

Episode 119 Transcript

Dr. Jaclyn Smeaton

Welcome to the DUTCH podcast where we dive deep into the science of hormones, wellness, and personalized healthcare. I'm Dr. Jaclyn Smeaton, Chief Medical Officer at DUTCH. Join us every Tuesday as we bring you expert insights, cutting edge research, and practical tips to help you take control of your health from the inside out. Whether you're a healthcare professional or simply looking to optimize your own wellbeing, we've got you covered. The contents of this podcast are for educational and informational purposes only.

The information is not to be interpreted as or mistaken for medical advice. Consult your healthcare provider for medical advice, diagnosis or treatment. Welcome to this week's episode of the DUTCH podcast. This was a fabulous episode and it really is a must listen for any woman who's thinking about how they can preserve their body, whether it's their physique, their muscle mass, their mobility into their later decades of life. We talked a lot about how working out and getting to the gym can be really tough for women, but why it's so critically important for hormonal health. And we also talked about how changing hormones are so impactful when it comes to how our body can either maintain or start to degenerate over time. None of us as women want to fall off a cliff physically when we hit our fifties, sixties and seventies. And our guests will really show you how you can make sure that that does not happen.

Our guest is Dr. Stephanie Estima. She's a chiropractor turned women's health expert, specializing in hormone balance, metabolism, neuroscience, and strength training with over 19 years of clinical experience. She's a creator of The Better Body, which is a bestselling guide to menstrual cycle literacy and host of the podcast Better with Dr. Stephanie, which has gathered over 5 million downloads. She's a sought after international speaker and really empowers women in perimenopause and beyond.

Dr. Jaclyn Smeaton (01:54.914)

with science-backed tools for nutrition, strength, and longevity. And really, you can see that she balances her professional insights as a clinician with her lived experience as a weightlifter and a mother really demonstrating hormonal health and strength can thrive at any age. I learned a ton in this podcast, and if you're gonna think, you know, I've talked about muscles, I've heard podcasts how muscles are so important for healthy aging, this goes way beyond that. We talk a lot more about how muscles.

are only a piece of the longevity puzzle. And this is one of the first times I've had a conversation like this one. So you're not gonna wanna miss it. Let's go ahead and get started. So Dr. Stephanie, thank you so much for joining me on the DUTCH podcast. I'm so excited to have you.

It's a delight. I'm delighted to be here.

Now, I always love to ask and to start out with like hearing a little bit about how you got into hormones and women's health, you and you're traditionally trained as a chiropractor. So that's not always a direct path. So can you just share with us where did this interest come from? How did you get here?

Sure, yeah. I spent 19 years in private practice and was noticing. So in my practice, certainly you have the low back patients, you have the headache patients, you have the knee injuries, all that. But we would also run what I would call a holistic facility. So we had nutrition programs, we had fitness programs, rehab programs, pregnancy, post-pregnancy, all the things. And what I would notice, particularly with nutrition,

Dr. Stephanie Estima (03:22.062)

when we would run, you know, whatever program we would run, that there would be a very different outcome if you were a man versus if you were a woman. And it was very much highlighted if it was a husband and wife that were signed up for the nutrition program.

And they're doing it together, doing the same thing.

So we have the constant, we have things that are controlled for, like they're living in the same environment, they're eating the same meals, they're eating the same, you know, so maybe you adjust down or up for calories depending on if it's male or female, fitness level, et cetera. But what we would always find is that men would have a much stronger, well, I'll say this way, they had an easier time if it was weight loss, they had an easier time shedding the excess fat, they had an easier time putting on muscle.

versus the female who's like, I'm eating the same thing and I am having so much trouble dropping more than five pounds. So I started integrating that also into my physical practice as well. So, you we would have patients coming in who could sometimes tolerate certain interventions. And I started asking about menstrual cycles and how, you know, understanding that estrogen affects ligaments, it affects tendons, it affects

so many things in terms of what I was working on in terms of the spine and the neuromuscular skeletal system. And so I would change the way that I was rehabbing women based on where they were in their menstrual cycle. I started getting interested in hormones and the hormonal, we'll say the ever-changing hormonal landscape of a woman when I was in private practice, treating the low back patients, treating the pelvic pain, the headaches, the elbow, the tennis elbow.

Dr. Stephanie Estima (05:01.694)

because all those ligamentous and or tendinous injuries were very much influenced by hormones as well. So what they could tolerate as, you know, interventions and then their prognosis. Like I had a lot of concussion patients. So where they were in their menstrual cycle

was often predictive for me in terms of how well they would recover. If they got injured, if they were concussed in the follicular phase of their cycle, so before they ovulated, much better prognosis.

than if they were injured in the luteal phase, when the second half of their cycle. So I started making these connections in private practice. And then when I decided to close the clinic to pursue more of a global offering and speaking to the global female population rather than just.

the local Toronto community, was already a part of my vernacular, it was already a part of things that I was considering when I was thinking about health for females.

I love that. And I love that it started with practice observation because it's like, even when we look to publish literature, most literature on tissue injury, it's mostly on men. And I think the assumption's always been that females are just like men when it comes to how our physiology handles diseases and injuries. And I love that your observation of like, is not what I'm seeing. They need something different is awesome. Yeah.

think there's something to be said about, I know that there's a lot of, especially in the world of social media today, there's what I'll call evidence-based trolls online. like, where's the RCT? Where's the randomized controlled trial for this? And it's like, well, if we actually think about the scope of evidence-based practice, we have sort of event, like three overlapping circles. One is certainly literature. So what is available in the published data in terms of the data sets? What do we see there? That's one circle.

Dr. Stephanie Estima (06:56.182)

Another circle that would indicate evidence-based practices is the experience of the clinician. One of the things, clinicians are pattern, we are pattern recognition masters, right? So you do it five, 10, I was almost 20 years in private practice. Like I could tell by the way you walk what your problem was, right? So it's like, what is the clinician's evidence? And then the third sort of evidence base is also what the patient wants.

So you have these sort of three competing maybe or overlapping data sets and those things should be how we decide what is evidence-based for that patient or for that individual.

Yeah, I couldn't agree more. I think, we definitely, societally over, not over index published literature, because it's important for us to look outside of our own practices at the patterns that are happening at a broader scale. And the truth of the matter is that most medical and scientific advances started in the practitioner's office with something that providers observed over and over again with their patients and said, let's put a trial together about this. So I couldn't agree more.

your own experience, you know, it matters. And I think about that with integrative medicine,

we will get to the point of this podcast momentarily, but this is such a fun thing to talk about that so many things that were kind of poo pooed, like I think about like the quote unquote leaky gut syndrome that naturopathic doctors were made fun of for decades, which has now borne out in literature that there's a hyper permeability in the gut and that there's microbiome disruption. You know, my son was diagnosed with type one diabetes and in the, in the children's hospital, they said,

This was probably caused by a microbiome disruption in his gut when he was an infant. You know, it's like now it's being recognized, but that came from clinician observation of our like esteemed elders.

