

EPISODE 281

Boost Performance, Prevent Injuries, & Upgrade Your Movement Diet – With Dr. Kelly Starrett

Shawn Stevenson: Welcome to *The Model Health Show*. This is fitness and nutrition expert, Shawn Stevenson, and I'm so grateful for you tuning in with me today.

Listen, nothing says pump the brakes on your fitness progress like being hit with an injury, alright? The question is how do we best prevent injuries? Right?

Is it warming up? Is it cooling down? Is it stretching? But here's the thing, we don't see other species needing to warm up in order to perform without getting an injury.

You're not watching The Discovery Channel and then you hear, "Here we have the wild jaguar hunting its prey in the bush. There he goes, he's chasing the wild gazelle. The jaguar is hot on his trail, but he's pulling up, he's pulling up. He's pulled a hammy. The wild jaguar has pulled a hammy. He takes a loss."

We don't hear that. Right? We don't hear that because it's not about stretching, alright? It's not about this idea that we need to warm up and cool down. Those are components that we can take advantage of, but it's really about how we live our day-to-day lives. Right? And staying ready.

And so that's what we're going to talk about today with the very best person on the planet in talking about this subject matter of mobility, of being ready, right? Being a supple leopard, right?

He's the New York Times bestselling author of this incredible book that everybody should have, right? It should be in your library. If you're into movement, fitness, all that good stuff, you just want to know stuff, you've got to have that book in your library, alright?

He's been on the show, this was way back in the day. He's new and improved, he's progressed, he's gotten better with age, alright? He's a fine wine, it's my guy, and we're going to get him on here in just a moment.

But first I want to give you something that has helped me today, alright? My son- both of my sons have been going through stuff. My kindergarten son is going to first grade, and so now he's like today he's at a new school as like a test day.

I didn't have no test day when I was in school. Like I just show up, right? Your mom just kicks you out of the car like, "Good luck." But today we're so conscientious about all these little things we do with our kids, and so he's having a prep day at this school.

And so you know, it was a little kind of stressful process for him, just kind of going through the motions, because he likes kindergarten. Right? He likes being where he is.

And so we had to have a talk, we were up a little bit later than normal, plus I was reviewing my son's - my older son is seventeen - his paper that he did at the last minute. Alright? So just- they will throw the curveballs at you, alright?

So this was my life, and so even though I wrote 'Sleep Smarter,' sometimes again, life is going to throw curveballs, especially if you have kids. So today, this morning, I needed a little extra, and so I did a double pack.

I don't know if you've ever done this. If you're doing the Four Sigmatic coffee, alright so I did a double pack. Alright? So I had to get a little bit more of that in my veins, and man I feel amazing.

And to be real, it doesn't have that weird kind of crazy caffeine spike that you might be accustomed to with conventional Folgers in your cup. This is very balanced because it's a symbiotic kind of blend with the coffee- organic, so you're not dealing with like, "Go ahead and make me a hot cup of Folgers with pesticides and rodenticides, please."

That's what you're really drinking, alright? You've got to get the organic good stuff, alright? So that's organic, plus we've got the medicinal mushrooms in there.

Alright so this one has lion's mane. University of Malaya found that lion's mane actually has been clinically proven to increase something called neurogenesis.

You're probably like, "Shawn, what is neurogenesis?" That's the creation of brain cells, alright? Neurogenesis, literally the creation of new brain cells. How powerful is that?

I promise you, Starbucks can't do that. Alright? They just can't. The unicorn frappuccino cannot do that. It would probably kill brain cells. As a matter of fact, I know it's going to kill brain cells. This does the opposite.

Alright, so please understand, powerful stuff here. Alright so Four Sigmatic, their mushroom coffee, I had the lion's mane blend for the brain-boosting capabilities. They've also got a blend with cordyceps for performance. I always have that pre-workout, it's one of my favorite things.

So pop over there, check them out. Do yourself a favor and get on top of the Four Sigmatic, alright? So it's www.FourSigmatic.com/model and guess what? 15% off everything. Alright?

Secure the bag alert! That just happened, so make sure that you take advantage of this incredible offer. It's exclusive here at *The Model Health Show*, alright?

So www.FourSigmatic.com/model, 15% off. It's one of my favorite things on the planet. Head over, check them out, and now let's get to the iTunes review of the week.

iTunes Review: Another five-star review titled 'Great Content, Great Role Model,' by KTCaw.

"*The Model Health Show* is probably the best podcast about health and wellbeing out there. Shawn covers all the basics from physical health to relationship health to mental health, and he does it while making you feel like he was a good friend or an older brother.

I look up to Shawn as a respected mentor. He's the role model I never had growing up. Shawn's the best."

Shawn Stevenson: Now that right there, that is incredibly powerful. Thank you so much for sharing that, and it's an honor and great gift and privilege to be that in your life. Thank you so much.

And everybody, thank you for heading over to iTunes and leaving me those reviews. You know I appreciate it so much, so please keep them coming. If you've yet to leave a review, please pop over and do so.

And on that note, let's get to our special guest and our topic of the day.

Our guest today is Dr. Kelly Starrett. He's the author of the New York Times bestselling book, 'Becoming a Supple Leopard.' And by the way, I usually don't read bios, but I have to read this because he's done a lot of dope stuff.

'Which has revolutionized how coaches, athletes, and everyday humans approach movement and athletic performance. It is also-' this is crazy, 'It is also the recommended supplemental reading for the Movement & Mobility 101 Course.'

Dr. Starrett is co-founder of www.SanFranciscoCrossFit.com and www.MobilityWOD.com. You've got to head over to www.MobilityWOD.com, the best stuff ever, where he shares his innovative approach to movement, mechanics, and mobility with coaches and athletes.

He travels around the world teaching his wildly popular movement and mobility course and works with elite Army, Navy, Air Force, Marines, and Coast Guard forces, athletes from the NFL, NBA, NHL and MLB, and national and world-ranked strength and power athletes.

He consults with Olympic teams and universities, and is featured speaker at strength and conditioning conferences worldwide. Dr. Starrett's work is not limited to coaches and athletes. His methods apply equally as well to children, desk jockeys, and anyone dealing with injury and chronic pain.

He believes that every human being should know how to move and be able to perform basic maintenance on themselves, and I'd like to welcome to *The Model Health Show* my friend, Kelly Starrett. What's going on?

Dr. Kelly Starrett: Always good to be back.

Shawn Stevenson: Oh man, I'm so grateful to be able to talk to you today. We were already chopping it up before the show, and you're just always dropping some serious knowledge.

But listen, I want to start with the origin story, man. I need to know the Kelly Starrett superhero origin story. Were you always nuts about human movement when you were like five? Like how did this all get started?

Dr. Kelly Starrett: Man, it's so boring. I have a huge genetic drive to move. Like right now in the world we're starting to understand the interface of genetics, and sort of owned expression, right?

How you move, which diet is better for you, how you can boost and train and optimize. It's not genetic determinism, but when you compare my genetics to everyone else's genetics, my desire to move and train is like 98th percentile.

So I've always been super nerd, let's go out. I fell into some serious- not strength and conditioning, but serious technical sports early on, and I remember moments where someone was explaining something, and it was technical, and I was like, "This is it. I'm home. This is my jam."

And it's interesting, early on my mom was actually a psychologist, and I was privy to some of like behind-the-scenes of how our brains work, and one of the things that she was a single mom. I went to a lot of her classes and sat in the back and read 'Tintin,' right?

But I was always listening, you know? And watching the monkey stories, and just paying attention. I mean when you take your seven-year-old to Human Sexuality, I mean like it's real. So I appreciate you, Mom.

But one of the things I learned early about myself is that I have a penchant for pattern recognition, and when I understood that, it really made school easier for me because as soon as I could understand how something I was learning related to something else I already learned, or where I was going, and I could see the 30,000 foot view, it gave me reason to noodle on the obsessive detail, but I always was good at picking up the new skill pattern.

So I applied that to all this, now in retrospect you can see it even easier, and I'll tell you even to this day, we still define who's the best athlete in the room to who can pick up a new skill the fastest.

That girl can backflip, and skateboard, and throw a ball, and you're like- you know? That girl's on my kickball team, she's on my hobby sport team, you know who that person is.

