The Science Of Building Muscle And Losing Fat During Menopause Transcript

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Introduction and Guest Welcome

Hello, ladies. Welcome back to Mastering The Meno(Pause) Transition 3.0, our third year at it. And your host, Dr. Sharon Stills. As always I'm excited.

I'm happy. I'm honored to be here with you all and share these amazing conversation plans for what you need to know to have your perimenopausal menopausal hormonal journey be as amazing as possible.

And today I have a very special guest Dr. Stephanie Estima. She is a well-regarded health expert on female centric health, life, lifespan, performance.

She hosts "BETTER! with Dr. Stephanie." I love that name. That's her podcast. She has a book she, has been on TV and all the things sharing her wisdom.

And now I've brought her here to share her wisdom with all of you. And so welcome, Dr. Stephanie, it's really nice to have you here. Thanks for being a part of the Summit.

Thank you for having me. You're so welcome. So, I always just like to ask, you know, how did you get what? What made you be involved? Is it a personal story, or how did you really start focusing on women's health and wellness at this hormonal journey of their life?

it was my own story. I struggled with my own menstrual cycle for years. I had one good week out of the month. It's the week after my. Yeah, my the week after my period finished.

That was that week was good. And then, you know, you enter into the luteal phase of the cycle and the inflammation and the emotionality and the mood swings and, you know, the water retention and all the things, and the just the pain and inflammation in my body was, enough that I had to I was constantly medicating and, I through a series of events, we were traveling, we were in Europe.

We were walking around everywhere. We were getting sunshine. We were, sleeping, taking afternoon naps. really, got my period in Italy, and, it was the best period I had ever had.

Personal Story and Women's Health Focus

I felt like I was a goddess, you know, like, I was just, you know, you know, it felt very cleansing and, kind of came back to Toronto, which is my home, where I had a practice, private practice and started creating programs for women and men around nutrition and fitness and all the things, and very quickly realized that there's a there's a big difference in, you know, nutritional interventions, physical interventions in terms of, of males and females.

So that's where, where I started, I wrote a book, as you mentioned, it's called The Betty Body, named after the podcast, which is called better around How to Optimize.

you know, training, nutrition, stress management over the course of the cycle. And now myself being in perimenopause, very interested in the perimenopausal and menopausal transition with the flux, we'll call it, of hormones, which I'm sure we're going to get into and how our experience is unique.

Right. It's not we're not just little men with pesky hormones. We're distinct, from our male counterparts in terms of our experience with our hormones over the course of the life.

And it's like the you're the European here, too. Yeah. I mean, everything like, er is everything better in Italy? Probably. But the one thing that I remember thinking was like, but my body did this, you know, so I know all the

gelato and all the parts and all that stuff I was consuming, but I, but my body did it so I could figure out how to come back to North America and, and figure out how to replicate it, which is which is what I've done.

I love that, yeah, I do a lot of European medicine. It's like they've really got it going on over there. So anything we can bring back and share is always a benefit. So, or were you at your chiropractor, but were you like a buddy, like a trainer or.

I know it says you were he knee competitors. So like, you have a strong background just in bodybuilding. Yeah. I mean you look at. Yeah. I mean, you know, chiropractic is the study of the neuro musculoskeletal system.

So the interaction between the brain, the muscles and the skeleton, the bones, the tendons, ligaments, all of that. but prior to going through my professional schooling, actually part of the way that I paid for, my professional schooling was to be a personal.

I was a personal trainer and a group exercise, instructor. So I was doing, like, the step classes and the high low and the tie bow and all of that kind of stuff.

So that's actually how I paid for, my, my undergraduate degree and then how I paid for my professional, schooling as well. So I've always, always been into biomechanics.

I've always been into muscle, I've always been into bone, I've always. And my, you know, my undergrad was in neuroscience and psychology, so I just really married my love for neuroscience with, with with biomechanics.

I love that and I'm such a huge fan of chiropractors. We just have to shout out for chiropractors. You know, we don't talk enough about chiropractic on summits and podcasts and things.

It seems to often be left out, and it is such an important part of our health care journey. So I love that you've married them all together. So we've got a real expert in the house to talk about, you know, what is going on, because one of the biggest things we hear, right, is meeting the way I always eat and exercising the way I always exercised.

But my body doesn't care anymore and it is betraying me. And I'm getting bigger and I'm gaining weight and I'm getting flabby. And so what's actually going on there is we're going on this perimenopausal menopausal journey.