Dr. Stephanie Estima (08:44.046)

It's usually about 20 years. There's usually a 20 year gap, right? Between what we see. So the clinician will make, you you have all the clinicians that are saying kind of the same thing. like, all right, let's throw a couple of studies, low level studies, we'll do some case reports, and we sort of move up to the RCT over time. So by the time you get the RCT, it's like 20 years, maybe 15, 20 years have gone by. So you often see the literature. There's also bit of a lag in terms of what the clinicians are seeing on the ground every day.

Well, I'm really excited to talk with you about something that you're really innovating, which is really the, let's talk about like performance and longevity and muscle building and strength training and its importance for women. And I wanna talk today really about the peri-menopausal woman, which is an area where there's so much interest right now. mean, this is a population of women. It's like a 10 year span of life, approximately, give or take, where we really haven't served these women.

in any kind of unique way. And just now we're starting to realize that there's a lot of changes. like we're really just at beginning of understanding what people need. when it comes to muscle building and just getting fit and maintaining good health and longevity, this is a time that's really critical for women if they've not been doing that.

Oh, 100%. Yeah, if you're a perimenopausal woman, maybe you were a cardio bunny growing up. spent however many hours on cardio machines, running, doing the Tae Bo, the high low, the step classes. It's time for you to become step into your muscle mommy era.

There we go. I love that, your muscle-mami era.

Dr. Stephanie Estima (10:17.9)

Yeah, it's time to really step into muscle building. And it is very, important for the perimenopausal woman to sort of get her ducks in a row, let's say, before menopause actually kicks in. So the reason why this is so important is your muscle is going to regulate. And I'm actually going to throw in the bones this year as well, because we often muscles are the popular girl at the party. Muscles always get all the attention. But if you don't have your

joints.

you know, you also can't squat, right? So we also need to put in tendons, we need to put in ligaments and bones into this conversation as well. But when we're talking just musculoskeletal as a whole, this is going to regulate your ability to dispose of glucose. So a lot of women and men become more insulin resistant as we age. It's just a natural thing that happens.

We start to lose muscle mass. It's like use it or lose it if you're not building it your body is going to figure that this is not important and it's going to get rid of it and Pair down and that also has a lot of knock-on effects to to the system. It's it has systemic effects. So it has Effects on your bone density, which we'll talk about it has effects on your brain volume and how big your brain is

It has effects on your mood, has effects on your sleep, it has effects on your libido. Like there's so many knock-on effects to keeping your musculoskeletal, so muscle and bones and joints by extension, healthy that we really just can't ignore them. the one thing I will say is I don't think many women really understand

how fast the depletion begins. you know, we sort of, when we think about like, oh, when I was 20 to 30, like, I kind of felt a little different, maybe 30 to 40. Okay, I'm sort of feeling a little bit different now. But when you're 55 to 65 or 65 to 75, those decades, like that 50 to 60, 60 to 70, those decades, it is an exponential drop off in terms of your capacity.

Dr. Stephanie Estima (12:17.294)

and in terms of how fast you will deteriorate. Like we don't really see that from 20 to 30, 30 to 40, and even 40 to 50. Like yes, you go through menopause in that decade, and yes, there's lots of hormonal changes. But if you're not really smart, if you haven't put in the work now in your 30s and 40s and 50s, really, your 60s and 70s are going to be brutal. And I don't think humans think exponentially. We often think very linearly, right? So we have to think about this.

you literally fall off a cliff, like you will fall off a cliff in terms of muscle mass, bone density, organ density, et cetera. So just wanted to just maybe flag that. I'm sure we'll come back to it later in our conversation.

Yeah, absolutely. So this is one of those things where when you're talking about preventive medicine, this is really at its core. you know, one of the studies I'd looked at was that with brain health, you mentioned brain health, like women naturally the brain size, or maybe it was a hippocampal size, but it declined at like one to 2 % per year after a specific age, 45, I'm going to say, but that could be wrong. But then if women exercised and they did weightlifting,

Yeah.

Dr. Jaclyn Smeaton (13:21.134)

It actually grew by one to 2 % per year. when I think about things like that, is it really that hard to get 30 minutes, three or four times a week of strength training activity? When it comes to the long-term investment that you reap, that gain that you reap from that investment is just such a valuable use of time. But it's so difficult for so many people to get started. Really, a lot of people that I'm working with are getting started at that time.

Yeah, I think that there's infobesity as well, right? There's so much information, right? Like that's my little portmanteau of like information and obesity put together, right? There's this infobesity that we see where there's just so much information. It's like it's paralyzing. You go on social media on any given day and you can see someone saying carbs are good for you. And then someone's like, carbs are the devil. They're going to use you can't ever have a glucose spike. And then you'll have someone else saying,

I don't know. Squats are the worst thing for you. Squats are the best thing for you.

Make sure you fast. Don't fast. Women shouldn't fast.

Exactly. Cold one. can be so overwhelming. It's so overwhelming, right? So I think what I hope we'll do in this conversation and in many others that I know that you'll have on the show is just cutting through the noise. And it doesn't have to be, if you're a woman listening, I will say that it doesn't have to be perfect. And in fact, it's probably going to be very imperfect, but you're going to take imperfect action and then you will.

Dr. Stephanie Estima (14:51.116)

be able to refine as you go. But the most important thing is that you start, even if you have literally no idea what you're doing. know, like you're just going to go. One of the things I'm working on right now, I hear this from my community a lot and I like you have a podcast, right? So the Better with Dr. Stephanie podcast, a lot of the listeners there will say, you know, when I first went to the gym, I felt so overwhelmed. Like everybody kind of knew where they were going. Like I was intimidated by everybody. But then

I didn't even know what to do when I got to the gym. Like I didn't know where the weight machines were. I wanted to work legs, but where are the leg machines? Everybody sort of knows where they're going. So I think that the biggest thing for women, especially if you're just getting started, literally just go to the gym one day, luxuriate in walking around for 15 or 20 minutes and then go home. Like don't even work. If you want to work out, fine, do something small, but just orient yourself with the pattern, with like the floor pattern of the gym, because that in and of itself,

is such a game changer because you want to be spending a big portion of your week like you're going to go to that facility two, three, maybe even four or more times a week. So you

really want to know where everything is laid out. And once that starts to feel like a second home for you, you're like, yeah, I got it. Today's arm day. Like I know where the pull-up machine is. I know where the bicep thing is. And I know where the dumbbells are.

you're just going to go in and do it versus going in and feeling like you have two left feet. You're the red, you know, it's like you're a red person on a blue planet. Like everyone's blue. You're the only one that's red. You feel like really out of sorts. that's really a big, big, big, big thing for women who don't know where to start. It's like just orient yourself to the facility, go there for a couple, like 20 minutes, one or two days, and then, then you can go back and have a workout.

