Introduction to Bone Health and Menopause

Welcome to day two of the Future of Menopause Summit. I'm Laura Frontiero, functional medicine expert and nurse practitioner and your co-host for this summit.

Today we're exploring how menopause can influence some of the systems that shape how you feel every day, including your thyroid, your bones, brain, sleep, and skin.

We'll look at what may be changing, what often gets overlooked, and what can help you feel stronger, clearer and more supported through this stage of life.

Let's dive in. Bone health isn't something most women think about until they're told they have a problem, like osteopenia or osteoporosis. And by the time you get that diagnosis, that means that significant bone loss has already occurred.

But I have some good news. Menopause doesn't have to be an inevitable decline in bone health. So today we're going to talk about understanding what's happening to your bones while you go through this transition.

And even if you're already on the other side of the transition, you're going to have an opportunity to take action and to strengthen and to improve your mobility and to keep your independence for decades to come.

My guest today is Kevin Ellis, founder and CEO of the Stronger Bones Companies and one of the leading educators in the field of osteoporosis prevention and bone health.

And through Bone Coach and his comprehensive approach to bone health intelligence, Kevin has helped. I don't know, Kevin. I feel like it's 300,000, but I think it's more.

Is it more than 300,000 people? It's more than 300,000. But yeah. Yeah, that's what I thought. I'd probably say more like half a million more. Probably close.

Probably closer to that. Yeah. Yes. And so you've helped people all around the world better understand, monitor and support their bones. So welcome, Kevin.

It's just wonderful to have you back. Laura, thanks so much for having me here. I mean, you know, just as much as I do how important bone health is knowing you were in the osteoporosis field for a long period of time and you've seen the impact of fractures, just like I have, on people's lives and their independence and being a burden on other people.

And what we want for everybody listening today is to take some actionable things away so you can preserve and strengthen that structure that's going to carry you to an active future, which means more memories, more time with your kids, your grandkids, and just enjoying the activities you love and traveling to the places you want to be without restriction.

So for everybody here, well said my friend. So today we're going to discuss what every woman should know about bone loss during menopause. And most importantly, we're going to give them practical steps today so that they can build stronger bones for their future.

So the first thing I'd like for you to explain to our audience is around the risk. So many women know they're at greater risk for osteoporosis after menopause.

But I would say most people don't understand exactly why. And so as we get started here, can you talk about the

changes during Perry and menopause that actually accelerate bone loss?

And then after you answer that, could you tag on one more thing? Is this inevitable, or is there something that women can do to slow the process, influence the process, change the process?

Yeah, absolutely. And so for those listening, because this is a menopause menopause summit, right? A couple important things. There are different things that can affect your bone structure.

A lot of times people think your bones are just these static structures that hold you up, right, carry you through life, help you be active. And they do that.

They do a good job of it. And they're also living tissue.

Why Menopause Accelerates Bone Loss

And they respond to stimuli. And they can also be affected by things that can contribute to ball and loss. And they're declined. And so we have to understand there are different causes of bone loss.

There's primary causes which are hormonal. Their secondary causes which are behaviors conditions diseases disorders medications. Let's start in the first bucket because this is probably the most relevant to the question Laura just asked about menopause and estrogen.

Specifically, estrogen has a protective effect on bone. When those levels decrease, as they do during menopause, you're going to have an increase in the activity level of cells of breakdown bone.

So that's one really important part of this picture. Now if we're looking at what are the potential interventions that someone could make if they're faced with a primary cause, a bone loss with hormone replacement therapy is a potential option for for some people may not be right for everybody, but if it is right for you, it is a lever that can be pulled to help bring that bone loss down and to help boost that bone building up.

And so estrogen can help bring bone loss down and reduce this really important marker. We'll talk about a little bit. Bring down this marker called CTS which is a marker for bone loss.

And then progesterone testosterone can help boost up this other really important marker called P1 and P which is a marker for bone building. And so as you're considering what are the options that I have, just know there is a primary cause of bone loss that you're facing, which is hormonal.

And a lot of times if it's not addressed, some women can lose up to 20% of their bone mass in the five years following menopause. So I think that answers at least the first part of the primary causes.

And what we don't want to do is just make an assumption that it's just hormones or it's just a natural part of aging, which is what happens a lot when you go to your doctor.

It can be chalked up to being normal or just part of hormones. And we there could be other causes behaviors, conditions, diseases, disorders, medications.