They were always there, and they weren't necessarily the best at training for sport, they were the best at integrating all these diverse skills, and then you'd be surprised on the football field.

You'd be like, "What happened? Who is that person?" You know?

And so that pattern recognition with desire to train really- if I'm honest with myself, my life looks like a straight line between where I am now and literally when I was a little kid chasing ski gates in Europe on the FIS, you know? Chasing FIS gates.

And what I'll tell you is I am so grateful that I've had the experiences that I've had. I was a high level national team athlete, I injured myself through an overuse training problem.

That kind of kicked me into being done with that life, and going to physio school, and then coupled with the time- all of that experience, being in physio school, with the birth of the Internet. With the birth of modern strength and conditioning which was really a revelation with really understanding- I mean I read 'The Zone' back in what, like 1999? 1999 is when I first read 'The Zone.' And that was like- "I should not eat these rice cakes and drink this Diet Coke? What? That's what everyone does."

So you know, already starting to think about it back then, and sort of getting exposed, and it takes awhile to set. And so I'm lucky because when all of this hit, I didn't have 10,000 hours of experience, I had 100,000 hours.

But then the tools were there to be able to talk and film. You know, it's hard to remember, but there was a time when the iPhone did not have a video camera. I know, wait for it.

There was a time when the iPhone did not automatically publish to YouTube or Vimeo, and that's when we started Mobility WOD, right at the cusp of that.

And one of the things that was really- we were lucky about, is that we had a strength and conditioning facility in the city, and an early CrossFit, we were the 21st CrossFit, and it was in a time where there was Ido Portal, there was no Cal Strength, Ken Lee was out in a garage.

All the masters were working quietly and privately. You didn't have access to them, you had to go like knock on their doors.

And so we had the luxury of becoming competent in gymnastics, really beginning to understand running, and cardiorespiratory training because of our friends.

We became competent in powerlifting. You know, Mike Berger was my sensei in Olympic lifting, and all of a sudden we had a chance to practice a lot.

And I was a young physio, and then the Internet broke, and we had an audience that was looking for connection between how we're moving and how we're feeling.

And what's really interesting, I really appreciate in your intro you say that the jaguar never pulls a hammy, you know?

The real thing that we're going to struggle with, and I want to change this conversation about, is we're afraid to say movement is skill-based in that our free will and the environment gives us a lot of wiggle room, and because the human being is so extraordinary at compensation, at dealing, at not sleeping, at eating, drinking alcohol, of being sleep-deprived, of just moving poorly.

We can buffer that for a long time. It's sometimes difficult for us to say, "These things cause these outcomes." Right?

"I did this, I got injured." And what we want to do is we have to sort of take this multi-disciplinary approach, and that approach is saying, "Hey look, the human physiology and the breadcrumbs of all the formal movement training that we've had from martial arts, in track and field, in pilates, in yoga.

If you go into those fields, they all say the same thing about the way the shoulder works, about the way the spine works, about how you're supposed to stiffen your trunk and breathe. It's all there and it's called practice, it's called those disciplines.

But because we didn't have access to them, and we couldn't compare, all of a sudden it was really difficult for us to be like, "Oh yeah, I heard that gymnast coach say that, and Ido Portal said that, and the yogis have been saying that for 2,000 years."

Match that suddenly with the fact that we are now more sedentary than ever before because of our lives, because of the work, what happens, that environment has shifted around us.

The access to easy sugar, the fact that we can be on our laptops and phones until late at night and disrupting our sleep. You know, we try and tell kids- you know, parents are like, "Hey look if your kid gets into bed a half hour earlier, just a half hour, every two weeks, that kid gets an extra night's sleep."

That's how much extra sleep it is, a half hour earlier. We're like, "Holy crap." That means you could sleep two extra days a month if you just got into bed a half hour earlier.

And what we don't realize suddenly is that we don't- we aren't growing up in conditions. And I'm not pining for the old days, right? Because they weren't better.

I mean you know, that common commercial with like Samsung right now, he's like, "We are living in the age," and he is right. Like the future is here and it's wild.

The things that existed, the games, the walking, the activity, the eating, the downtime, the incandescent bulbs; it's all different and I think it's important to understand that like I said, human beings are so good at managing and buffering that it's difficult for us to see the relationship between inputs and outputs, especially since the experiment that we're running is so long.

And I think we have to keep this context of how long we're all going to live. You're going to be 100 years old. If you're listening to this podcast, you are going to be 100 years old, and it's difficult for us to say, "Yeah I smoked for twenty years, and I didn't get cancer until I was seventy." Right?

It's hard to say that those things are related, but what we know is that a lot of the transgressions of movements, a lot of transgressions with breathing, the diet and nutrition doesn't show up right away, and thank goodness it doesn't because we would be so fragile that there would be no human beings, right?

But I think we've been really afraid to say, "Hey look, do this because it causes cancer. Don't do this, and you won't get hurt."

Instead, let's change this conversation for one around from fear, and injury, and negativity, and let's say, "Hey here's why we make these decisions. Because they give us better access to our potential. Let's make this movement this way because we can move faster. Right? We can move faster more often.

Let's eat this way because- not because our blood panel says it, but like hey, that opportunity cost of that training session is much smaller, which means I can get more volume in, which means-

And my hypothesis now is that we are not working at the limits of our capacity at all. We feel like we are, our brains are telling us that we are still kicking ass even though we're redlined, but we're redlined in third gear.

And I think when we begin to give people this holistic, common sense, sustainable, and granular approaches to understanding how their bodies work- very simple, right? What are the key principles?

Your book is a great example of just basics. Like why don't you know this? Because if you know this, then you can be a big boy, and a big girl, and make those decisions.

"Yes, I'm going to have a coffee after 4:00. And I now can't go to sleep, so hey, I'm going to drink this bottle of red wine and deal with my anxiety of going to sleep. That wrecks my sleep."

It's easy for us as humans to get caught up in these cycles, but when we come back to first principles - and again, that's that pattern recognition part of my brain - then it really is simple to make small decisions, and to set up the environment where I'm going to automatically do a better thing, and one that gives me better choices.

So let me give you guys an example. I know I've been running my mouth a lot here.

Shawn Stevenson: Oh this is good.

Dr. Kelly Starrett: You're standing as we're talking to each other, I'm sitting on a stool, right? I'm sitting in basically a wide sumo stance, and I've got a little tiny barstool, but I'm just leaning. I just went for like a two-hour paddle, so I'm a little cooked.

And what I'll tell you is that we say- take the word posture, right? Posture, the Latin root for posture is position, and what we're really talking about is the position of your spine, and that is literally what we've come to understand as posture.

And so even the fact that we don't use the real language, spine position, we say posture, it gives us an out. Posture. You would never brag about having bad spine position, right?

And the issue is that we say, "Hey posture is important," and then the physios, or the doctors, or the scientists come out and say, "Well actually it's hard to correlate bad posture with pain." Right? And dysfunction.

And what I want to say to everyone is stop doing that. Stop saying we should care about posture because we're worried about pain. What we know is that when we improve position, we improve function, and we restore function, and usually pain goes away with that when we restore function.

But what I can tell you is that when are in dysfunctional positions of posture - rounded back, sitting on your bum tucked under, shoulders slouched forward - your shoulders don't work right, you can't take a big breath, you can't put your arms over your head, can't stabilize your trunk, pelvic floor turns off, and all of a sudden this is not a conversation about do this because you may get hurt, this is a conversation of hey if you just want to be, and exist at a 30% human level, that's your total God-given right.

But if you're talking about performance and longevity, then what we know is the best practice is that we can make decisions that are about function and capacity instead of decisions that are based on fear. You know?

I love Four Sigmatic, I'm such a fan. I love the chaga, it's my jam. Larry Hamilton put me onto the chaga. Right? And you know, I try to drink more tea during the day because I feel better during the day, and when I feel better during the day I'm a little bit more lucid, I'm engaged with my kids, at 4:00 I don't get the lulls. Right?

I sleep better, and that's a function of me drinking some more water-based beverages and not just caffeine during the day.