Yeah, I love that. And nowadays there's so much support. The gym is not as intimidating as people make it out to be anymore because there are such a diversity of women. It's not just gym bros anymore, like weightlifters. The gym's attracting a wider variety of people. I see that when I go into the gym, which is like elderly people, younger people, women, men. It's such a better mix. And really, if that's something that's been an intimidating factor for people that are listening today.

Dr. Jaclyn Smeaton (17:04.654)

give it another go because it's not the 90s anymore.

Totally. And the one thing I will say, my experience in the gym has always been the bigger the bro, the nicer they are. Like they really look scary and maybe they make some really scary noises when they're working out. But if you ask them to help you, they'll do 70 backflips. They're my God, you want me to help you? Of course. Like, you want me to move the weight? You want me help you? You want me to show you technique? They are so... Gym culture is something I've always loved because, like you said, you can be old, you can be young, you can be black, you can be white, you can be...

Totally.

Dr. Stephanie Estima (17:36.48)

anything in between, doesn't matter. It's level pegging. Everyone's the same. There's no one that's better or worse than the other. There's no case system. There's no societal classes. You're just everyone's there to better themselves. And I think that there's something really beautiful about and I've seen it and I've experienced it where there's been like really big burly guys that have come up to me like I want to just help you with your technique. And I'm like, yes, please. Of course, help me with my technique, you know, right. Yeah, better. So.

Well, because someone did that for them, that that was a game changer, you know, five, 10 years before. So it is, it's such a positive environment. So can we start by having you just talk a little bit about how does strength training influence hormone health for women, especially as they're going through perimetapause and menopause?

Sure, yeah, my favorite subject, let's do it. I like to talk about three M's, okay? So when we're thinking about, so there's three M's that I'm gonna talk about when it comes to muscle building and why it's important for women in midlife. The first is mobility, okay? So like I said, we don't think about mobility really in our 30s and 40s, but like I said, when you're 60 and you're having a hard time getting up off the floor, you're 70 and going down or up the stairs is becoming challenging for you.

or your ankles are really stiff in the morning, your shoulders are really, you don't have the same range of motion that you once did. muscles really do, with the, and I'll pull in bones into this, really do help with mobility. So you want to be able to, through things like squats and lunges, be able to develop legs, leg strength so that you can get up off the floor. Like, I don't know if you remember, you might be too young, but I remember these commercials when I was younger. It's like, help, I've fallen and I can't get up.

Gosh, you're being way too kind. I'm probably older than you are. But yes, of course I remember that.

Dr. Stephanie Estima (19:23.15)

I remember those conversations. It used to be sort of the butt of late night jokes. But that's a real thing. Like if you are a 75-year-old woman and you trip and fall over the corner of a rug or if you live on the East Coast and you have winter and you slip and fall on black ice, you need to be able, I mean, ideally prevent the fall, which we can talk about how we can train hip flexors and glutes and everything. But if you do fall,

Was

Dr. Stephanie Estima (19:51.03)

You want to be able to have the strength in your glutes, your hamstrings, your quads, and the flexibility in your hips, your knees, and your ankle joints to be able to pull yourself back up. And if there's nothing for you to hang on to, like if you've fallen on the sidewalk, you need to be able to push yourself up without using your hands, right? So mobility is really important for women as well as we go through, again, we don't really think about it even in the early years after menopause.

but you go 10, 15, 20 years without those anabolic hormones, without testosterone and estrogen and progesterone because you're not a regularly cycling woman anymore. And your bone density, you run into osteopenia initially, which can turn into full blown the disease of osteoporosis. So if you do end up falling and fracturing a bone, very commonly it's a hip bone, but you can also fracture, we call them like foosh injuries, fall on outstretched hand, can like, the forces can go up.

and crack the humerus, certainly the femur I've seen, I've seen tibial fractures, like I've seen

everything from falls. Those are hard to come back from when you're 65. Like even if you're 25, it's a devastating injury. But 65, 75, it's really hard to come back. then as you were mentioned, like there's knock on effects on cognition, on brain health and volume, et cetera. So mobility is the first M, which is why we want to think about it. Not now, but it's an investment for the future.

The second is metabolic. I already alluded to it a little bit with your muscles by weight. are the largest endocrine or they're the largest organ in the body. Okay. So you have think about your the weight of like your glutes and your quads and your hamstrings and your latissimus, your all your back muscles by weight. It is the largest organ in the body. So muscles are really cool in that they can with or without insulin present.

they can take excess glucose, excess sugar from the blood, from the plasma and actually sequester it, like suck it up like a mop or a sponge and actually hold onto it. So as we age, the propensity for cardiovascular disease, vascular disease, metabolic diseases like type two diabetes and Alzheimer's, all of these things start to ratchet up. But if you are keeping your...

Dr. Stephanie Estima (22:14.368)

muscle, the quality of the tissue and maintaining the muscle, are now able, your muscles are still able to sort of sop up that excess glucose that's in the system. And you're also able to tolerate the carbohydrates that you're having in your diet. So metabolic function, that's the second And then my third in my little mnemonic for you to remember is menstrual. Every time you are sufficiently stimulating muscle tissue,

you are going to be pulsing testosterone naturally occurring, like your own internal, endogenous production of testosterone and of estrogen, both of which are anabolic hormones. And when we say anabolic, that just is like a fancy word for grow, right? For growing. These are hormones that drive growth. And we actually want to, not systemically always be driving growth, but certainly in the musculoskeletal system,

or musculoskeletal, depending on the area of the world you're in. We want to be driving bone density, right? And we also want to be driving hypertrophy of the muscle. So I say menstrual as it's sort of a mnemonic because the hormones of your menstrual cycle are estrogen and progesterone and testosterone. They all sort of follow as a woman a 28-ish day cycle. And every time you're training, you're going to have a transient rise

in your own production of these hormones. So it depends on how fit you are. The more fit you are, the less benefit you get, unfortunately. But you know, somewhere between 10 hours post-lift to if you're very untrained, it might even be as long as, you know, 48 hours of a boost in testosterone or estrogen. So think about that as a perimenopausal woman where we already have this sort of downward trend of downward trending testosterone, downward trending estrogen, downward trending progesterone.

And if you can, within your own internal pharmacy, like stimulating the muscle tissue actually produce more of these hormones that we need and decline as we age, like why wouldn't you do that? So there's sort of the, there's the back of the envelope sort of summary. I mean, we can go into more details if you want. We can talk about myokines, we can talk about all sorts of fun stuff.

Dr. Jaclyn Smeaton (24:29.44)

No, I love, mean, I think that high level summary is such a great place to start and really understanding just like all of the positive impacts that can come from strength training with this. When you talk about menstrual hormones, you know, obviously in perimenopause and then into menopause, the menstrual cycle is changing for women. Does the benefit obtained from strength training decline when those hormones shift?

Absolutely not. No.