So autoimmune conditions, chronic digestive issues, Crohn's, ulcerative colitis, celiac disease, celiac is what I was affected with for and which led to bone loss for me a long time ago.

It's an autoimmune condition where when you ingest gluten, it damages the tiny little nutrient absorption centers in your small intestine. And when they're damaged and blunted, they can't do their job.

One of their primary jobs is absorbing nutrients and specifically calcium. Calcium is the primary mineral constituent of your bones. And if you're not taking it in and you can't absorb it, your body still needs it to execute its daily functions like muscle contractions when you're working out nerve impulses.

And if you're not getting it, your body will go to the largest reserve of minerals you have, which are your bones. It will tear down that structure to access those minerals.

So I always say, your bones are a storage tank for calcium for every other function in your body. If you don't get enough coming in. Absolutely. Think about think about how important it is for your heart to pump.

And it requires calcium. So your body is going to rob Peter, to pay Paul to make sure that heart keeps pumping, because that's mission critical. Absolutely.

And so this is just to highlight, there are certainly many other causes autoimmune conditions, inflammatory conditions, all that stuff. We won't go through every single cause, but just know there are lots of things that could contribute to bone loss, and you just have to be aware that the focus becomes figure out if you are actively losing bone.

So you would look at these two markers and P1 and P, we call them bone turnover markers. They help you understand if you're actively losing bones. That's the first thing you have to do to get those markers done.

And then if you are actively losing bone, figure out what's causing it. Primary causes hormonal start hormone replacement therapy could be a solution for that could if it's the right fit for you.

And then do you have secondary causes? If gut health nutrient absorption issues are something you're facing, then you need to get a gut health test. You know, GI map, GI 360.

You know, I'm sure you recommend different tests, Laura. Right. What are the ones that you recommend? GI map that's the one I use the most. Okay, so get a test like that.

Uncover what the issues are and then go in and address those underlying issues. Build a protocol around it, and that can help address at least that part of the puzzle.

So, you know, I worked in the Western medical system for a couple decades. I actually worked in a osteoporosis clinic for over a decade, and we would screen for primary cause of osteoporosis, of course, which is what, Kevin, you just explained estrogen depletion.

And then the secondary bucket, I would say I would argue that the Western space is very limited in what they screen for in the secondary bucket. We're looking for hyperparathyroidism.

We're looking maybe at a handful of drugs that are known to cause bone loss. We're looking for vitamin D deficiency, severe vitamin D deficiency. The level of vitamin D that's acceptable in the Western world is completely different in the functional world.

So I would say that we didn't do a good job in the Western space. It looks looking at gut health, looking at toxins in the body or looking at, you know, is it heavy metals.

Displacing bone for example, is a secondary cause of osteoporosis. So this is something that they don't do very well. And I you know, like I say, I didn't do it very well when I worked in the Western space.

How Bone Testing Reveals the Full Picture

So the second thing I want to know from you is, you know, what are the biggest flaws in the medical system that actually keep women in this loop of bone loss and fractures and something that you describe as an endless loop.

And I would say working in that space, I mean, it was people would, you know, break a wrist or break an ankle or, God forbid, break a hip or vertebrae.

And then we put them on a medication and then they'd come back again with another, another, another fracture.

So what is the problem there? Yeah, I mean there's a couple problems there.

So the first one would be the markers that we're looking at are not the full picture. So what everyone here, if you haven't already had one done, what you should go do is go get a bone density scan.

And bone density scans are going to tell you the actual mineral content of your bone, your bone density. It's going to generate a score. And based on that score, it's going to help you understand if you have osteoporosis, osteopenia, normal bone density, and then depending on that in that conversation with your doctor, just based off that one measurement, bone density, they're going to say take some calcium.

It is important for your bones not the whole picture. Take some vitamin D. Also important, not the full picture. Do some walking. Walking alone is not enough to build bone and then take this medication and come back in two years for your next bone density scan.

And what normally people are left with, what you're going to be left with if you follow this approach, is you are now guessing for two years, hoping that you're doing the right things to hit your target.

Now, the second measurement, though, that I like to see people get and it's a little bit harder to get, I will say is called TBS Trabecular Bone Score.

It is an add on software to the bone density scan. You can call a facility ahead of time, ask them if they have it, or specifically look for a facility that has Dexa plus TBS capability.