So what we want to do is help people see, and this is a greater conversation about position and mechanics, which is really the conversation about why our bodies should look a certain way when we move, even though we can be creative, and there are fundamental principles underneath the way the body is organized, and then we can then deliberate around functionality versus purpose. Right?

And I think if I take my hat off, and I put my keys in my hat, my hat is no longer serving as a hat, it's function is to hold my keys, and it functions fine like that. If I wear a shoe with an arch support all the time, my foot is functioning fine by using the support of the arch, but it's no longer being able to act with its purpose and design.

And when we start having those conversations on top of helping people make sense of this crazy lifestyle that we're all living, now we're going to be 100, and you and I are going to be stealing cars and racing at 100, and we're going to be doing knucklehead things at 100, and that's the way it should be.

It's difficult for us to keep the long view in our heads.

Shawn Stevenson: Yeah.

Dr. Kelly Starrett: And that's how all of this gets there, right?

Shawn Stevenson: Yeah, man that's so, so powerful. There are so many insights there, and you know, one of the things I want to go back to really quickly is this

concept - which when you said it was just like you're so right - because I've been studying this for the last month of what is the actual human capacity?

And many experts agree, like there's just certain things that we can't do, right? And you saying that we are maxed out in third gear, and really understanding we've got this thing called a central governor in our brains that are controlling the whole thing, and a lot of times it's based on your perception of reality, your perception of what's possible, and of course your physical ability, but it's not the biggest thing that's taken into account.

You know, we've got a lot more potential but we have to retrain our thinking, and thus retraining our body as well. So he's really pointing us to the fact that we need to take care of what's going on upstairs.

And you also mentioned the - I've mentioned this in the intro as well - Mobility WOD. So let's talk about why did you start Mobility WOD? And also for folks that don't know, what the heck is a WOD?

Dr. Kelly Starrett: WOD. Right, it's not like a tissue wad. It's the idea here is that WOD is the shorthand for workout of the day. And we started- we used the word Mobility Workout of the Day. First of all, is that the word mobility wasn't used at all.

There was a reference to Eric Cressey, and I think he made a DVD called *Magnificent Mobility* a long time ago, and as a physical therapist I mobilize tissues.

And so what we found was that I wanted a word that didn't mean stretching, because stretching had really come to mean something else, right?

What I'll tell you today is that mobility is a word that's now been convoluted. It means like- it's like the word 'extreme' or 'core.' You know like, "What are you doing?" "I'm working on my mobility." I'm like, "Okay."

So let me define mobility for us. First of all, mobility means that I have the requisite base range of motion that all of my tissues should be able to have. That means that the physiology, the structured geometry of the body suggests what normal range of motion is for each of us.

And what it turns out, is that if you're going to the experts, American Academy of Orthopedic Surgeons, American Academy of Family Practitioners, physical therapists [Inaudible 00:23:48]. If you look at all of these people who've studied range of motion, we have basically all agreed within a few degrees of what normal baseline function should look like in each joint. Right? Joint base.

So that's well and good, and in physical therapy school I had to memorize all of those things, right? Well it turns out what no one had done for me was compare what my

body should do with what I was doing when I squatted, what I was doing when I got into a pistol.

So it turns out for the average person, we don't have to memorize those body range of motions because we have a language called pushup, air squat, squatting all the way down with your heels on the ground, getting into a lunge, running, putting your arms over your head effectively.

And you know, what's nice is that gives us real benchmarks around what we're supposed to be able to do in terms of just straight raw tissues.

There's also this software component to it, and what we know is that your practice doesn't make perfect, practice makes it permanent. That's how your brain is wired.

That's why we practice skills. That's why you did all those crazy skill drills over and over again in sports, so that you could ingrain a pattern, so that those neurons could literally wire together, that oligodendrocytes, those schwann cells would come in and lay the myelin in, and reinforce that neuropattern so that it would be easier to do it.

That's why habits are so hard to break. It's so difficult to wire together, to create a habit, it's also even more difficult to fire and wire apart, because we have to physically break down those myelin sheaths and train a new pathway.

So mobility is not only, "Do I have the joint capsule range of motion? Or is my interstitial tissue, my interstitium fascia, does that slide? Are my muscles stiff?"

But I also have this software that says, "Does my brain know how to put me into stable positions? Does my brain know how to organize the body, and have the control it needs?" Which means that's 50% of the score is skill. That's why we teach fundamental movements to kids and they continue to build on it.

So like I said, one of the things that we ask about is, as we're having this conversation about mobility, the one thing is, "Hey can your tissues get there?" And then, "Do you have control of your tissues?"

And what we'll see is that when we look at skills, we want to make sure that skills and training leads to open positions. That those skills and abilities scale from kids to Olympic athletes, from children and youth athletes all the way up to my geriatric patients, that the principles are the same for our adaptive athletes as they are for my MMA fighters.

It is the same principles, and when we suddenly can't derive consistency, when you're saying one thing and it doesn't jive with the principles with what I'm saying, someone has a problem in their thinking.

Because what's happening now is that there are lots of ways to get to the end. We know that all roads lead to Rome, and it's okay to have styles.

You're the swoldier from Onnit, you're all about the kettlebells, and great, and there's a lot of ways to be working on those- get you to those shapes and positions, but the principles and the physiology remains constant.

The environmental considerations remain constant, we just turn them up, turn them down.

So when you suddenly get to mobility, what we've found more and more now through the workout of the day is that, "Hey we want position to be part of the conversation of the modern physical practice."

And when I say 'physical practice,' I'm not talking about just training for an hour. I'm talking about your physical practice starts when you go to bed, and how well you sleep, and how dense you sleep, that's part of your physical practice.

What you do first thing in the morning, and how you prime yourself, the foods you eat, how much non-exercise activity you have during the day, your ability to down-regulate, did you breathe hard?

All of those things - and then we can talk about training - all of those things constitute your physical practice. But what we've tried to say is- hey look, the issue is that a lot of times we can buffer poor positions for a long time until all of a sudden you're like, "What do you mean I can't squat all the way down? What do you mean I can't put my arms over my head or take a full breath? What do you mean my shoulder comes forward?"

And so what we've done then is said, "Hey let's put position and value position as much as we value strength, as much as we value speed, as much as we value cardiorespiratory conditioning," and really position is the hallmark of efficiency.

And ultimately the way we train to think is that we say, "Hey look, here are your positions, you've got it, you're solid, you're working on it, it's a moving target, it changes day-to-day based on who you are and what's going on, but can you maintain that shape and position under load? Under a little stress? When you're breathing hard? When you're going fast? When you've got to do more than five in a row?"

Right? What do you look like at the end of your 5k race? Do you look like the beginning? Well there's a really interesting diagnostic around your position.

And what we've said forever is as long as you went faster, that was good enough, and now we know that that's short-term thinking.

And so what we can really see is the skilled athlete can transfer the positions between sports, between training modalities faster, and faster, and faster.

And suddenly what you have is when someone else- and I'm blanking on the name, calls repetition without repetition. And that's it, so that I never- when I'm snowboarding down some steep face, I never want to be thinking about my feet or my breathing, I want to be thinking about where the board's going, what's coming next, the inputs.

I've got to get back to no mind, but that's why training is so important, and why you need to take- sometimes take the high intensity out now, because we're here, and put the skill and mindfulness back in.

These are skill training sessions. And there's a time to just be a piece of meat, we get it, but- and the world has changed in ten years.

Shawn Stevenson: But what about with that getting into position? When we're getting into position and learning that skill, is the word 'stretching,' is that how we go about doing it? You know?

There are thousands and thousands of people right now being told by their trainers that stretching is the way. So what is our path to get there?

Dr. Kelly Starrett: Well the key here around restoration of position, one is- the first thing I'll say is let's move away from what we call press and guess, right? That's a good way to put out fires.

"My knee hurts." That's the top of business today, not how well you're squatting, that's the second conversation. But today your knee hurts, your elbow hurts, your back hurts; what is it about your environment that has changed?

Why do those tissues become sensitized? Why did your brain- you know, we talk about the central governor theory, and if you guys haven't read 'Endure' by Alex Hutchinson, you've got to read it. It just came out, it's fabulous.

But also understanding that pain is highly subjective and radically there are a lot of things that can affect that. I can do the same thing for twenty years and wake up with chronic pain one day.