Is it harder for women to make gains? that's a big, I think women say that often. It's like, I'm not making gains anymore. Maybe I need to go on testosterone or, you know, go on HRT. Although the data on that's not clear that it's directly influencing muscle building.

Yeah, I mean, this is a bit case by case, but I will say as a general rule, every time you are strength training, you are going to be producing that endogenous, that internal pharmacy, like I said, of those sex hormones. Now, is it harder in menopause? Yes, it is harder. Does that mean it's impossible? Absolutely not.

I know lots of jacked women who are 55 and that's my goal. I want to be jacked and tanned when I'm 55 and 60. want the biceps to show, want glutes, want like hamstrings that you can take a bite out of. So I'll say to a woman, if you're 55 and you're like, hey, I've never started training and now I'm in menopause, is it too late for me? The answer is absolutely not. The best time would have been 20 years ago and the second best time, my friend, is today.

Dr. Stephanie Estima (25:58.274)

Like you can still make incredible gains, incredible, incredible gains. Even just training at a frequency of two times a week. That's the other thing too. You don't need to be in the gym like all day, every day. You can make, I have seen women make incredible body composition gains with like two full body workouts a week. So yes, it's totally possible to do the menopause. Is it hard or yes, but that's fine. It does, just because it's harder doesn't mean it's impossible.

Totally. You're going to laugh. had one doc, she's a newer doc in practice and in a family medicine environment. And we were talking about strength training and hormone health and she's just wants to recommend it to everyone. She said, well, I have to be honest. I've started saying to everyone, no matter their age, like this is the most, the most important decade of your life to be building muscle. She's like, but I say it to women in their twenties.

They're 30s, they're 40s, they're 50s, they're 60s. And she's like, and I kind of feel unethical saying it so much, but it's actually true no matter, you know.

It's so true. Each individual patient that she's sitting in front of, the best thing that that doctor can be doing is saying, this is the most important time for you because it absolutely is. If the person has not invested time in weight training and strength training before, she's absolutely right. Whether the person is 25 or 75, it is the best time to do that.

Yeah, I loved that. I was like, that is absolutely hilarious and perfect and really, really true still. so beyond physical changes, what are the other advantages of strength training that contribute to women's overall wellbeing and longevity that you've seen? mean, I just see transformations in people altogether, not just through development of muscle, but like that commitment to doing something for yourself. Like I'd love to know with your experience, tell me about some of the things you've seen, or maybe share a couple of stories that stand out to you.

Dr. Stephanie Estima (27:45.016)

Yeah, think, you know, beyond the three M's that we talked about, right? So the mobility, the metabolic and the menstrual or, hormonal regulation. One of the, mean, I got into, I'll be honest, I got into strength training because I wanted to look good, right? So I was like, I want to look good. I'm coming up to vacation, starting to, you know, lift a little bit of weight. The reason why I stayed is for the mental benefits that it gives me. So this is, especially when you're training, I tend to, I tend to train for strength outcomes and hypertrophy and we can delineate those.

if you want. But for me, I am trying to take the muscle as close as I can get it to failure. And that is not an easy thing to do psychologically, right? Your muscles are screaming at you to stop. You you're not able to maybe do full range of motion anymore. The muscle is, know, somewhat, you know, a little bit of pain. And so I think that the mental grit and the mental resilience

is also often under looked. I mean, we often talk about the physiological benefits, the aesthetic, like you're going to look great in a pair of jeans and a tank top, like you're going to look amazing in that. But you also develop a certain pride about yourself, a certain respect and reverence for what you have achieved.

and how far you've come. if you, especially if you keep a log in some way, if you have like an app or something where you're like, yeah, when I used to squat, I used to only be able to do like 20 pounds and now I can do, you know, whatever the number is, 50 pounds, 40, whatever it is, doesn't matter. Like you can see the timeline changing of your capacity. And so as your physical capacity increases, I've also found like a proportional and equivalent or maybe even greater

capacity, your mental capacity also expands as well, which I think is really important for women in midlife because it is a very busy, stressful time to be a woman in midlife. And it's very peculiar because you have...

Dr. Stephanie Estima (29:53.462)

You have your own aging, like your caregivers, your parents probably are aging and you're having to deal with maybe more doctor's appointments, they're on more medications or they're falling ill or dying, which is very stressful unto itself. And if you're a woman who's had children, you are either a newly perimenopausal woman, is like a new subset, like women are having children later and later. So we have new babies and they're in perimenopause or

Someone like myself, had my children in my early 30s. So now my children are teenagers and now I'm seeing, mean, teenager, parenting teenagers. Wow. If you want.

It takes grit. takes grit. We'll just say that.

It takes grit. that's what for me, like now this is where the real parenting begins, right? Because they were like cute little squishy blobs, know, before that, like looked up to me and I was their sun, moon and stars. And now they're really branching off into their own people and their own friend groups, their own interests and things. So there's these two things that sort of happen in tandem, right? So you have your sort of with your parents or caregivers helping them manage aging or end of life care.

And then you have the children that you've had, whether they're going off to, I mean, as you mentioned at the top of this conversation, perimenopausal is like 10, sometimes 15 years for people. So in that time, you'll see your children grow up by 10, at least 10 years, and in some cases off to college as I will be, I'll see my children do before my perimenopausal journey is up. And so it's really stressful and there's a lot of grief and there's a lot of sadness and there's a lot of

Dr. Stephanie Estima (31:33.08)

pressure. You're also in, you know, if you have a career, sort of prime years for, know, you're kind of at the peak of your career, let's say, or reaching the peak of your career. So there's a lot of different vertical, like there's a lot of different ways that you're kind of being pulled. And so I think that the physical, like the physical practice, becoming physically literate in the gym and doing the things that are really hard.

also translates to your mental capacity to be able to do hard things and manage very difficult and complex situations as well.

I think you've summarized that so beautifully. And I think that's my personal experience too, like as a working mom. I think the other piece of it is you give so much of yourself away to

others, to serving others that time for me for workouts is my...

Yeah.

Dr. Jaclyn Smeaton (32:22.926)

and I say it's a non-negotiable. I have to do it for myself. And part of it is the way I feel after I work out, way more calm. I feel like I can tackle my whole day no matter what's thrown at me. But the other thing is the act of choosing that time over anything else that I could be doing for somebody else. gives me...

It's self care in its greatest way because it's like I set this as a priority and now I'm aligning my decisions and my time with that priority for myself with that goal that I set for myself. And I think that becomes an act of self care. Like I see it builds so much confidence for women, just the act of committing and showing up even before they get results, which is a really cool outcome.