And what that gives you is a measure of bone density, the mineral content of the bone, and a measure of bone quality. The structural integrity of the bone density and quality combined to create bone strength.

So now you have you're getting closer. You have a more complete picture. But here's the challenge. With only having density and quality, they are both lagging indicators of improvement.

They're telling you the impact of the things that have happened or done for a given period of time, usually 1 to 2 years. So you're looking at a snapshot of the past.

Bone turnover is the third pillar that I want you to focus on. And bone turnover is looking at the activity level of cells that are breaking down and building up bone right now as we speak in real time.

And this is CTS, CT low peptide test and P1 and P, I call the seat the active bone loss test because it's the most sensitive marker for bone resorption or breakdown.

Then P1 and P is the what I call the bone builder test. It's the most sensitive marker for bone formation, and these are the markers that you can see improvements in eight weeks to three months.

So now the ideal situation. Now you have a baseline of your markers. And now what you do and we'll talk about these in a minute is you do you make interventions.

Interventions are the levers you pull to improve those objective results that you have now as a baseline. And the smartest way to do this, that the medical system certainly does not do is get a baseline, make an intervention or interventions, retest the markers, especially bone turnover.

And C did the intervention I just made objectively have an improvement on those markers? If not, what do I need to adjust to see that improvement? So you're recommending a completely different approach where we're actually looking for this bone remodeling process in real time.

Is it happening or is it not happening with the strategy that you put in place with. And we'll get into those levers, you know, things like how do you move your body to actually build bone?

What are the foods, what's the nutrition, what needs to happen there. So that's a completely different approach than anything I ever did in the Western space.

You're absolutely right. It was here's this medication. We'll check you again in two years. Yeah. That was absolutely. And take calcium and vitamin D.

And we never recommended D with K. It just released. By the time I left the system it was still just calcium and D. Yeah. So I was going to ask about nutrition.

So most people think about building strong bones. They think about calcium which you already mentioned. Now we maybe maybe we should touch on that. All calcium is not created equal. So there's that.

And then there's much more than calcium. We know that bone health is much more complex than that. And so could you share nutrients and dietary habits that you think are the most important for protecting bone health during and after menopause?

Yeah, absolutely. So so if we zoom out and look at a bigger picture of you have your results. Now remember I said there are levers for everybody listening.

There are levers that you can pull to improve those results. So the first tier of those interventions or levers that you can pull, I talked about one of them right at the beginning is form replacement therapy.

That's a big pharmacologic lever that can improve that bone turnover. Or you can see improvements in a very short period of time, eight weeks to three months. Okay.

So those are big levers that you can pull. Bone medications fall into that category too. We won't go into those right now. But but that is a big lever that could be pulled that a lot of people don't want to pull.

But it does have a dramatic effect on those bone markers. So just know as I'm going to as I'm going to talk about nutrition, just know right above nutrition is tier one interventions.

Those are the ones that have the most dramatic impact on your markers in the shortest period of time. And then we go down to what I call tier two interventions.

And tier two interventions are where you're applying an external stimulus to improve the results. Okay. So we're not taking a farm. We're not making a pharmacologic intervention.

But what falls into tier two interventions for bone building would be exercise nutrition supplementation taking something externally to improve the results.

And so what we're talking about now is at a foundational level, what do your bones need just to maintain themselves before we even get the building. So your bones are a college and protein matrix structure with minerals laced in there.

Your bones are 50% protein by volume. I don't think people realize that at all. They think it's just calcium. They need amino acids, right? I mean, acids are the building blocks of protein.

And so you take those in, you break them down and they go and get rebuilt inside your body into the other things that you need them to be rebuilt into, like your bones and your muscles and all those other things.

And so if you are listening to this right now and you already think you're falling short on your protein intake, just know that is probably a target intervention for you to make.

Now, I say for people, a lot of times people are falling even below about 90g of protein per day or 30g a meal and a shake. You know, a lot of people are falling below that.

But we could even we could even push that higher. And I'll just share an example that I see pretty consistently. I have I have these calls inside our programs where their bone turnover marker calls.

So I actually look at these markers and I watch people make interventions over multiple month periods, and we track their data. And one of the most interesting interventions, I had a woman who came to us in December.

She had a seat marker of about 750. Now that's that's elevated, that's considered active bone loss. And she didn't do hormone replacement therapy. The big she didn't pull the big levers.