Why? Because I suddenly became sensitized, right? I've been running this way forever, all of a sudden my knee hurts, what happened? We don't know, and it's impossible for us to say.

It turns out you haven't slept for the last three months, you've been highly stressed, your volume changed, and you've been eating like a child.

So maybe that's a component to it, right? We're going to have to address that, but what we want to do now is break that pain cycle. And there's a lot of things we can do to desensitize a tissue, reperfuse a tissue, get blood back in there, get some hydration back in there, right?

We can restore your motion and unload those tissues that may be sensitized under stress, right? And we can start to uncouple breathing and pain patterns from some of that pain that's going on.

So what we see, is we want to give people an immediate out. "Hey, here's how you should treat this." You know, you break something off, you need to know how to put the faucet back together. You need to know how to restart your iPhone, right?

That's it, but that doesn't tell us necessary about best practice, and what we try to do in our gym, and have been doing now for thirteen years, is we get people working competently at the limits of their capacity for the day, and that's it.

It's a moving target, and for some of us we can to the game late, and some of us were geniuses, and we move well, and I'm not one of those people, and I'm a skilled mover now, but what we do is we say- hey look, we do this drill called the 27 Squats that came from one of our friends named Jami Tikkanen, and it's a way that I teach everyone how to think about foot position.

And if you're standing and you have your- you look down and your ankle is in the middle of your foot, and you're balanced between the ball of your foot and your heel, that's sort of our reference position for the ankle.

When I squat or jump, when I'm compressing, I should be balanced between all the foot and the heel. When I swing the kettlebell, et cetera, et cetera.

Ankles don't wobble, I don't wobble. My job is to try to minimize how much wobbling and gimping I go from front to back. But now I'm going to turn my feet. Turn them out thirty degrees, hold that same position. Turn your feet in thirty degrees, make your right foot forward, squat again.

And what I'm seeing is that some of us don't have the range of motion in our ankles, in our hips, we don't have the skill. Right? We get down there but we can't breathe.

Great, now we can say is, "Hey let's work on the width of your position today, which means not everyone deadlifts from the floor, right?"

It's not an accident that kettlebell swings start from the high hang position, that all Olympic lifting is taught from usually the high hang position. Not from the floor, but the swing first, right? Because that's where I have the most range of motion.

Then when we have people competent in some of these basic shapes, we can begin to open up that range of motion, and challenge their capacities as we move to full range.

But if I can't put my arms over my head, and I jump up on the pull-up bar and I start doing radical kipping pull-ups, and I'm swinging around, what do you think? You think you magically have full range of motion going over your head because you're hanging from a pull-up bar?

No you did not. What you're experiencing is your ability to compensate. Let's say that I'm a runner, and I'm a heel striker, and I love my heel striking. Yeah, I've been striking my whole life, right? Heel strikers for life.

Then I'm like, "Take off your shoes and let's go run again," and you see that your technique suddenly reverts into natural running, into normal running, which is not heel striking. You cannot run fast on a hard surface barefoot unless you revert to the way you're supposed to run.

So suddenly what you're saying is, "Oh okay, I move this way when I have this special shoe on, when I have this special compensation."

And what we can begin to say is, "Hey there's nothing wrong with heel striking, it's very effective, but it doesn't transfer very well to speed, and notice that you have two different skills going on here.

So let's get you working towards always thinking that skill is an unlimited vessel, and that we can always become more skilled, especially as we get older.

I am now turning forty-five this year, and I'll take my forty-five year old skilled self over my twenty year old meathead self any day, right?

I'll beat the crap out of that kid because he can't keep up with my skilled self, and that gives me hope. Even though my engine doesn't get as hot, even though I'm not as strong as I possibly could be because I'm forty-five and I have these real world demands, and I don't live in my truck and train three times a day, I'll tell you that I continue to become a skilled mover and continue to refine my skill.

No wonder Brazilian jiu-jitsu is the future, because you can continue to roll until you're dead, and you can be a more skilled mover until you're dead.

In fact, if you want a humbling experience, go just tap on the shoulder of a sixty year old Brazilian jiu-jitsun and let me know how that goes for you.

You know, you're going to get crushed by a really, really skilled mover, and that's interesting.

Once again- here's an example. We see that young kids are limited by their pitch counts in baseball and softball, right? And the pitch count is a way of saying, "Hey here's roughly how much volume we think you should do or not do."

I think those pitch counts are way too low, that if we give kids the right input, we can get a lot more pitching out of them, and that's an example. Right?

We just- let's take the brakes off of our human function, let's stop making it so secret squirrel precious. Eat some vegetables, sleep, do some down-regulation, be in some loving relationships, talk about your feelings, breathe hard, lift something heavy, see you when you're 100.

Shawn Stevenson: Yeah man, powerful. And speaking of talking about feelings, and processing stuff, going through even a traumatic experience, so you've got one of your family members got a kid who recently broke their leg, I believe you said it was a tibia, and my son-

Dr. Kelly Starrett: That's right.

Shawn Stevenson: And my son broke his fibula, and this was just a couple months ago. And seeing him going through that process mentally more so than anything, and then the recovery process.

So I want to talk a little bit about what are some things for us to look for with recovery for something like that, and just share a little bit of the story of what happened, and kind of the process that she had to go through.

Dr. Kelly Starrett: Yeah this is my oldest daughter, and I have permission to talk about it. She's twelve years old, working on her backflip with a coach on a super trampoline at Woodward, which is a trampoline extreme park, a place where we teach kids to backflip into foam pits, and skate, and do all this stuff.

She just caught a weird double bounce, hit puberty, snapped her tibia. Bad spiral fracture. Didn't go through the growth play, didn't have to have external fixation, didn't have surgery, we dodged.

But it's the middle of volleyball season, and she is a volleyball player and loves volleyball, and she is the heart of the defense and a scrapper, and we ski as a family, and we bike as a family, and we race- we paddle race as a family.

So suddenly this is gone, and what we see is anytime- we really generally say that most of the overuse problems, we see most of the orthopedic sports injuries are really a preventable disease, and if we move more efficiently, if we manage our environmental loads, we can buffer that.

I mean there's two really good pieces of research around kids and injury prevention, and that is sleep, that kids who don't get sleep are likely to get injured, and there is a one to one correlation there, and it's unequivocal.

The second that best predictor of injury for kids is also do they eat whole foods? Do they eat vegetables, and lean proteins, and high-quality fats?

Shawn Stevenson: Right, what are they making their tissues out of?

Dr. Kelly Starrett: That's right! Now you're thinking, principles, right? Hey, what do you got on the board? Because I know you can like eat little chocolate donuts and unicorn frappuccinos, and still beat me, but I'll see you in a week, I'll see you in two weeks, I'll see you in three weeks.

So we're thinking about the long-term, right? And I mean the things I used to tell my coach, I'd be like, "Coach, I'm already pre-stretched, I'm stretched, I'm stretched. When do you want me to do the splits, Coach? I've got you." And he was like, "No we're going to warm up because this is how we get better function, right?"

So the idea here is with Georgia-

Shawn Stevenson: And that's your daughter's name, by the way.

Dr. Kelly Starrett: That's my oldest daughter's name. It's just a total fluke accident. And I have done the post-mortem. Is she getting enough vitamin D? Are we getting enough calcium? Am I a bad dad? What's culpable?

Normally what behaviors- she sleeps, she goes to bed at 8:30, wakes up at 6:30 every night. That's our family. My youngest daughter goes to bed at 8:00, wakes up at 6:45 every night, right?

Like we protect our sleep. Our kids sleep on chilly pads, they circulate cold water underneath the sheet all night long, they have blackout blinds, and it's dark in there. Like we protect our kids' sleep, so that wasn't it.

The kids eat good food, that wasn't it. Just fluke.

Shawn Stevenson: Yeah and by the way, my son, same thing. His toe got stuck in the turf, you know?

Dr. Kelly Starrett: Oh, it happens.

Shawn Stevenson: Yeah.

Dr. Kelly Starrett: Yeah, we're human beings and it's messy business being human beings. So what I'll tell you though is one, it was useful having the Olympics on - the

winter Olympics - because every story was about someone being injured at the winter Olympics and missing the Olympics.