And what can the women do about it? Yeah, this is a great question. I think to start, I would say that if you're not being strategic, around your resistance training program, which we'll get into specifics in a moment, but just to give you an idea of sort of what's happening physiologically, you will start to lose muscle fibers.

and it starts actually in it's unfortunate. It starts in our 30s, but starts to really accelerate in our, you know, fourth decade in our, in our Perimenopausal years.

And then we'll accelerate even further than that in our menopausal and postmenopausal years as well. So you are losing about 1%. If you're not strategic, you're losing about 1% of your muscle mass per year.

So on a decade like that's 10% per year. And interestingly, when we actually look at the muscle fiber types, women are notoriously, you know, we have more type one fiber.

So those are the, you know, your audience may have heard of like slow twitch fibers. Those are the those are the muscle fibers where you go for a walk.

You can garden, you know, you can do sort of low level activity. We can do that for hours and hours and hours. We have a lot of that. But if you're not training, in a heavy we'll talk about the different, you know, what constitutes heavy lifting and all of that.

Why Muscle Matters in Perimenopause

But you're going to start to lose a lot of type two muscle fibers, and you're going to also lose speed and power. and so for women, this can become a big problem because muscle when we when we look at muscle, it serves three main functions.

One is obviously mobility. It helps us walk and get around places. the second is a metabolic function. Right. So our muscles the more muscle. So your muscles are the primary site for insulin activity.

So when you're contracting your muscle you are literally forcing the insulin receptor from inside of the myocytes inside the muscle cell to be expressed to the surface so that insulin can bind.

And then you can open up glucose channels. And then you can kind of get rid of the blood glucose. And so it's the primary site for insulin activity glucose utilization and also blood lipids as well.

One of the things we see in perimenopause is like just what you said I'm doing the same thing, I'm eating the same foods and working in the same way. And now body composition is changing and they start to see a decline in their lipids, like they start all of a sudden there's more LDL than there ever was.

There's more triglycerides on their labs, and they're everywhere. Part of that is in part due to a loss of lean muscle mass. So lean body tissue, but specifically in the category of muscle.

And then the for the third options we have mobility, we have metabolic. And then the third but I like to talk about is menstrual. So when we're training whether you are fertile you're in perimenopause or you're like in the waiting room, like, am I menopausal?

You know, when we're training, resistance training specifically has a positive, effect on the progesterone estrogen balance in the luteal phase of the cycle.

So progesterone, I'm sure you've talked about this on the, on the, on the summit already, but just for those who haven't heard it yet, progesterone is the main hormone in the second half of the cycle.

It starts after you ovulate. And I like to call like, I almost think of, like, progesterone coming, like showing up on the scene with her other, like, uterus ninjas and, like, beating the crap out of estrogen.

Right. So like, we down regulate the estrogen receptor. So it's not as it's not as responsive. And then through feedback loops progesterone also down regulates estrogen production.

So in perimenopause cause a lot of women start complaining about all of a sudden they're anxious. All of a sudden they're depressed. They have raging PMS and they've never had that before.

Part of that is that progesterone estrogen balance. And the last thing I'll say about it, in terms of providing a positive menstrual, effect on the female body, is every time you resistance train, depending on how fit you are, you're going to get a bump in testosterone.

So anywhere from, like, if you're really fit, it's going to be shorter lived, unfortunately. So it's going to be like maybe ten hours. if you're not as fit, you're going to get up to like 48 hours of a bump in testosterone.

And for I always say this every time I speak and people are like, what? But testosterone is the most, abundant sex hormone in the female body. We often are like, no, it's estrogen. Well, we have more estrogen than men, as you as you know, but we have more tests.

We have less testosterone than our male counterparts, but we have more testosterone than we have estrogen. So that also becomes important in perimenopause and menopause, where you'll find women will say, like, I used to, like, own the boardroom.

Like I would walk in and I would like make the decision. I would walk in and I would have no anxiety. And then they

feel in perimenopause and menopause like former shells of themselves.

And part of that is there's receptors in the brain and including, you know, the areas that are involved in, you know, the nuclear for a personality, for testosterone.

And so as testosterone declines, we can also sort of feel like the world can feel like it's shrinking. And we feel like we're shrinking, that we're former, you know, warmer versions of our full, full of self.