But she chose specifically to focus on nutrition. And she upped her protein intake.

Nutrition for Stronger Bones

She was predominantly plant based, which I often find people were predominantly plant based or falling short in protein intake and nutrients. And so she added in some animal proteins, and she targeted that protein intake and brought three months later, with that being the only intervention she made.

She brought that 750 seat down close to about 550 with just that intervention. And so I know that's one isolated example, but I see that that specific intervention have a meaningful improvement pretty consistently.

So you say real quick, while you're sharing this, can you say what is the ideal seat number for our audience so they know where they want to get to on that?

Because she still has work to do at 550. So what's the ideal exactly? So. So is she still actively losing bone at that point at a 550? Yes she is. So target think target.

And it doesn't have to be perfect. Just aim in that direction of about 250 somewhere close to there. If it's I see people that still build bone when they're 200, you know, or 200 to 300 or even a little bit below 200, but target 250.

So just know that if you're at 550, the target is 250. There's still a gap. Okay. So now what we do is we look at all right. We saw this intervention of upping protein worked.

Now what other interventions can we make. What other levers can we pull to stack on top of that to bring that to where it needs to be? So so while we're going, Kevin, for this, we're going to get in all those other interventions.

Can you talk about all the nutrition interventions first, and can you talk about the differences of calcium. And then we'll go to the other levers that you had this case study that you had heard.

Absolutely. So protein and minerals, minerals are the other component that your bones need. Calcium is the primary mineral constituent of the bond target 1000 to 1200 milligrams a day.

Now if somebody has, you know, you don't tolerate dairy, you have an autoimmune condition you're trying to put into remission, or you're on a cancer journey or, you know, whatever it is, just know.

And I'm not anti dairy, by the way, but I'm also not pro drink a bunch of milk. So what I would say is if you don't tolerate dairy and you remove that, just know it is a good source of protein.

It is a good source of calcium and minerals and that if you take it out, you have to be really intentional about knowing what your daily intake is and then closing the gap.

Okay, so what I would say is some of my favorite nondairy food sources of calcium sardines with the bones in macro with the bones and salmon with the bones.

And they usually come in a BPA free can. You can get them like that. That's going to give you one can or give you about 250, 300mg of calcium. You're going to need to dress it up a little bit, put some good quality dressing or olive

oil or, you know, mixing it with a salad or make a pate or whatever, but just know that's one.

And then another one that's a plant based sauce would be arugula. But even if you eat a big tub of arugula, you're still only getting 200mg of calcium a day.

Okay, so if we have one canister a day, one thing of Aruba, that's 500mg of calcium. You got a gap, right? So how are you going to close that gap if you're not going to take calcium in?

Sure. There are other foods that you could add in, but they're going to make a small small difference. So now if we that's where supplementation can come in.

Before we talk about supplementation I will say if you are adding dairy to your plan, focus on cultured and fermented dairy like kefir. Kefir is like a fermented yogurt drink.

You can get it without sugar added to it. You can use it as like a salad dressing. You can add it to smoothies. That gives you again an extra boost of protein, extra boost of minerals.

You can mix it in. It's really, really an easy addition way. Protein one scoop away protein can add about 10 to 20g of protein and calcium into actually probably more calcium, about 200mg or so of calcium.

And then just look at it like that, you know, and you don't have to obsess about the exact amounts, but just get close, okay. So that's at least from a non supplementation perspective.

Now if you are having a hard time closing the gap and you are going to supplement with calcium, I only like to see people getting to about 500mg of calcium supplementation max, and that is only if they're incorporating the other minerals nutrients cofactors that are important to.

So magnesium, vitamin C, vitamin K2 and then capping that calcium supplementation around 500mg a day is important. And another one. Absolutely. Absolutely D so D3 is important.

And I actually I see this a lot in our community with osteoporosis is the range for vitamin D is really wide at 30 to 100 ML. Most people that I see a hugging 30 or if they're coming out of those colder weather months there in the 10 to 30 range.

Yeah. And you might even be told that's normal. That is not where you want it to be. You know, Western medicine standards. The threshold is 30 and functional medicine standards.

We'd like to see it above 50. Yeah. And so just know it's kind of like the bone turnover markers. Vitamin D is one of those things where you can test that marker and get that test done.