So Georgia was like, "Wow, I didn't realize that the normal experience of being an athlete is there are injuries to overcome."

Secondarily, it helps when like Kerri Walsh is her auntie, and Gabby Reece is her auntie, and they send her text messages, that's really nice.

But what we realized is Georgia sees why we ice bath, why we work on breathing. Because she was in a lot of pain, you know? We respect kids' pain but we don't want my kid gorked out on Vicodin and hardcore narcotics.

We were able to manage it with Marc Pro. We use a Marc Pro, which is a muscle stimulation device, which allows us to dump swelling. So they took the cast off after two days, they were worried that she was going to have too much swelling, and they were like, "Whoa, she doesn't have any swelling."

I'm like, "Yeah, we've been managing swelling from the second hour." She broke her leg, and then we were getting ahead on her swelling with our Marc Pro, once again, which again is a muscular stim device that causes a contraction which dumps the lymphatics and removes congestion and swelling, right?

We don't ice. So we're thinking, "Hey what can we control?" And suddenly when we have this conversation with our daughter around, "Hey now's a chance where we can tweak your- you can tweak your nutrition a little bit, we're going to have to pull some of the carbohydrates out because you're not moving as much anymore. Because you're not moving, we're going to have to force yourself to go to the gym and get on the- in our garage gym, and get on the exercise bike.

If you follow my wife, Juliet Starrett, you can see some little montages of how we're training our daughter. Right? Just to keep that input in it, right?

How does she tap into her social network? We give her permission to talk about it. She goes to practice.

Like so the key here is there are these opportunities to say, "This was a travesty. Let's make lemonade out of lemons." It's not travesty, she got injured working on backflips, but there are so many lessons here, and we've still got another five weeks in the cast.

But I'll tell you, my kid knows how to be uncomfortable. She knows she can breathe through broken leg pain. She knows what it looks like to have to manage that, and this is why we do sport in the first place.

Not to win Olympic medals, not to be on a team for any other reason than it helps us know ourselves, and it helps us know our friends, and it helps us see the world very cleanly, and I think this is why I hope that everyone has some kind of competitive, or at least a physical practice, because it really simplifies in a really easy model what's working in your life and what's not working in your life.

Shawn Stevenson: Oh man, super powerful stuff. You know, I want to talk to you about something that I've experienced myself since I started thinking about, 'What have I done?' It's been pretty random, but my SI joint. Alright?

And you know for some people, I mean again there can be random things that can be trauma, but a lot of times there are some issues going on with how we're treating our body. You know, movement.

For me, I remember the last time that I had this SI joint dysfunction flare-up was traveling back to back to back, and getting out of the plane, into cars, sitting down for interviews. Because as you know, right now I'm in my studio and I'm standing.

So let's talk a little bit about the SI joint, what some of the resulting symptoms can be for people, and what are some things we can do to help to get that sorted out for ourselves if we are experiencing some SI joint issues?

Dr. Kelly Starrett: Well so let's clarify that. So you know, before we even say SI joint, which is sacroiliac joint, that's the interface between your sacrum, the bottom of your spine, and your pelvis. Right? You have two SI joints there.

And what we want people to understand is this is a dynamic joint. It's supposed to move. Every time you walk, there's motion there. But once it gets jammed, you have had SI pain, it is no joke and really feels like- because what we try to do is we try to help people conceptualize their body in terms of priorities and systems.

And one of the things that we see as the greatest limiter to performance is central nervous system readiness. And not talking about your brain's perception of what's going on, right? Not our, 'Is my CNS cooked?' I'm talking about like are you trashed? Is that a negative input to the central nervous system?

Oftentimes, the body is ready but the brain is not, the interface, the neuromuscular junction is cooked, right?

And what we see then is when we prioritize nervous system, we can then say, "Well we also prioritize nervous system when we're looking at movement," and for us- and someone like Stuart McGill who's a great therapist and a brilliant clinician, we say spine first because we see the spine and the shape of the spine as one of the biggest limiters to output.

But if I start putting kinks in the spine, I see output problems. If I start tweaking the spine, I can't breathe, which means I can't stabilize, I can't create as much intra-abdominal pressure.

My body has all these really clever ways to try to protect itself and really guard the spine. And anyone who's listening who's ever had back pain can relate.

So we always- in our courses we say something like, "Alright, how many people have had spine pain? Like low back pain?" And everyone raises their hand because it's normal to have this as a human being. This is just typical, right? This is the design, and sometimes we have some weird inputs.

And I was like, "Now compare that to the time you sprained your ankle." People were like, "Yeah the ankle sprain was a pain the butt, but I got on."

In fact, you probably finished the soccer game with that sprained ankle, right? You just kept lifting. But when you tweaked your back, you were done.

And the reason we- our brains protect our nervous system so much is that if we have an insult to the nervous system, man, we cannot move around, we cannot feed ourselves, we cannot reproduce, we cannot generate force. You can barely breathe. You can't even get up off the ground, right?

It's a big deal and such a root of chronic pain in America, and part of understanding how the spine is supposed to function is that we have to put these inputs into the spine. The spine is supposed to flex, the spine is supposed to extend.

So if you jump into something that looks like sun salutation for example, that's what the yogis did first thing in the morning, ten minutes of some breathing and really gentle positions, where you just got- it was stored motion from after being stiff.

All of a sudden you see that sun salutation is really a practice of just taking the body and functional parts of the body like the spine through normal physiologic range.

Not trying to become super hyper mobile Cirque de Soleil hand balancer guy, right? It's not that, it's about moving when it's supposed to move.

But if I look at what people's movement diet is during the day, our language, we have like ten words. Sit, walk a little bit, sit, walk a little bit, you know? That's it. Lay on the couch.

What we've done is we haven't taken the hips through their full range of motion, we haven't exposed the spine to its normal ranges, we haven't flexed the spine, you know?

And so what we see is suddenly, "Hey, I have some dysfunction, I've been sitting, my body adapts, and their butt is really a non-weight bearing surface."

And when we're designed to sit, we're designed to sit on the ground, not designed necessarily to sit in the chair at this kind of weird ninety-ninety angle, which then when you stand up and move around can cause loss of function, and that loss of function or down-regulation, or degradation of function shows up for you as a little tweak in your low back.

So suddenly what we start to see is, "Hey I've lit up my spine, I've taken one of my joints into a range," and my brain is like, "No, you didn't." And then the brain starts turning on all the emergency stabilizers.

Well you know what? This thing is going to get worse, so let's fire up the psoas. Let's put that QL into spasm. Let's make sure that the piriformis goes into lockdown, right?

And all of a sudden, you can't even tell what's what now because your brain, your nervous system is protecting, it's doing its primal job.

What we want to do is get people understanding that, "Hey, can you move yourself a little bit more the way you're supposed to every day?"

So if you're traveling, and I know that you are because welcome to being a modern human, one of the things you're going to have to do is when you get off the airplane, I need you to go for a walk.

One of the biggest mistakes, because we always want to make it simple again, one of the biggest mistakes that a lot of our athletes do, and you're a good example. You were training hard, but doing a ton of traveling, but what you weren't doing is moving enough during the day.

So there's a great concept in physical therapy called mechanotransduction, which is a fancy term that says I need mechanical input into my cells' tissues for those cells and tissues to be able to express normal function. That if I don't load my tendons, my tendons will become weaker.

Okay, that makes sense. We told women forever and ever, "Hey look, you've got to walk and take calcium." Well it turns out walking wasn't enough pounding to uptake the calcium. You had to load.

Then when you loaded, the bones were like, "I know what this is, it's cute when you get stronger, give me that calcium." Right?

One of our friends, Katie Bowman, who wrote a great book called 'Move Your DNA,' just fabulous, talks about this example of the orcas that have the tall fin. And when you take an orca whale and put it in captivity, oftentimes that fin starts to droop, and

what we can see is called folded, fanned, or floppy fin syndrome, and it's a great example of two things.

One is that because we've changed the environment of the orca, the orca is now spending more time at the surface, and because it's not being supported by water, that fin, not just when it breathes and comes down, it has higher forces on it. Right?

But secondarily- so that's us sitting, flying, not moving, right? Not eating right, not sleeping, being a stress case, not being in loving relationships, not having community, but all the things that are important.