So I always like to start off by talking about muscle. I mean, yes, it's also it's going to make you look good, which, you know, if you if you're a vain woman, you want to look good.

Awesome. Good for you. And it has all of these other, biological functions in the body that are going to help you navigate menopause and perimenopause, better than you otherwise would.

fantastic. So I want to circle back to the word you said, strategic because I would love for you to share because we hear all the time you need to lift heavy shit, right?

You need to let need know. What does that even mean? Yeah. So, like, what does that mean? How do you start? How do you do this and not hurt yourself? Yeah.

And all the things. This is this is such a great question, Sharon. Because this is maybe because we all grew up like if you're in your 40s, in your 50s, 60s, we all grew up in the in the cardio section of the gym.

Like, you know, we all grew up on the elliptical or the treadmill or whatever, right? and so now the conversation has gone from like, Cardio Bunny. Right? That's the way that you lose weight.

That was sort of like the 80s and 90s, like when I was really into into the sort of the gym scene. I mean, I'm still into the gym scene, but now it's like it's gone from Cardio Bunny to like, Muscle Mommy.

Right? So it's like, what is the like? How do I start? I want to I want to lift weights. So, I would say, it is important to lift heavy weights, but but what heavy is going to be is going to be very different for, you know, you and I, right.

Like you and I are going to have a different, answer to what is heavy if we're let's say we're just doing bicep curls, right. You might have a certain weight and I might have a certain way, and it's going to be heavy for me.

So the way that I define heavy is it's heavy enough for you to let's say you want to do ten reps. We'll just say like it's ten reps. That's your set. You're going to do ten bicep curls.

And if I were to ask you, once you finish the ten, I want you to do five more. You could not do it if I asked you three more. Maybe. Okay. We might maybe.

So like, you really want to you really want to lift a weight that you can do with proper technique that at the end of the reps you will have maybe 1 to 2 kind of reps left.

Right. We call this, reps and reserve or RA. You'll have 1 or 2 left. The other thing that's important is range of motion. So this is actually where I've I've skewed this I've, I've changed my opinion a little bit on this.

How to Lift Heavy Safely

I used to be like team full range of motion. Like if you can do range motion full range I mean, no chiropractor. Right. Like you can do range, full range of motion.

You're not doing it doesn't count. I have, I have, modify that to a range of motion that you can own. Right. So if you have an arthritic side. Right. So if you have like psoriatic arthritis, you have osteoarthritis, you have, you know, any, any type of Arthur Tide, there's going to be a restriction, right?

There's you're not going to have full range of motion. I've had many, patients with RA with rheumatoid arthritis where the primary goal is not lifting heavy.

It's actually just to preserve the range of motion because the joint is actively being destroyed. Right. So you lift heavy in a range of motion that you can own.

And if you don't, if that range of motion that you own is not full, that's fine. You do what you can right now. And then over the course of a long runway, one year, two years, three years, you work to increase your range of motion so that it can get as close to full as your particular.

You know, biomechanics will allow for. That's okay. That makes a lot of sense. And no one ever talks about range of motion, right? Yeah. Yeah. Well, I mean, this is the thing to like when you go to the gym.

And so ladies, if you're new to the gym, you it won't be long until you see a guy that is putting 400 plates on the squat rack or 400 plates on the leg press, and then they have five degrees of knee movement.

You know, it's like they just have such because the weight is too heavy that if they were to move through a full range of motion and they don't have the muscle strength for it.

So I've struggled with this myself too, because, you know, it feels really good to lift heavy. It feels like really empowering. You feel strong, but if you are compensating, if you're changing the way that you move in order to move the weight, the weights too heavy, so you have to strip the weight off along with your ego.

Lift a little lighter, until you can build up the strength. and with that range of motion that you can own, so suffice it to be able to add more weight on.

And so do you recommend weight training three times a week or how do you how does it look on a calendar? I think that's I mean, in terms of putting on muscle mass, if you're someone who's like a complete you're completely new at the gym, I would say that you're going to get, a lot of benefit from training twice a week, like if you are at the gym and you're lifting weights.

And I would always recommend, if you can, working with someone if you have the capacity to work with a trainer, even if it's just like 1 or 2 sessions, so that they can critique and comment on your form, because they're going to know, you know, just because it's their, you know, their the nature of their profession, they're going to be able to tell you where your biomechanics and where your patterning can be improved.

but I would say you're going to get a lot of benefit at two times a week. And then, you know, if you have been doing that for like a year, you can bump that up to three, I think you'll get and most people can stay there, like if you're looking at it from like a health and longevity standpoint, most people can can hang around at three times a week and get lots and lots of benefit.