And then supplement intentionally with 5000, 10,000, whatever I use, and then check three months later and see what was the impact of that supplementation on your vitamin D levels.

And then you just you can kind of target it like that and keep going up. A lot of times, 5000 a day isn't going to be enough for people, especially if depending on their genetics, they might not actually whatever they ingest in a supplement or food form or from the skin, it might not become bioavailable, and so they may need to supplement even more.

So that's a marker that you should get tested a couple times a year. If you're struggling to maintain a normal level. From a genetic perspective, the the osteoporosis community, at least that I see, because that's the realm I work in, is a lot of people have issues with binding, conversion and transport.

I have all three. I call it the trifecta of awful. So I'm one of those people who my vitamin D runs in the 20s. Unless I take at least 10,000 international units and split it up, I have to take it in the morning and evening.

Because if I take it all at once, my body can't deal with it because I have all three of those problems in my genetics. Yeah. So just now, as you're listening to this, you might be the person that needs more needs more frequently.

And that's okay. But again, tests make the intervention retest. See what was the impact of that intervention. That's just the way everybody should be thinking.

So can we talk about calcium forms. Because there's crappy calcium and there's good kills. Yeah I mean there's calcium citrate calcium malate anything bound to amino acids, organic acids, those kinds of things are going to be better absorbed.

There is calcium carbonate, which is the least most poorly absorbed form. There is microcrystalline hydroxyapatite which is essentially bone bone meal.

That is a good form of of calcium. But you need good stomach acid production for that. People as they age and go through menopause have poor acid production.

So I would say go with citrate, malate, something that's better absorbed. Yeah, yeah. And so there are trade offs there obviously. But you know I, I would say to try to get as much as you can from food and close the gaps with supplementation if and when necessary.

When it comes to calcium. That's probably my general guidance I would give there. I love your conservative approach, trying to get more from food. Your body is actually going to absorb calcium from food better than it does from a supplement every day.

So always try to get your nutrition from food. But it is very difficult to get 1200 milligrams of calcium a day if you're not a dairy eater. That just gets hard.

So definitely consider taking. And I love how you're on the conservative side because too much calcium, you start making kidney stones, excreting it, putting it in vessels where you don't want it to be, and don't take calcium unopposed without vitamin D.

That's the other really important thing. Yeah. And and K2 is the other, the other important nutrient here. So different forms of k2, k2 mk7 k2, m k4. You can take both of those forms, but MK for 15mg a day or 15mg three times a day.

The 45mg dose is actually used as a treatment in Japan, and then even some of the other forms. Mk7. There's some studies supporting the use of all the different Vitamin K's, but just know if you cover your basis there, you're going to be okay.

I want to say something about magnesium to Kevin, because this is something that I used to have on repeat when I was in the Western space. We really didn't talk about magnesium and how important it is.

And what we used to tell people is, don't worry about your magnesium unless you're an alcoholic. You're not magnesium deficient. It's impossible to be magnesium deficient.

And because it's, you know, in a lot of food sources. Well, once I got into the functional space and I started running organic acids on people, and I started looking at the functional need of magnesium, which is required for close to a thousand enzymatic processes in the body.

What we found is that almost every person I tested thousands of tests later, almost everyone has a functional need for magnesium beyond what's circulating in the bloodstream.

So if we just do a blood test and we can say, oh, your magnesium levels are fine, if you do organic acids test, you'll see, oh, you actually have a high need for magnesium, a higher need than what you're ingesting.

And so I cannot stress this enough to our audience that magnesium is critical piece of the puzzle. It's important for

bone health. It's important for many aspects of your health.

You're never going to go wrong taking a magnesium sulfate. You just aren't. Yeah, yeah, I would agree. I'd get on that little soapbox for a second. Okay, so Kevin, anything else we want to talk about nutrition wise before we go to movement.

So I know nutrition I think one of the biggest points you made is protein that people don't realize how much protein is required for bone. Yeah. That's right I mean cover the protein, cover the minerals.

There are certainly other nutrients that can give you an edge or that have some studies showing benefits. I talk about delta and gamma triangles as having studies showing improvements in bone turnover, bone turnover markers that we talked about bringing bone loss down, improving the bone turnover rate.

But if we look at the bigger picture of interventions, just taking delta and gamma to try and ALS is not going to bring a 750 seat down to a 250, maybe it helps bring it down from the 750 to a 650 gives you a little bit of an edge.