But now because that orca isn't swimming very fast all the time, sprinting, and punting, there's no force pushing on that fin very often. And guess what happens?

The collagen of the base of the fin starts to degrade because it's not exposed and it's not reinforcing itself under normal forces and so it starts to fold over.

So your SI joint is really the same thing as that folded fin syndrome. And then what we can begin to say is, "Well what are the minimum requirements?"

Well one of the first things you can do is you have back pain is to begin walking. And that might be five minutes at a time, three minutes at a time. The first thing you want to do is restore your function.

You're not going to make yourself worse walking, in fact we need to, to move your decongestive tissues, to put those loads in, and what we think is, what we're coming to understand is that that 10,000 steps everyone's heard of before, that's our minimum therapeutic dose.

As you know in your book, one of the easiest ways to get people to start sleeping again, is to get them to move a little bit more during the day, so that if you're having a hard time sleeping, you have back pain, guess what?

We're going to knock both those things out, and it's called walking, and that is what human beings are supposed to do.

We're not supposed to drive to the mall, and drive to the grocery store, like we're supposed to walk. So see if you can't kick that up to 10,000 steps on a low day.

That means when you get home and you've only walked 8,000, you need to go for a walk before you go to bed. Get your steps in.

And I can't tell you the power of that. If you look at what's going on with Stan Efferding, or [Inaudible 00:51:54] and some of these amazing coaches- Joe Kenn, strength coach for the jaguars, what you'll see is they all have begun walking practices.

They walk a little bit in the morning, they move around during the day, right? You're standing right now which is the same thing as walking, right? Being active.

And so what we want to do is start to say, "Okay now we understand how that's an environmental pattern problem," and then we can say, "Well what's the minimum dose?"

Because you don't need to squat 400 to have a healthy back, but I can tell you that the women in Africa who carry very large loads on their heads, right? They have the biggest discs in the group. They have the highest disc spaces, and it's counterintuitive.

Because they load their spines all the time, their spines are solid, and rock steady, and I think one of the issues that we're going to confront, and especially as we're taking about chronic pain, and the fact that some of us are really struggling to sleep, and to feel good, and to want to have like a high sex drive, et cetera, et cetera, is that we need to get back to the principles that made us human, and then we can start to say, "This is the next."

So if you pin me down, you're like, "Kelly, I want a leap performance, what am I going to do?" I'm like, "Well you should probably read a book on sleep. I have a friend who's written one. I'm telling you that's the number one, and the number two, you need to walk a little bit more during the day."

And when we start to move around a little bit more during the day, we start to sleep, then we can have the next conversation about eating vegetables, and then we can have the next conversation about which coffee and how much fat you should put in there. And the next conversation, should you swing kettlebells or deadlift?

But let's get first principles first, and it's a shame that you and I are spending- this is like you didn't want to lecture adults about sleeping. That wasn't your life dream as a child.

It wasn't my dream as a child to lecture people about posture, yet it turns out we have to because we suddenly find ourselves as strangers in a strange land, and the conditions that make us human.

Look, here's a challenge for you. If you have a little kid at home, and you have a Saturday, do everything your little kid does. Toddlers- toddlers walk two and a half miles a day on average. Toddlers.

You do not walk two and a half miles a day. Every time they get up and off the ground, do it. Every time they jump and land, do it. Every time they spring somewhere, do it and you're going to be so cooked, and what you're going to realize is that you don't have to warm up as much, you don't have to activate your glutes as

much, you don't have to do all these mobilizations or skill tissues or position transfer exercises because you are maintaining and nourishing that normal range of motion and healthy tissues just by the fact that you're being a human being.

Shawn Stevenson: Man, this is like really- like one of the big headlines for today is being more human. That's what this is really about, you know? When you think about even walking, man.

Like the context you just shared is like medicine, you know? And it's like one of these fundamental things, top of the list, like we shouldn't even be talking about kale yet, you know? Like are you walking?

And so like for my firsthand experience-

Dr. Kelly Starrett: It's not sexy. It's free!

Shawn Stevenson: My firsthand experience with the SI joint dysfunction- like and I remember by having these practices of like taking my family, going for these walks, and then I'm in this condition all of a sudden where my brain, the central governor, is just like craving it.

Like as I'm driving to the next interview, like I really need to get a walk in. Like I just really need to walk, then I'll force it down like, "You know what? I'll do it after this."

And then the next thing happens, and the next thing happens. Before you know it, you've created this pattern where you're putting yourself in a compromise- literally compromised physical position, right? And my body's just revolting.

Dr. Kelly Starrett: How about not compromised, let's say compensated. Right? And that's the key is that- because sometimes compromised has this negative association to it, and certainly I can say that position doesn't transfer as well, this is why we're training this position.

And what we can say is, "Hey this lifestyle compensation, it works and it's going to have to work sometimes. Go ahead and have a baby. Go ahead and be up all night puking. Go ahead and have a job. Travel to the east coast and back in one day, let me know how your perfect little routine works." It doesn't work.

So what we think is, "Hey how can I build in some capacity and slack into the system so that when these things come on that I can't control, my full physical practice doesn't go out the door."

For example, when we look at sugar, there's- no one is going to debate that we should eat less sugar. Like eat less sugar, people. Like and I love cookies, I love ice cream, that's my jam.

But when I am stressed, I do not eat cookies and ice cream. Why? Because I can't handle it because I'm sleep deprived and stressed, and so my body is a lot more sensitive to it.

In the last two years, my drinking has dropped to- and I wasn't a big drinker before because it doesn't make me feel good, but like I literally have one drink every two weeks now maybe, right? I just don't drink. And that's a beer, or- you know?

And what I'll tell you is I definitely don't drink when I'm sleep deprived and stressed because I can't handle that at all.

So what I'm saying is let's do the fun central- like we're human beings, party on the pizza when you're rested, right? Not when you're stressed. Go binge drink when you're rested, not when you're stressed. Go eat that pint of ice cream when you're rested, you know?

So think about also it's not about, "Did I eat perfectly and did I exercise today? Did I train today?" It's about controlling all of those components; sleep, down-regulation, stress.

Create a physical practice that lasts for twenty-four hours a day, and then nail as many things as you can. You know, one of the things that we started a couple years ago, we started a walking school bus at our kids' school.

So we live about a mile and a half from school, we have about thirty kids that show up in the morning, we all walk to school together, right? Parents drop their kids off.

And that's about- so our kids walk at least a mile and a half in there, they get some steps. We had a couple parents come up to us at the end of the year, they're like, "This is amazing. I lost twenty pounds."

And I'm like, "You lost twenty pounds walking two miles to school? Like how messed up are you?" And what it means is that our bodies are craving this basic input, and what we're trying to do then, for example if I don't want to eat cookies in the house, if I don't want to eat all the cookies, I just don't buy cookies.

I create an environment where I can make the good choice, right? Like you don't have a- I see a stool in the corner, but there's no stool there, so if you want the stool, you have to get the stool.

And what that means is that you automatically come in and do the right thing. So let's set ourselves up so we don't have to make another choice. Let's set ourselves up so that we can- "Hey, I'll walk my kids to school in the morning."

If the day goes to hell in a handbasket, I have gotten hot, I've done eight minutes of breathing, I've eaten a vegetable, and I've walked two and a half miles. I've nailed it, and that doesn't matter that I have done some physical practice.

It's not a perfect practice, but now I can bridge to the days where I do have a little more time and a little more flexibility, and I think that's what we need.

We need to help people sift through this notion that you've either biohacked or are nailing every perfect thing, and you have this perfect practice of high intensity, and it doesn't work that way.

Not if you're a parent, not if you're running a business, you just need to make small changes. And as our friend - I quoted Eric Cressey before already - but small hinges swing big doors, and that's the way to think about it.

Shawn Stevenson: Man, there's so much there to unpack. But I want to go back really quickly. I mentioned kale, and do you know about this? So where I get my kale chips first of all, Kelly, is from Thrive Market.

Do you know about Thrive Market?

Dr. Kelly Starrett: We love Thrive Market. Those guys are my friends.

Shawn Stevenson: Yeah, so I knew it. You see? I knew it, and we didn't talk about this before the show. I knew it because the people that are in the know doing big things, they're utilizing Thrive Market.