So you don't have to be there every single day. I personally love to lift. It's part of my personality. So I'm there. I'm there more often because I really enjoy it. Right?

So I got into it for the esthetics. but I'm there now because I feel like it confers a lot of mental benefits, a lot of esteem benefits. Like, I feel really good about myself being able to lift, so I'm there more often.

But, you know, I started at two, three times a week. Right? And you can you can build up from there if you want. But if you don't have any desire to be a gym bro.

Right. You can just do it twice, two time a 2 or 3 times a week, and you'll get phenomenal benefits from that. and at that 2 or 3 times a week, is it like 60 minutes or what should the ladies expect.

Yeah. I mean you can I would say anywhere from like 45 minutes to you can get in a really I mean it also depends on your own particular constraints, right.

Like if you only have 30 minutes like it's going to be 30 minutes, right. in an ideal world of, you know, if it's unicorns and sparkles and rainbows and you have like all the time in the world, like a 45 minute to a 60 minute session is great.

I think the time that you're at the gym is less important than the quality of work that happens at the gym, so you want to finish the workout when you have sufficiently provided enough stimulus into the muscle to create change.

So that might be 30 minutes. Like you can get in a you can be very effective at, you know, 25 or 30 minute workout, you know, and I and I, and I, I, I like to do a lot of work again.

So I, I also want to remember, like where I've come from versus where I am now. You want to make sure that you're doing that. You're giving your muscle enough stimulus, like enough volume that it's going to change and remodel.

but you don't want to you don't want to. there's something, that you'll hear in like, exercise physiology, people who are, like, really into muscle science.

You'll hear a term called junk volume where you have done six sets of squats, and then you've done four sets of Bulgarian splits, and then you've done four sets of deadlifts, and then you've done, you know, and then it's like some other version of a squat, some other version of a hinge, you know, and then you're, you know, you've been there for an hour and a half like, you know, two hours.

And like, I work out somewhere between 75 minutes and 90 minutes a session. But after 90 minutes, I honestly, I'm just, it's like it's it's just for my it's just for my ego.

Like, it's not actually, it's like I'm in junk volume territory at that point. So I would say that it's the less important the time, but more important the quality of the stimulus.

And what more is not always better like exactly. Right to. Think. Yeah. And then so one last exercise question because yes, I was laughing. You know, me and my NordicTrack were like best season ever.

Yeah. Yeah. So where does because we all hear, oh, you know, you need to be focusing on weightlifting. But where does cardio, whether it be just hiking or walking or if you like running or you still like getting on a, elliptical machine, where does it end, in your opinion?

Cardio, VO2 Max, and Speed Training

I think it. So first, I love cardio. I think that it is a it's great like from a cardiovascular, a cardio respiratory, benefit category. I mean, cardio is the way to go.

I think that our needs change as we age. Right. So one of the things that we know about women who are still cycling, including perimenopausal women, is you still have estrogen, even though your estrogen is in flux. Right?

and estrogen is very cardioprotective in menopause. We lose that, right? So we we, you know, your estrogen levels are going to plummet to something like 1% of their previous levels, right?

So it's like you've lost 99% of the estrogen that you once had. And so cardiovascular disease still the number one killer of women. so we want to be thinking about what are some of the ways that we can improve upon our respiratory or cardiopulmonary fitness.

So I like to think about training the base and training the top. So the base is the, walking the zone one, the zone two training. This is you know, if you don't have an exercise lab to be able to.

Exactly. you know, calculate your heart rate, you can just use, Doctor Phil, math. Tony is like 180 minus her age, formula. So 180 minus. Let's say you're 50.

You know, you're going to, like zone two is going to be somewhere around 130 beats per minute for you. I typically, you know, typical recommendations for that can be anywhere between 100 and 20, you know, 150 to 180 minutes per week.

but that can be walking, right? So I, I love to walk, like in the morning. That's what I like to make my coffee. And I like to either either sit on the porch or I'll just like, kind of do a lap around my neighborhood with my coffee in hand.

so that that would count. if you love the StairMaster or the elliptical, the treadmill, like, have at it. because we know that the best exercise programs that people stick to are the ones that they enjoy, right?