Yeah, I mean, you don't see results right away from the gym. I love that you're saying that. And I love what you're saying too around this idea of self care. For me, it's like that old, well not old, you still see that on airplanes. like if an emergency happens, put the air thing, I forget what it's called, but you put the thing drops and you put the air, the oxygen on yourself before helping others around you. It's like you can't really pour from an empty cup, right? It's that same idea. If you are

burnt out and you are continuing to give to everyone else and forgetting to give to yourself. Like, how are you going to do that, honey? You know, like with love, how are you going to that is not sustainable. So giving to yourself first, it's like paying yourself first, right? It's like compound interest. It's like, you know, when we think about our financial life, we want to also be able, we pay ourselves first before we pay everybody else. Right. You also want to, and that, and that compounds over time. Same is true.

with the gym when it's your time, you first, you pay yourself first so that then you can go and pay all the other people or pay, you know, respects, time, energy, money, whatever it is to, to other people. So I love that you're saying that. And the other thing that you said too, which I really, just really delighted me is that you don't, you don't actually see results right away, which is a little bit backwards, right? In this world of Uber eats and instant gratification and instant dopamine hits on Instagram. When you go to the gym,

Dr. Stephanie Estima (34:29.005)

The only kind of immediate thing that you get is the pump, right? Especially if you're, especially if you're training, right? If you're doing a hard workout, I always see it like for me, when I'm training shoulders and upper and like an upper body workout, I always see the pump in my shoulders. But what that is, is a glimpse into the future, right? So if you keep doing the same thing, six months, nine months, a year, that's actually going to be how you

look without the pump. So that for me is like super motivating. When I see the pump, I'm like, Like that's

Dr. Stephanie Estima (34:58.286)

Okay, this was gonna look like in six months, right? Where I can see my, so my resting, like my resting length of the muscle will be more defined, let's say. And I've already stated my goal when I'm 60 is to be jacked. So I definitely wanna keep working at that too. So that's a big motivator for me as well.

I love that. it really, mean, how long does it take for women, like once you hit the gym, if you're new to it, how long before you really start to see results, like six weeks or so?

yeah. that's best thing about being new at the gym too, is the newbie gains, right? So the newbie gains are if you... So what happens when you're training, just a little bit of nerd, little nerd speak for a minute, is you're actually, I'm sure you've talked about autophagy here on the show before, the recycle, it's like the Pac-Man, right? So you're like recycling old folded proteins, bits of nucleotides, like bits of stuff that shouldn't really be there, or just like cells that aren't working as well as they did.

The same is the same happens when your resistance training, you actually go through autophagy in the muscles, like your muscle cells are actually turning over. So when you first start training, your body's like, these cells are like not up to they're not at the level like we got to get rid of these for bigger, stronger muscles. So you're actually in the beginning of your weight training journey, you're going to see incredible strength gains and hypertrophy gains like the timeline that you stated is

bang on, like six weeks, eight weeks, 12 weeks, 16 weeks, you'll start to see this huge gain in the first like eight to 16 weeks of training, six to 18 weeks of training, sorry, six to 16 weeks of training. And then it starts to peter off a little bit. So someone like myself who's been training for decades, like I won't make, you know, 10 % gains in a year, I might make a one or 2 % gain over the entire year. So my progress now is much slower.

Dr. Stephanie Estima (36:49.41)

Because I'm close to, if I'm not already at, my natural ceiling, right? The only way I'm really going to surpass that is if I start taking exogenous hormones or blockers, let's say, to really preserve as much testosterone as I can, which I won't do. But...

Yeah, I think it's really exciting if you're a new, if you're a woman who's like, man, I've never, like, what can I expect? It's like, you are going to get addicted to the gains and that's the best thing that can happen for you, right?

So yeah, can feel, always recommend women take photos too, like before and after, because

sometimes you don't, the scale might not move, but you're having such a recomposition. Like it really can be so fun to the transitions that can be made in that time.

Dr. Jaclyn Smeaton (37:36.792)

We'll be right back with more.

If you're already running DUTCH tests in your practice or thinking about it, there's never been a better time to become an official DUTCH provider. Why? Because we go beyond lab testing. Our provider community gets exclusive access to clinical education, in-depth report interpretation training, monthly case reviews, and one-on-one clinical support. Whether you're just getting started or looking to sharpen your functional hormone expertise, we give you the tools to grow. Join thousands of

providers already making a difference. Visit [DUTCHtest.com](https://dutchtest.com) today. We're back with the DUTCH podcast. So I want to shift and talk about mobility, which is not something we've talked about as much on the podcast. So can you share a little bit about the connection between mobility and flexibility, recovery, and how does that shift with all the hormonal changes that changes that women go through in midlife?

I'm so happy we're here. so I will say as you get into midlife, so whether it's perimenopause, menopause, one of the things that I have found myself personally, as well as the women that I've worked with, is that recovery becomes a much bigger requirement than it once did in 20s and your 30s. And I say, know that you're laughing because it's hard.

It's hard. It's so hard to admit that it's like, no, I can still go six days a week and I can still do my doubles. No, we need women in midlife. We need more recovery. We are slower to heal from the stimulus for the reasons that we've stated before. So we're seeing some of these declining hormones, the turnover rate slows down, etc. So recovery is an absolute must. The other thing that I think is not talked about to your point is mobility. Muscles, like I said,

Dr. Stephanie Estima (39:30.254)

popular girl at the party, no one wants to talk about joints, but it's like, girl, you cannot squat if you don't have knees, you know?

You can't. and I feel like it's like everything just deteriorates and it's the injury rate goes up if you're not careful. I mean, it's just and it's so hard to recover.

It's hard to recover and I think where a lot of, and I'm actually seeing this with my colleagues now, even people in the online space who are just very good friends of mine, where if you keep pushing so hard in the same way, like you're still doing the same line of drive, you're still always trying to go up in weight, you're always trying to maximize progressive overload.

you're going to get injured. Like you really do have to have a diversification in your

movement program. Where I see friends of mine who are like, you know, 52, 55 and their bodies are destroyed. It's like they have chronic back pain, chronic joint pain because the joints just can't handle that. So we do really need to prioritize recovery. It is so important, not just for your muscles, but for the preservation of your joints. And if there's

if I may be so bold to offer or to suggest that I think that it's actually more important to preserve your joints than it is your muscles. Because if you, like I said, if you don't have knees, you can't squat. If your wrists hurt, you can't do pushups. If you're sure you have a bad shoulder, you're never going to be able to do a pull up. So the joint is actually a double whammy, because if you don't have the joint, you're also going to lose the muscle. It's not always about the muscle preservation. You have to think about how am I preserving the joint?

Dr. Stephanie Estima (41:10.7)

So how would you do that? Well, one of the things that I like to build into my own programs and programs that I designed for women that I work with are things called D-load weeks. So this is just like a, you know, like a bro, it used to be a bro term, I think it's more, you know, more main stage now, but D-load weeks are basically where you are significantly decreasing your volume, like how many sets and how many reps you're doing per week.