It's where I get my kale chips, my almond butter, my coconut oil, my personal care products; all these things you'll find at great stores like Whole Foods, but you'll get it 25% to 50% off the retail price. I'm serious, it's insane how much money you save.

Dr. Kelly Starrett: Yeah, and ethically morally good people.

Shawn Stevenson: Yes, that's the thing, they're such a great- the people there and the mission behind what they're doing is phenomenal. Every membership that is purchased, they give a membership to a low-income family, a veteran, somebody who's in need, a teacher.

And so guys, make sure to utilize them because I beat myself up every time when I buy something that I could have gotten at Thrive Market for the full price. Don't be like me. In this one area of life, don't be like me, don't make that mistake.

And so head over, check them out. It's www.ThriveMarket.com/modelhealth and you also get an exclusive 25% off every single thing in your cart for your first purchase in addition. Plus, I'm pretty sure you'll get the free shipping. Okay?

So it's a little amount that you get the free shipping, because that can do it for people. I don't know if you've ever done this before, Kelly. Like you're shopping, and then you might buy \$300 worth of stuff, and then it's like \$5 for shipping and you're like, "I don't know."

But so the free shipping can help as well, so make sure to check them out, www.ThriveMarket.com/modelhealth. They've got categories for paleo, vegan, whatever you're looking for- gluten-free, all the best products, organic, non-GMO, all the stuff that we're looking for. Head over, check them out.

Dr. Kelly Starrett: What I was going to say is the Starretts are not small people, and when we go to the Whole Paycheck / Whole Foods, and we fill up our cart with food, right? Food takes up space like veggies, like our cart is full of food.

Everyone comments on it. They're like, "Wow, you guys eat all that? Wow." It's gotten to the point where I'm a little offended. I'm like, "Yeah, I eat all that. Are you saying I'm fat? Like what are you doing?"

And then now I just say, "Well I don't drink," and people are like, "Oh, okay." And they're really confused, but they don't know where to put that, and I'm like, "Because I'm not spending my money on alcohol, I'm spending my money on kale."

But what I'm telling you is that with Thrive, I can hide my consumption habits. I can buy Thrive and have boxes of food coming, and I don't get shamed at the Whole Foods.

Shawn Stevenson: Oh man, the boxes, and also even the way they package up. Guys, I'm going to throw this out there if you're listening and you use Thrive Market, chipotle spicy mayo, okay? Okay guys, check that out, alright?

Dr. Kelly Starrett: Oh, there it is.

Shawn Stevenson: Now Kelly, I just want to ask you about one more thing, maybe it's going to have a piece that's a second piece, but could you give us a checklist, alright? Maybe like three to five things that ideally we should be able to do, skills as a human, alright?

So you mentioned before being able to get into basically a resting squat position. So would that be one? Like what are- give us a checklist of things that we need to be able to do.

Dr. Kelly Starrett: Yeah, I'm not the first person to say you should be able to squat, but it was the first Mobility WOD we ever did. Just try to accumulate ten minutes at the bottom of a squat.

You know, when I was twenty I went to Nepal, was teaching kayaking there, and man, everyone can squat down and work on the fire, little aunties, and it's just a fundamental skill that we all lose. Every kid can squat, and then as we get adults, we start making up all these excuses.

"I have this Scottish hip." "My Achilles are short." Right? Well what I'm telling you is that every kid can squat, and it's a capacity that is really good for the back.

Actually, when we sit in that bottom position, we're restoring normal motion in the SI joint. A lot of the motions that we do, for example, between the pelvis and the spine cause the sacrum and the pelvis to lock into a more stable position.

That's really useful when I'm sprinting, that's really useful when I'm running or lifting, right? That I can create more stability. But also to restore those positions, to move that fascia.

If I squat all the way down, like I'm taking a poop or just hanging out by the fire, my sacrum is going to move in the same direction as my pelvis, and that SI joint that's called counter nutation of the pelvis, is one of the restorative features, and it's not an accident that Louie Simmons and the powerlifters use the reverse hyper to do the same thing.

Shawn Stevenson: Yeah.

Dr. Kelly Starrett: Like getting a little bit of that flexion in the bottom position, we can restore that motion.

So not only is it a great restorative for the knees, and the back, and just what you should be able to do because it gives you a lot of movement options, but it's also really, really important for your spinal health.

And if you just spent some more time in that bottom position, even if you have to hold onto something for awhile, scale it, hold on, turn your feet out. If you can't get your feet perfect, do the best you can, get them as straight as you can, hold onto something, take little breaks.

You know, and there are guys like Ido Portal who's like, "Hey, thirty minutes a day is our goal." And I was like, "I agree, we should be spending that much time, but-"

Shawn Stevenson: If we should just get a minute. So that's number one, we've got the resting squat position, and I'm sure you've got a video on it. We'll link up for this episode. So what's another one that we should be able to do?

Dr. Kelly Starrett: One of the things - and this is subtle - one of the things that I think people should be able to do is handle stress, and be able to turn themselves off from it.

And one of the things I think we're really bad at, I think we've got all these bulletproof coffee, layered coffee I'm a huge fan of, I love the fats in my coffee, you know?

We spin up, and what we are really bad at is coming down, you know? You have your like playlist, your perfect jams, you do all your routines, and then at night you're just like, "I'm wired."

So you know, and that's a problem, and one of the things that we try to get people to do is create a little bedtime routine, and I think one of the easiest ways into the brain and the nervous system is through the soft tissues.

And this goes along with what [Inaudible 01:05:17] said a long time ago. [Inaudible 01:05:19] said, "Breath is king of the brain, and nerves are king of the breath."

One of the things that we like people to do is do a little ten minutes of some foam rolling at night before they go to the bedroom.

So if you start a practice where you get on the ground, and you roll around and just treat your soft tissues before you go to the bedroom, you are going to sleep better. It's going to switch on some of those parasympathetic aspects of your nervous system.

If you've ever had a massage, you never stand up and want to fight someone after a massage, right? You want to chill, you know? Your voice is all low.

So do your soft tissue work in the last ten minutes before you go to the bedroom.

Also that gets the soft tissue work out of the gym, which is important. I want the gym to be about training, and about using my time there effectively. If you end up at a gym, that's little miracle frankly in the day, so let's use it to our best.

Like I'd rather you do another set of some skill work, or climbing, or squats, do something like that. Save your soft tissue work before you go to the bedroom.

We also find that people can do that because in the last ten minutes before you go to the bedroom, nothing good is happening. You are watching TV, you're on Facebook, you're giving your information to the Russian bots, you're doing something bad.

And what you'll feel is that if you get into the habit of just keeping your foam roller up by your couch, you'll feel better. In fact, on Mobility WOD, people forget that we've been programming follow along videos for years, like we have thousands.

Every day I make a brand-new video, we don't recycle, and I make one that can be done in the gym, and I make a ten-minute follow along soft tissue down-regulation piece, and you don't have to have any experience.

You're going to need a ball and a roller. You don't need any fancy equipment, but I'll take you on an adventure about how your body works for ten minutes, and what we've found is that that ten minutes is magic.

It's enough to make significant change, it's not so long that you won't do it. Throw it on the TV, watch it on your iPhone, put on your headphones, follow along, and you'll see that you will sleep better.

So learning how to turn off is a big deal. And then you know, I'd say one of the things that I would really like people to do is move more during the day.

Is that I have to do a lot less sort of tissue management if you're just active a little bit more. And that doesn't mean train or not train, I just need you to move more, and I think what you'll find is that your tissues will heal a little bit better, and you'll sleep better.

So those things, that's where I'm going. Work on some squatting, work on your shapes, see if you can put yourself to sleep, and then walk around a little bit more during the day.

Shawn Stevenson: Perfect. Perfect, man. Alright super quick here, another question came up when I was thinking about the process of somebody watching the video, or you know, being on social media.

Let's talk really quickly about tech neck.

Dr. Kelly Starrett: Well think about it this way, if you spend- the research is that we are spending a lot of time on our smartphones, between two and a half and three and a half hours a day.