So I could tell you all day long, no StairMaster, that's the one. But if you love the elliptical like you're not really going to, you're going to it's going to be more laborious, like mentally to be able to, you know, stick with that over time. So, that's the bottom of your base.

And then the other thing, that I think is important, again, with the maintaining of the power, that we were talking about before the loss of type two fibers, that happens in perimenopause and menopause.

I think it's important to train speed training. and this is, the one I struggle with the most. In the spirit of transparency and honesty. I don't enjoy it.

but it's like, basically speed training. Right. So you're going to sprint for 20 to 30s no more? if you have a heart rate monitor, you would wait until your heart rate sort of recovered.

And then you do that again and you might do that, you know, you might do 4 to 8 rep, you know, cycles of that. there are other ways to do it. There's a Norwegian 4×4, which is absolutely torturous.

It's like four minutes as hard as you can and then four minutes break and you do that four times. It's awful. I'm not going to lie. I'm not going to lie, right?

As someone who's listening, that's like, no, I love the 4×4 that the Norwegian like, I bow down to you. I struggle with it. So, I think it's important to the top end, like your VO2 max.

I think that that's a really important indicator of longevity. It's actually one of the better indicators of longevity, right? Like your lung capacity and your ability to sort of take in oxygen maximally.

That's very, it's an important consideration that we lose as we age. So training the top, which is like the speed training and then training the bottom, which is like the walking, the zone one, the zone two stuff, it becomes more important for women in menopause as we lose estrogen to, to maintain both of those things.

could you actually, no one's mentioned VO2 max, and that is such an important. Could you just talk a little bit more about that for what the women should know?

Because I think it is a really important indicator, and I want to make sure they know about it. Yeah. It's basically your the maximum amount of oxygen that you can take in at any given point. So when we are running, let's say you're doing a sprint maximally.

there's going to be you're going to use a couple of different energy systems, in that. So you're going to be probably anaerobic, initially for like the first call it, you're going to use something called the fossil creatine system, which is just the, basically the creatine.

it's just basically ATP that the muscle has sequestered. and then after that there's like, this is getting a little nerdy, but this is like after that, there's like almost like a, like a biological fork in the road, like you have to slow down after that.

So you start using something called, aerobic glycolysis, which takes a little bit longer to produce the ATP. But you'll

notice after 10s if you're sprinting or if you're.

I do my sprints on the bike. after 10s there's a market decrease in my power output. so glycolysis is the second energy system that comes in after that.

And then and that you'll, you'll get like ten, you know, at 10s glycolysis kicks in and you know, probably at the 32nd mark is when we start to get that another biological fork in the road where we will have that a step down.

where now you're going to move into something called oxidative phosphorylation, which is very slow. again, so at 30s you're going to notice again a big step, like a big drop in your, your power output.

So that's why I was like 20 to 30s max, because you're using you're not using ox force. You're using the ATP, the fossil creatine. system and then glycolysis.

And then those are, those are the systems that are going to as you're training those up, those are going to positively contribute to your VO2 max. Awesome. Thank you.

Okay. So I was thinking like for that 4×4 like I like to do hot yoga. So does that count. Because we do like a pose like Max. And then we get into shavasana and we rest.

And so that's kind of like that type of training, right. The it wouldn't be it's not maximal training. So you're certainly like if you're in hot yoga, you're going to be stressing the system out because you're hot and you're holding a pose or you're moving through, you know, a sun salutation or something like that.

I think yoga is very important for pliability, for decreasing stress and all of that, but it wouldn't be. It wouldn't fit under VO2 Max training. it would be really important for flexibility and mobility and all of those things.

And then you can add on the heat stress in like a Bikram style or like a hot, you know, heated room kind of yoga, which is actually really, there's some really interesting data on like activating heat shock proteins and what that does for cardio, you know, for cardiovascular health, which is also a positive.

but because it's not all out max training, it wouldn't, it wouldn't be categorized as VO2 max. yeah. Bummer. Yeah, I know, that's I think I get that question too, is like, what about Pilates is Pilates resistance training?

It's like, it's not. but it, you know, again, it's going to contribute positively to like, you know, muscle strength and isometrics and all of that, but.

Yeah. Gotcha. Okay. All right. I'll have to have to switch it up a little. so I guess to just kind of tie a nice bow on all this beautiful information.