Or it can be, and we can talk about how to structure that. I usually will recommend at a minimum reducing the volume and the reps and sets by about 50%, five, zero. Or taking a week off entirely, which I actually prefer to do. And I'll say that psychologically as an overachieving type A personality, it's hard for me to go into the gym and just do 50 % of what I'm used to because I'm like, oh my God, no, I can totally do 50 % more.

So I just take a full, I just take the full three to five days off of the gym entirely so that I'm literally salivating to get back in. And then I've also given my joints, my muscles, everything sufficient time to recover. So I would say deload weeks at a very minimum. If you're a seasoned lifter, I would say at the very minimum, somewhere at the eight week mark.

If you're somebody who's new to training, might even make them a bit shorter. I might go four weeks or six weeks.

Okay. And what about other kind of preparatory, when it comes to kind of the health of the joints through a strength training program, can you talk a little bit about like warmup, stretching, what do you do before and after a workout? And then what other things that people might not naturally think about have an influence, like sleep is one that comes to mind. Like if you are long on sleep or short on sleep, does that make a difference?

Dr. Stephanie Estima (42:58.99)

Sure, yeah. So for warmups, I think that most people, when they think of a warmup, it's like, okay, I'm gonna get on the elliptical or the treadmill, and I'm gonna get on there for five or 10

minutes so I can get the blood flowing. Maybe I'm a little breathless, and then I'm gonna go and do my workout, which I think is okay. You can do that. However, I think a better way to warm up is actually to prime the body with the movements that you are going to be doing that day.

So if you, for example, have a leg day, then maybe you're going to take one to three sets as warm up sets. And what I mean by that is that you are maybe doing 60 to 80 % of your maximum. And you're also cutting the, so you're doing lighter weights, but maybe you're doing a bit more reps to help warm and lubricate the joints. So for example, I'll just use some arbitrary numbers here. Like if you are usually squatting, let's say with a bar,

works out to 100 pounds. Maybe you want for your warm-up sets you're gonna get under the bar and it's 50 to 60 to 70 pounds and you're gonna do a couple more reps like you might instead of doing like 10 reps you might do 12 or you might do 13 or 14 just to kind of get everything lubricated and you're priming the muscles and the joints for the movement that you're about to do under a heavier load. So I really like warm-up sets one to three warm-up sets of the exercise that you are

going to do immediately afterwards because now your body's primed. So not to say that you can't warm up on the elliptical, you can certainly do that, but I really like in terms of joint preservation and then you can also kind of check in, right? You're like, okay, how's my knee feeling today? How's my back feeling? My ankles, do I feel like I need to do a little bit of an ankle move, like mobility drills today? Are they feeling really stiff? That's another thing that we actually find.

in midlife is a lot of women end up having like stiff ankles, plantar fasciitis with the dropping estrogen. We actually see like decreased circulation to the bottom of the foot. you'll, if you're a woman and you're like, God, every time I get out of bed in the morning, like I just, it's so painful. Those first couple of steps, like that's usually an indication of that starting to settle in. So you may need to, those warm-up sets also allow you to sort of check in with the joints and be like, how do I feel today? I know I was supposed to do.

Dr. Stephanie Estima (45:20.15)

really heavy weight today, but maybe I'm going to call back the weight a little bit. Maybe I'll do a little bit higher reps, but lighter weight. Or, you you can kind of modify it with the warm-up. So that's something that I like to do. I do that every single time I work out, no matter what I'm doing. It's two to three warm-up sets, somewhere between 50 to 70 percent of what I normally lift.

and then I'm checking in with my body as well. And that also gets you sufficiently a little bit breathless, heart's pumping a little bit, and then you can really get to work with your working sets.

And then what about stretching? Is stretching overstated with its importance or should we be incorporating stretching into our plans?

You can, yeah. I typically like more dynamic. So I think when we say stretching, it's usually like just static holds, which are fine, which are also totally fine. And if you love to do that, like sometimes I'll do that in the morning. I'll do like, well, it's not static. It's a bit more of a dynamic ankle and hip and hamstring routine that I'll do. What we want to think about is mobility. So, and we really want to double, we really want to focus in on mobility, which is to say that

Can your joint move in maximal range of motion? So active range of motion, is what you like. So if I were to just, for those of you that are watching on video, I'm moving my wrist now actively. I'm not helping it in any way. So that's called active ROM or active range of motion. And then if I want to increase it, I might do more passive. So I might go as far as I can myself. And then I'm gonna apply a pressure over top. That will be passive range of motion. So you wanna be thinking about mobility in terms of active and passive.

Dr. Stephanie Estima (47:03.584)

ranges of motion that are pain free. So you want to own the range of motion and the range of motion itself wants to be, you want it to be pain free. So whether you're lifting weights or you're just warming up, you should never feel your joints in those movements. Like if you feel your joints, you should stop. But mobility is in my opinion, my very humble opinion, and I'm happy to be wrong on this, more important than just a static stretch.

because now we are moving the joints and the articulation and the ligaments and the tendons through a range of motion that it's designed to do rather than just holding it and, I've done my wrist stretch now, right? So you're able to kind of see where there maybe are deficiencies, then of course you can compare from left to right, et cetera. So that's how I think about stretching and mobility. I feel like...

muscles have much better PR firm than joints do. Joints are sort of like, gotta find like a better PR firm for joints and mobility because everybody wants, everyone skips. Like I was a doctor in practice for almost 20 years. As soon as people start feeling better, they drop the rehab. It's like the first thing that they do. Like, oh, I was feeling so good this week, doc. Great. Did you do your rehab exercises? No, I don't, but I feel better. It's like, okay, I get it. We've reduced.

the inflammation and the pain to a subclinical level, like you can't feel it anymore, but that doesn't mean the deficiency is not still there. So I haven't quite figured out how to make mobility sexy yet, but Jacqueline, I am definitely still trying.

me know when you get there, I can get you back on. know, one of the things I think about too, like that I hear a lot, and there's, you know, suspect that there's hormonal connections

here too, is shoulder injuries for women in perimenopause. I've had like three, you know, rotator cuff tears, one and then the other and then the other. And it's really interesting, that's actually what got me into lifting. Had my last child when I was 38, and I went to put...

Dr. Stephanie Estima (48:49.496)

Yeah.

Dr. Jaclyn Smeaton (49:03.232)

you know, this meatball of a one and a half year old or whatever into his car seat. And when I reached him to side to put him in the car seat, I tore my rotator cuff and it was, it's really what got me into lifting. Cause I was like, gosh, if I'm not strong enough to do the things that I need to do every day, like get my kid in his car seat without injuring myself. This is like the time to change that, right? That like, okay, I'm a busy mom, but I've got to make that time because otherwise I'm going to be a disaster. But.

Mm-hmm.

Dr. Jaclyn Smeaton (49:30.582)

I hear this from so many women, like shoulder injuries specifically, and I've seen a post on social media where you talked about how it has like the widest range of motion, so it's very susceptible to injury. Can you just talk a little bit about shoulders generally? Because I hear this from my friends, like my tennis playing moms, my lifting moms, like the shoulders, it it stinks to injure a shoulder and it seems like everyone's doing it.