And all kids now are going to be in front of screens more often than not, right? Because it's a learning tool. Right? Our school- this little public school, every classroom has a Chromebook, every kid has a Google Drive or a Google School, right? I mean this is just the reality of how they communicate, and turning to silence.

What we have to do then is think, "Hey is the technology bad? No, but how is it disrupting what I'm supposed to do as a human?"

So am I supposed to have my head flexed down for two and a half to three hours a day? And if I am, what are the adaptations?

Can I take a full breath there? No, so I'm practicing not being able to breathe, you know? Can my shoulders be stable? No, you know? Does that change my jaw mechanics? Yes, it does because my head changes, I'm more likely to see teeth grinding in that, right? I'm more likely to get headaches.

Some of the squeaky parts of that. Your neck isn't going to explode, but what we want to be thinking of is the granular piece of this is even our eyesight is a function of these screens, and that what we should be doing is looking far, looking close, looking far, looking close.

Because we look at this two and a half, three feet all day long, we're not sort of flexing that. We're exposing ourselves to the blue light from the LEDs, and there are some real physicians and some thinkers out there who are like, "Hey man, any blue light is really hard on your brain."

So the key here is to say, "Hey look, technology is not going anywhere, but there are places and patterns where I can put myself into position, where I don't have to worry about my shapes. If I'm at a standing desk, and I have a stool and it's at the right height, I'm automatically protected."

So again, the way to think about this is I should be able to look down, no problem, but is that the resting habit? It's like I said with the foot, is that resting foot position- can you find that rested foot position?

Because if it's not important, then it's not going to end up in the language of pilates, or yoga, or powerlifting, or Olympic lifting, or gymnastics, and guess what? It does.

And so what we're seeing, and one more time, is practice doesn't make perfect, practice makes permanent. So what positions am I spending the most of my time?

And I think the key here is that put your head down, take a breath, put your head up, take a breath. And what you're going to find is like, "Wow, I can breathe a lot better if my head is up."

Alright, now we're talking. That's a reason to keep your head up, not that you're going to explode your neck.

And so I think the real thing is we want to recognize that this technology is a miracle, and it's changed the quality of our lives forever, but it shouldn't dictate how the human moves through the environment at such an incessant consistent way, and it does unfortunately.

So look, I don't want to be a little bent over hunched man when I'm old, and there's an easy way- I just try to think about it, "Hey, be less hunchy," you know? And I think that's what we want to see.

I think the problem is we are going to see fundamentally that because we don't have some of these pieces in place to inoculate ourselves from this movement, we are going to see a generation of kids and potentially users of this tech who feel shaped

by the tech, the same way that chair has shaped us, the same way that dog has changed our interaction with the world, right?

Like we are constantly adapting machines, and I think sometimes it's difficult for us to see the implications of all the stressors on the body because we haven't run the experiment long enough.

So what I can say is hey, if you're head's in that position, you're not going to squat or deadlift very well, you're not going to be able to put your arms over your head or take a big breath, and you might grind your teeth. That's going to be a problem.

What I can't say is that it's going to be a real problem, but I'll see you in fifty years, and we'll know.

Shawn Stevenson: Man, man, man. Kelly, you're one of the smartest people walking around on two legs.

Dr. Kelly Starrett: No!

Shawn Stevenson: Sometimes four probably getting your bear crawl on, I don't know man, but you're amazing and I always love talking with you, and man just thank you for being you, man. It's so, so powerful.

Dr. Kelly Starrett: I can't turn it off. I tell you, you know? What's amazing is that I am part of a generation of coaches- coaches and thinkers, and I am really proud of this generation, and I think everyone feels that way, but I think we're finally coming in.

I have a bunch of mates in their thirties and forties and fifties who have a voice. Jocko Willink, Tim Ferriss, you, Aubrey, who are really helping me. Joe Rogan has changed the face of the human kind, you know?

Has put more onto people's radar and helped people understand and conceptualize what a better life looks like, and because we're all doing this, I'm really proud to be of this generation.

We'll write a book in thirty or forty years and be like, "Wow, what happened? There was a happening here," and it was like a human awakening where we got back to being human. And it's really exciting, so I appreciate that, and I'm really proud to be of this generation.

Shawn Stevenson: Perfect man, can you let everybody know where they can connect with you online? And where they can also follow all your cool stuff that you're doing?

Dr. Kelly Starrett: We are @MobilityWOD, and dot com, @MobilityWOD is our handles. You know if you want to have a conversation with my wife, sometimes my

wife gets left out as the- she's the CEO of this hot mess, and we just launched some sessions.

We just launched some sessions, we kind of have a radio project called *The Ready State*, and we have too many friends with really great podcasts, but we wanted to have some extended conversations around topics that we were interested in, so we just dropped eight of those, we're going to take on pain for another eight.

And then so we're doing these little sessions, going quiet, doing some sessions, going quiet, but if you want to hear kind of what we're talking about, and some of the things we're working on, follow us at *The Ready State* on podcasts.

And more importantly, that's on iTunes and everywhere else, but come jump along. We have a free trial on the website.

If you're having a hard time sleeping and want to feel better, come just play along with the down-regulation recover piece and I think you'll be blown away that after ten days you can't give it up.

Shawn Stevenson: Yeah, absolutely. And of course we'll link everything up in the show notes, and man just again thank you so much for being a superhero in this world, man. I appreciate you.

Dr. Kelly Starrett: Oh it's such a pleasure, and go team, best family I ever had.

Shawn Stevenson: Yes sir, go team. Everybody, thank you so much for tuning into the show today. Like I said, Kelly is one of the smartest people walking around on the planet, and man, I learn a lot from him.

And every time that I hear him speak, every time that- you know, today I was like immersing myself in his world before the show, and also just through the week, and just pick up so many little nuggets that are buried within nuggets, and it's just like so powerful, man.

And he's a great thinker, but also the application, you know? And the athletes that he's worked with, and the everyday folks, helping them to become more functional, but also getting folks out of pain as well, and he's got a tremendous amount of insight, and tips, and tools, and strategies with the Mobility WOD.

So listen, seriously do yourself a favor, put that on your mental and also your manual rolodex, alright? On your computer of course, I don't know who has a rolodex anymore.

But just so that you can have access when you need it, alright?

I would prefer you though to do it proactively, alright? Let's not get to a place where you need to do some mobility, and drills, and things like that. But proactively engage this in part of your life.

And by the way, I love when he said be less hunchy, alright? That's the goal from today, be less hunchy. Pay attention to how you're utilizing your smart devices.

Like seriously, think about how much time you're putting your body in that position, and he said this multiple times, practice doesn't make perfect, practice makes permanent.

And we don't really know the full ramifications that we're going to have by utilizing our head like that, and keeping our head down all the time.

So even just bring the phone up a little bit, it might look a little weird, I don't know. But also be mindful, maybe spend a little bit less time on it, and more time engaging with the rest of the world, right?

And I'm talking about in your physical presence, alright? The world isn't just- you know we have this ironic thing where you've got more friends than ever on Facebook, but less friends in the real life. You know?

So be mindful of that, and invest in both. I'm not saying that one is bad, but we want to engage with life, right? We are human, and to be human is to engage, is to live, is to engage with our environment. Alright?

We dove so deeply into our phones that we forget sometimes that we have this world around us to engage with. So that's another big message from today.

And listen, I'm telling you what, we want to stay ready, right? You don't want to be in a situation where you have to get ready for something to happen, right?

We don't want to be like the jaguar. We don't want to be like the jaguar who pulled his hammy, alright? We want to stay ready. Be proactive, get this mobility practice into your life so that you're ready for whatever life happens to throw your way.

Alright, I appreciate you so much. We've got some incredible guests and incredible show topics coming up. I'm telling you, it's going to blow your mind. So make sure you stay ready, alright? Take care, have an amazing day, and I'll talk with you soon.

And for more after the show, make sure to head over to [www.TheModelHealthShow.com](http://TheModelHealthShow.com). That's where you can find all of the show notes, you can find transcriptions, videos for each episode, and if you've got a comment you can leave me a comment there as well.

And please make sure to head over to iTunes and leave us a rating to let everybody know that the show is awesome, and I appreciate that so much.

And take care, I promise to keep giving you more powerful, empowering, great content to help you transform your life. Thanks for tuning in.