What are your thoughts on diet? Because we're talking so much about body and muscle and composition. So how does diet play a role into that? And what are like your your rules of, of food intake?

I think that I have currently I have no rules around intake, like there's no bad foods. so that includes ice cream and bread and pasta and all that stuff.

And I will say, depending on your age.

Nutrition, Protein, and Fiber

So depending on, you know, whether you're kind of 40 and under or 40 and older, for what I have found, again, coming back to this idea that we're losing muscle, is that the one macro nutrient that changes as we age, we actually need more of it is protein.

So we do need more protein as we age. because our muscles, again, if you're not being strategic in all the ways

that we've been talking about heavy lifting in a range of motion that you can own and, and working on your Vo, all the things that we've been talking about, you will lose muscle and the want your muscle will become more resistant to grow with time.

So you need a bigger stimulus. Protein is one of the ways that we stimulate muscle growth. so I always say, like, you can build muscle in the gym, and you also build muscle in the kitchen.

and part of that is by increasing your, your protein intake. So I would say if you're 40 and over, you need more protein than you think. if you're under 40, you know, you can you can kind of get away with whatever.

I mean, you can not that you can eat anything, but, you know, I think that I still think that a high protein, like a higher protein constitution in the diet is going to be healthy for you.

But I think if you're younger, you can probably get away with, not having as much protein. But as we get older, perimenopause and menopause, ladies, you need more protein.

So that would be my only rule per se. and I would the other thing that I'll say with protein is I don't look at it as a percentage of total calories. So let's say you're someone who's like, I'm having 2000 calories a day.

40% of that's fat, 40% of that protein, and 20% of that's carbohydrates. I actually don't like to look at protein for perimenopausal and menopausal women in that way.

I actually like to create a gram target of protein, and that stays constant all the time. For a perimenopausal and menopausal women, if you're a cycling woman, it's different.

You can kind of up, up and down the protein over the course of your cycle. And I talk about that in the book. But the next book that I'm writing, on perimenopause, is going to be around this concept that you need to pick a protein target and stick to it.

No matter what. If you're still menstruating, it's like it's the same all through the cycle because we are, losing muscle at a faster rate than when we did when we were 20 or 30.

So that's my only thing. So if you're if you're, let's say you're, I don't know, let's say you're 160 pounds and you want to weigh 140 pounds, like you're like, I got 20.

I've been I've put on this perimenopause or menopausal 20, and I want to lose weight. So I would say, okay, if you want to be 140 pounds, one of the ways that you would start is by having 140g of protein every day.

So one gram of protein for every idea, like for, you know, that ideal pound, of body weight and then you can run some math, very quickly. You do 140 by four, which I can't do off the top of my head.

I think that that might be gone. I don't even know. 520 maybe. I think it might be five, 540 I think it's 540. So it's 540 calories and you're going to say, okay, I'm having, 2000 calories.

So now 540 of those calories have been accounted for. So 2000 -540 and then whatever that is, whatever that number is 14 God, I'm making a mess of myself.

But 1460 I don't know what it is, but let's say it's 1460. Then you can decide what you want to spend your calories on. If you're someone who really likes fat, I'm at it.

If you're someone who really likes carbs, have more carbs. But as long as we reach that protein target, I actually don't care about anything else. The the only other thing I'll say actually, now that I'm talking about it, I realized fiber is the other one that I like women to get.

So I like at least 30g of fiber, daily. So if that's very difficult for you for a variety of reasons, like you can get some

type of psyllium husk or fiber supplement.

but I like fiber for women as well. And I just ask you, when it comes to protein, are you talking about animal protein? Are you talking about plant protein? What's your viewpoint on?

Are all proteins created equal or not? Yeah. This is a this is a good question. my current opinion is changing. and actually haven't talked about this publicly.

I've, this is literally the first time I'm going to sort of say this, but I used to be of the opinion that it was only animal protein, all the time. So whey protein, red meat, goat, lamb, chicken, salmon, poultry, all the things.

There have been a couple of studies, that have kind of rocked my belief a little bit in, in that, where they've looked at, they've divided the groups into people who just took animal proteins versus people who just took plant proteins.

And it seems like. And then they took muscle biopsies and all that. And it seems like the individuals who were supplementing with plant proteins. So this might be like a plant protein powder, like a you know, pea protein or soy or something.

which actually soy has very good bioavailability. We know that it's like 94, 95% bioavailable. So I, they were able to, I think it was the same or like there was there wasn't a statistic difference between the muscle protein synthesis between the two groups.