Yeah, I think that the three, well actually we always say four body parts where most women injure themselves in midlife. Number one is shoulders. Second is the hips. So we often see bursitis, like hip bursitis. And then plantar fasciitis, which I mentioned before. And then the other places like neck, that's sort of related to the shoulder button. You know, we'll see neck and shoulder pain, like joint pain in the neck. So what's happening with the shoulder? Shoulder's one of my favorite joints, I have to be honest with you. And it's because...

because it has all these degrees of freedom. So your shoulders, if you think about it, your shoulders can flex, they can extend, they can abduct, they can adduct, they can circumduct, which means you can make a big circle with them. They have all of these different degrees of freedom. So with those degrees of freedom also comes an element of instability, right? Like if you were to look at the joints in your finger, like you can't do what your shoulder can't do it. You can just sort of bend it and straighten it, and that's sort of all you got, right? You can maybe go, you can maybe...

argue that there's little bit of rotation, but not actively. So with the amount of degrees of freedom comes instability. So as you mentioned with the rotator cuff, there's all these different muscles that sort of come in and attach in and around the shoulder joint on the humerus, on the glenohumeral joint, the AC joint, there's all these different attachment sites.

And so if you have weakness, if you have like an instability from left to right, or if you're right-handed you're going to be using your right hand or your right shoulder and your right hand more. Of course that's there's more wear and tear happening on one side of the body. And then you pair that with perimenopause where I mentioned before estrogen starts to decline and that also changes the the tension we'll say of your ligaments and your tendons. So estrogen tends to make our ligaments more lax like more loosey-goosey.

Dr. Stephanie Estima (51:47.598)

And it tends to make our tendons stiffer. So as we are losing estrogen, both of those things get worse. We get more ligamentosaxine, we get tendons that are stiffer, which means if you're not warming up and doing your mobility routines and all of that, you are going to injure yourself. So for shoulders, there's a couple things I would say. First is...

I would continue to train in the ranges of motion that are not common in everyday life. So a lot of our life is how you and I are sitting right now. We are seated, the shoulders are sort of, you know, our arms are, I mean, I'm very like animated if you're watching this video.

and then he's all set.

Make it a workout. I know. But generally, both of our arms are at our sides. Maybe my arm is flexing a little bit as I'm making notes on what you're saying so I can remember the points. But generally, arms at the side. So what we want to be thinking about in terms of training is we want to be thinking about all the motions that are not being addressed. So one of the biggest things that we actually don't see in modern life is this motion that I'm doing here. So this is called abduction or abduction. my teacher's is like abduction. So abduction.

So you are moving the arm away from the midline and all the way up, and then you're coming all the way back down again. This is going to train pretty much, I'm just going through my mind mansion. Yeah, like it's pretty much every single muscle that is involved in the rotator cuff. You're also getting the subscapularis. getting, like you're getting every single muscle in and around the shoulder is being trained when you do this motion, okay?

Dr. Stephanie Estima (53:31.534)

So I like there to be, when we are thinking about training the shoulder, I like a lot of lateral arm raises, that type of motion, because that's not something that we actually get in everyday life. And as the saying goes, use it or lose it. So I like that. We can also make the case and we can get into this, but hormone replacement therapy, especially specifically with estrogen, does seem to help.

I've seen many, many, many frozen shoulder cases and without kind of losing everyone and totally going like full on nerd with you, I will say that there are some cranial nerves, spinal accessory nerve in particular, which can be sometimes entrapped in some of the neck

muscles that can also affect

movement of the shoulder as well, which can affect sort of blood flow, etc. So you couple like declining estrogen with changes in the articulations in the spine like changes in the joints in the cervical spine. have cranial nerves that get entrapped and then it's sort of like and then you're not training the lateral that coronal that side plane that coronal plane. It's a recipe for disaster. So I would say making sure that you have mobility in the neck.

Maybe you're seeing a chiropractor, physical therapist, body worker to help kind of, you know, work out some of the knots and the tension that a lot of us have here. And you're making sure that you're training at the gym as well in the motions that we don't often see in everyday life.

Awesome, thank you so much. Now you talked about like hormone replacement therapy and we've talked about hormones kind of on and off through the podcast, but I do wanna talk a little bit about like hormone testing. Of course, that's what we do and we love to talk about it. How important is it for a woman to kind of know her hormonal status? Like does that help her optimize or help you as the provider optimize a plan going forward for that patient?

Dr. Stephanie Estima (55:25.39)

I sort of have two minds about this. I would say that in an ideal world, especially if a woman has no idea where she is, it would be wonderful. I personally, my personal habit is I take blood work every six months. So I like to sort of know where I do hormone testing. I do the whole thing. I do labs every six months. And I like that because it gives me sort of a handle. I understand what my baseline is. So if I see any aberrations in that, it's like, this is different. This is a pattern intro. This is different than what it has been for the last.

whatever from last time or the last two years or whatever it is. So I think that in an ideal world, it is a nice idea to have a baseline for your labs. If you are a perimenopausal woman and you feel like crap, so you are feeling like your energy is zapped, you're not sleeping well, you're more anxious than ever, can't regulate your moods, don't feel like doing some of the things that brought you joy before.

Do I need a test to tell me that you're probably low in progesterone? No. Would it be nice to have? Yes. So it's like, it's a little bit of like, it's a nice to have, but I don't think it's a requirement, particularly when we're as a clinician, if you are just treating the symptoms. you don't need, hormone therapy is a little bit, I would say, and I don't prescribe hormone therapy.

with my designation, but I will say that the, I want to say this like as delicately as like, it's more of an art than it is a science, right? Like you're just trying to clinically manage the patient's symptoms and get her, like you're not trying to replace her menstrual cycle. You're not trying to get her to like have her hormones act like she's 25. You're just trying to have her not hate

everyone, not hate her husband, you know, and try to like give her a good night's sleep, right?

Give it to us. Come on.

Dr. Stephanie Estima (57:19.278)

So I think that you want to manage her maybe clinically, like to manage her signs clinically so that there's a bit of an art there. And if you have the financial wherewithal, I would say you can absolutely get the labs done as well.

Now with DUTCH testing, now we look at estrogen and progesterone and then also cortisol. We haven't talked about cortisol yet. Is there any value in knowing what's going on with cortisol, any impact that you see on women when it comes to training efficacy or what they can tolerate?

Yeah, this is a good question. I think that a couple of things. I want to say that first, I think that cortisol has been demonized unfairly.

No kidding, right? I mean, it's like our most important fire extinguisher. It's like a fabulous hormone in so many ways.

And you know people like me, you can't cortisol spikes it's like along the side like my other thing that gives me an angry tick is glucose spikes and the second one is like you should never have a cortisol spike it's like girl if your cortisol does not rise in the morning you dead or

Dr. Jaclyn Smeaton (58:18.742)

or workout even like it's supposed to go up.

