaces, and when those are working well, theoretically, no extra forces are needed to maintain a stable state when we're loading and when we're unloading. The reality is that this type of construction would not allow for any practical mobility.

So it truly is a theoretical state. Force closure is also a theoretical state where we've got muscular work, where muscular work, fascial work results in a joint compression, and that

enables the joint to withstand a vertical load. So back in the day when I was thinking about form or force closure, I wasn't actually thinking about.

That languaging of form and force closure. I bring it up now because many people have moved on from this idea of form and force closure, but I think there's a nuance to it in the way that I thought about it that can still be really useful, even if it wasn't what the researcher was intending, but maybe it was the intention that I had around utilizing the ideas of form and force closure is that form closure was the idea of what the skeleton was able to do, and my work as a yoga therapist does not directly, directly impact the skeleton.

That's the work of someone with a scalpel or with bodywork technique, someone who can directly impact a joint. And I can't directly impact a joint. I work more on the muscular energy, my fascial energy, the way things coordinate motor control and coordination.

When we reduce compensatory patterns, that changes up the muscle dynamics. That changes up the way things stabilize. So when I would teach teachers and clients, I would be very clear that I can't change the skeleton, but I can change the way that forces are applied, the way forces can act like a sacroiliac joint belt, but internally, right?

So when I work with the hip abductors, the adductors, the pelvic floor, the transverse abdominis to begin with, to get those working better through better mechanics, and then expand outward to the rib cage, down to the feet, integrating the breath, and yes, the jaw, when we get those things coordinated better, the SI joints improve.

So much around SI joint pain and poor mechanics, in my lens, has, I wanna say, a root in compensatory strategies. And when I can help my clients reduce compensatory strategies, they naturally begin to improve better stability, more strength, they've got more variability and adaptability and nimbleness.

Through the activities that they do. So this idea then of improving the mechanics of this joint all lie in what I do with almost every other scenario I face when it comes to biomechanics, when we look at hip mobility or hip strength or just how that joint moves. Does it move, or is there something else that we're bringing in to help make it move?

Where are we compensating? What's working? What should be working but isn't? And we begin to refine those movement patterns, that control and coordination mechanism. That is where real shifting occurs. That is what we do inside of my programs, whether it's the Power of Pure Movement sacroiliac joints program or whether it's the Therapeutic Yoga Intensive.

The whole intent and idea here is to fundamentally improve the way forces move from the upper body to the lower body and from the lower body back up to the upper body. So it's not just local in and around the SI, but rather it is, but then it's what happens more globally in its interaction with that area of the body.

So now let's bring this back, weaving together biomechanics. In ancient history, ancient cultures believed the sacrum survived fire, that it resisted decay, that it endured. And while that isn't

literally true, symbolically and structurally, they weren't wrong. The sacrum is one of the densest, most reinforced bones in the body.

It anchors massive ligament systems. It protects reproductive organs. It sits at the base of the spine where gravity and ground reaction force meet. So how you can integrate this into the movement mechanics I just spoke. When you're working with someone with pelvic pain or SI joint irritation, consider how.

Does your sacrum receive? You can it. How do you receive it?

So many people treat it like something fragile, when in reality it's quite resilient, and what's usually struggling isn't the sacrum or the SI joints per se, but rather the patterning around it. When we bring together the history, the anatomy, the lived experience of movement, something can shift. The sacrum stops being the problem.

It stops being the fragile one. It becomes what it truly is, a crossroads, a bridge, a translator between above and below.

The ancients were right. The sacrum is special. It is powerful, and it deserves attention. Not because it's weak, but because it's foundational.

If this is interesting to you and you wanna dig in more, you've got two ways to do it. The first is the Power of Pure Movement sacroiliac joint program, where we dig into the sacredness, the strength, the stability, and bring more of that into your body and mind. And if you're a teacher and you wanna take this deeper with me, please check out the Therapeutic Yoga Intensive.

I'll give you the two links now: functionalsynergy.com/sij and **functionalsynergy.com/intensive**. Thanks for listening. We'll see you next week.