So I'm actually, I haven't totally changed my mind yet. I am getting a couple of experts on my podcast to help walk me through it and help teach me. so right now, I would say that, I'm not becoming vegetarian anytime soon.

I'll say that. but if you are vegetarian, it seems like if you are able to supplement with something like a soy protein powder or, you know, you're getting it enough like of the tofu and the tempeh and all, like the beans and stuff.

it seems like when calories are equated, that, that the, the effect on the body is very similar. So, yeah. I don't know how articulate that was, but I'm basically trying to say I'm changing my mind on it, which is what we do as scientists, right?

We make new information and we up, we upgrade, right? We upgrade. So yeah. You have piqued my interest because I'm very you know, I was a vegan, until I was and and, you know, I was a very I never felt good as a vegan and as a mechanism.

As a, as a different category. I'm not sold on the veganism. I do what I've seen in practice, and I've seen enough of this in practice where we run into mineral deficiencies with women, in particular the thyroid.

I mean, you've probably seen this like the thyroid basically goes kaput. we run into B12 deficiencies, mineral deficiencies. So it's not I'm not saying that vegan.

We can do it as vegans, but it's like the lacto ovo vegetarians that they can have some products, some like, you know, cheese maybe, or eggs, some dairy and then supplementing with plant proteins.

It seems like being vegetarian, which will be very you know, I know that a lot of I run into this issue with a lot of, women from Asian, cultures like India and Pakistan and all these places where it's part of their like, it's just vegetarianism is how the whole, you know, like cows are sacred there.

Right? So it's like it's very difficult to make a case for them to have beef because it's like you're asking me to completely go against my cultural norms.

but there is some exciting there is some promising research, at least for vegetarians, being able to get their protein requirements as they age. interesting.

Yeah. I, I when I was in India, I loved being a vegetarian. I think it's also how, you know, if you're a junk food vegetarian, right? Yes, yes, yes.

Plant vs Animal Protein and Closing Remarks

So, well, I could talk to you all day, but unfortunately our time is up, so, but I'd like to, I'd like to hear more about what you discover. So tell us where this podcast is so we can listen to you interview and further this conversation.

what do we think? Oh, thank you so much. Yeah. So I have a podcast. It's a weekly podcast for women. It's called "BETTER! with Dr. Stephanie," and that's like my philosophy on life.

So thank you for noticing. And I you're like, I love that word. It's like, you know we don't want to be the best. We just want to get better every day.

So "BETTER! with Dr. Stephanie," if you want to hear about my musings on things, I have a newsletter that I put out every week as well. Every Saturday, I like to think that you open it and have your morning coffee with me on a Saturday morning.

It's called The Mini Pause. That's my play on menopause, so you can sign up for that at, drstephanieestima.com/newsletter yeah. So you can find me. Those are two really easy places that you might find me and begin to learn about some of the things that I'm geeking out on. Awesome.

And she'll have a free gift for you when you, signed up for the summit. So make sure to download that. Go follow her, sign up for her newsletter, and go check out the podcast.

And thank you so much for being here. I just love the the mix that you bring to it with the chiropractic and the neurology and the nerdy, geeky background and the, appreciation for the body.

And, you know, like you said it, there's nothing wrong with wanting to look good, right? We know hey, to want to look good, right? So like, you know, we can we want to of course, be healthy on the inside but looking good on the outside also, you know, rooms are like you said, you're.

I asked her how I say her name and she said, Estima like self esteem. And you know, part of self-esteem is how we feel, how we carry ourselves feeling good about ourselves.

We want to like what we see when we look in the mirror. We don't care what anyone else thinks. We just want to like what we see is absolutely said. Yeah.

So I love what you brought to the table today. Thank you for being a part of this summit and really bringing value to the listeners. So it was a delight.

Thank you for inviting me. This has been wonderful. You're welcome. And thanks everyone for being here. So if you didn't have your pen and paper out while you were listening to this one, you're going to want to listen again and take notes, because there's some really good information in here that's going to help you on your journey.

So thank you for being here. I'm always humbled by all of you taking the time out of your busy lives to come. Learn to see what you can do to help your journey.

So thanks for letting me be a part of it and we will be back.