Exactly. It's like cortisol is liberating energy stores for you to be able to do that squat. Your cortisol, it is very much a sympathetically driven activity. When I say that, just mean it's a part of your nervous system that's not a, you know, it's not emotion, you're feeling sympathetic. It's like the sympathetic nervous system is a part of your nervous system that's involved in that fight or flight. You need that, you need the cortisol and those catecholamines in order for you to finish the workout, right? So cortisol, I think is important.

for women because what happens in perimenopause, lots of women feel very burnt out. We described sort of the environment that everyone's living in, sort of these different things that are pulling us everywhere, very stressful time. But we also tend to see in perimenopause, you know, there's this, I'll give credit where credit is due, Dr. Sarah Zol, formerly known as Gottfried. She coined the term, I think it was Sarah who did it, thyropause.

Right. So we start to see the thyroid actually go kaput in midlife because of all of the chronic low grade stress that this woman has been under, which starts to affect her thyroid. So I do

think for a woman who is complaining, if she's saying, hey, listen, I'm listening to Stephanie and I'm going to or any other guest that you've had on the show that's talking about muscle building and I go and I work to failure and then I'm bedridden for three days. Right. It's like, OK.

We need to look at your cortisol pattern. We need to see, we need to make sure. Do you have an appropriate or are you overshooting your cortisol awakening response? Is your cortisol lowering in the evening? Cause a lot of women actually have that curve reversed where they are so burnt out that the car, that cortisol awakening response is flat in the morning. But then 3pm comes when they get the kids and then the rest of the evening we see the cortisol levels start to increase. And then of course,

Dr. Stephanie Estima (01:00:11.138)

with cortisol increase, can't have melatonin, you can't have all the things, like that beautiful dance that gets us to sleep in the end of the day. And then of course it begins to affect your thyroid, which is your master metabolic hormone. So I do really like to understand a woman's cortisol and like how much of that is she?

How much of that is cortisol? How much of it's cortisone? You know, what is it flipping back? Is it flipping back and forth? You know, all of that data, which the DUTCH does provide, I think is very, very useful information for a woman because then we can titrate and then we can, based on that, we can say, okay, you can't handle super intense workouts right now. So you're going to go to the gym and instead of working to one to three reps of failure, you're gonna actually work within like five or 10 reps of failure, where you're gonna work at like a 60%.

of your maximum or a 70 maybe maybe 70 like usually like 50 or 60 percent of your maximum because other if it's anything other than that you are taxing an already taxed system. So I do really like to understand a woman's cortisol because if she's someone who's been chronically stressed like low grade stress and inflammation over time we actually see that normal car response which should look like a ski slope. It's like high in the morning drops off. We usually actually see it reversed.

That's super helpful. Well, I know we're coming towards the end of time, but you are such a cut it straight person. I've enjoyed this conversation so much. I'm hoping you'll like entertain me with one final question, which is I want to know like with all the stuff that you see online, give me like the top three things in this area that people are talking about that it lights you up. It's finally getting the attention it deserves.

And then I want to hear the couple of things that you hear that you're like, my gosh, that is total bull. I can't believe that's online. And it just makes you so angry when you see people talking about it and misrepresent.

Dr. Stephanie Estima (01:02:02.094)

Okay, so the things that are really exciting me right now, I would say is actually we talked about a lot of it today. We talked about mobility and joints like my original love like I am in love with biomechanics and joints like I am a chiropractor through and through like that is my first love in science, right? And I love muscles and I will always love muscles. You will all I am a gym bro. Like you will always find me at the gym.

And I love that we're talking about, I love that you actually invited me on to talk about joints. Cause I've said a couple of times, like you can't squat if you don't have knees, you know, you can't put up if you don't have wrists. So that's making me really excited. I think generally just the female centric approach to living well makes me see like my first book, the Betty body was all about menstrual cycle literacy. So we were talking about how to change your nutrition and your fitness based on where you were in your menstrual cycle.

I am very excited about some of the names in the space, myself, Stacey Sims. There are many others who talk about menstrual cycle literacy and actually understanding that you are not just a smaller archetype of a man. You're not just a small man. are fundamentally different by way of your reproductive cycle. But there's also other things that make us uniquely female. There's different

size nucleus in the brain, our livers function differently, our biomechanics, you want to talk biomechanics like our hips, our knees, our Q-angles, the stuff is different. So that makes me really excited. The things that I really hate, I think I've mentioned them before, I get a little bit of an angry tick when I hear people talking about glucose spikes. Your glucose is going to spike every time you have protein and every time you have carbohydrates. That's what it's supposed to do.

You don't need and there's like one particular her name doesn't matter the name but She talks about glucose like it's the devil and right lo and behold There's a supplement that you can take to make sure that you don't have glucose spikes like again. It's just like cortisol You don't have glucose spikes and what what are you like? I'm like you're dead There exactly these are normal

Dr. Jaclyn Smeaton (01:03:52.238)
you're talking about.

Dr. Jaclyn Smeaton (01:04:08.398)
What are you trying to prevent? What you trying to prevent?

expected physiological responses to eating carbohydrates, you should have a glucose spike. What is important is what your body does after the glucose spike. So context is important. Does your glucose come back down or does it remain elevated for hours on end? Like that's the question that you want to be asking, right? I've mentioned the cortisol thing. I think that

we've demonized cortisol. The other thing that

I we can start to soften as women is our relationship with carbohydrates. I know we didn't talk too much about that, but I love protein. Protein is, you know, the goat for muscle protein synthesis. But we also need carbohydrates to prevent muscle protein breakdown. So protein and carbs go hand in hand when we're thinking about preserving from a nutritional perspective, preserving muscles. So I flinch a little bit with

anyone who really prop- like who's still talking about the carbohydrate insulin model of obesity. There's like enough holes in that theory that insulin is the big driver of obesity, that it's carbohydrates. It's like, it's not the carbohydrates. It's just you're eating too many of the carbohydrates, you know? So that CIM model, that carbohydrate insulin model- or sorry, yeah, carbohydrate insulin model of obesity, I think we can potentially leave by the- by the curb and walk away.

Awesome, well I have really loved talking with you. Thank you so much for your time today, Dr. Stephanie. If people wanna follow you, learn more about you, what are their best ways to get in touch?

Dr. Stephanie Estima (01:05:43.822)

Well, like you I said, I have a podcast better with dr. Stephanie every week. have thought leaders coming on to talk about nutrition fitness Just what it means for a woman in her 40s 50s 60s What it means to have a well-lived life Instagram as you mentioned dr. Stephanie Estima. I'm there and then you can find everything at dr Stephanie Estima comm we got newsletters and lots of fun stuff programs and all the things

Awesome, I've really enjoyed our conversation. Thanks again.

Thank you. Thank you for having me.

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