That's great, but it's not the thing. Right. And I hope everybody what everybody takes away from this is there are multiple interventions that can be made.

And I see I still see a lot of people, and I don't think it's by any fault of their own until they get the education that just say, I'm taking the supplements, I'm taking the supplements, why am I still losing?

And it's because there's a much bigger picture here that we have to address. So let's make progress in one. Hold steady their focus on making progress and others okay so let's move to movement exercise.

So I think it's I said it a million times when I was working in the Western space that just start walking. Just walk. You need to walk. That'll be good enough.

I wasn't telling women to lift weights. I wasn't telling women to get more aggressive with their exercise. So are all forms of exercise equally beneficial for bone health, or are there specific types of movement and exercise that are most effective for building and maintaining strong bones?

Exercise, Impact, and Resistance Training

Yeah, not all forms of exercise are the best for bone health. You know, some are better than others. And then, you know, it's not like you just want to do one and not do some others.

So I'll break it down into again, this falls into that tier two, those tier two interventions. They're not going to have as dramatic of an effect as those tier one interventions like hormone replacement and bone medications.

But they're really important. And they're going to have a they'll have a pretty big effect. You have to apply the stimulus. Bones need to become stronger.

So there is your bones need different types of stimuli to become stronger. Weight bearing exercise is important, impact is important, and muscle strengthening and resistance training are important.

The most define weight bearing because I think everybody has a different subjective idea of what weight bearing is. Absolutely. And most, most of the effective interventions use one or both of those all those things in combination.

So weight bearing is your body. Your bones work against gravity to keep you up right there. You're doing these things on your feet. You're working against gravity.

You're placing good, healthy stress on the bones, so you're bearing your own weight. That's always how I describe it. Yeah. It's not it's not weight lifting like pumping.

It's bearing your weight. Yeah. So walking falls into the weight bearing category. So it's not to say walking is bad. Walking is great. Get your 7000 10,000 steps in a day.

It is good for you. Just know it's not the thing that's going to maintain or build bone necessarily. It could help maintain but not build. So walking falls into weight bearing, jogging, hiking, gardening, pickleball, playing with the kids, with the grandkids out in the yard, yoga, Pilates, Tai chi, qigong that all falls in the weight bearing bucket.

Okay, so just know if you're doing those. There's still two other things that we need to be doing or incorporating it from an exercise perspective. Second one would be impact.

Now impact. It depends on you know, I know right here not everybody watching this or listening to this either has osteoporosis or even knows they have osteoporosis or any issues with their bones.

But the audience that I work with, they do. And sometimes if they've already had low or no trauma fractures, we would need to make adjustments here from an impact perspective.

But just no impact would be things like skips and hops and heel drops and, you know, side to side movements and your bones need that impact to become stronger.

So just know that is another type of exercise that we have to do. I would also say that vibration plates would fall into this simulated impact intervention category here also.

So women don't like to jump train after we had babies. Like it's just a whole thing. You jump and you leak and you jump and you leak. So, so yeah, I mean, it's a real thing.

People like, I don't want to jump train. I don't want to do it then. Yeah. And so that's where you get into making modifications. Right. So we just have to all understand that every single one of us has a different body, different situation, surgeries, accidents, injuries, whatever we're all trying to compensate for and trying to get a plan in place for.

Just know there is a way. We just have to figure out what adjustments need to be made. Yep. And do it. Whatever it takes, whatever you can do to do it, do it.

Yeah, yeah. So that's two. Now the third one, this is the most important one that I feel like a lot of people are leaving out. This is muscle strengthening a resistance training exercise.

Now a lot of people are told to just you know, I know there's a lot of cardio queens out there. I see a lot of people that have been doing endurance exercise and, you know, long distance running.

Or maybe that's the the release that you grew up with is just getting out and going for a nice long run. I used to do it to three plus miles before every single workout for years.

I used to do that, but I know some people long run long distances. As as you're getting older, you need to transition to more muscle strength than your resistance training exercise.

So this is where we bring in barbells, dumbbells, kettlebells, machines at the gym, or one of the things that I love for many reasons, variable resistance bands you get you know, you can get them on Amazon at different weights.

And it's really easy to pack and move around so you don't have excuses. And you're also not going to have big plates that you have to move around necessarily.

So there's a lot of good things that come with variable resistance bands, and then doing exercises that incorporate more of the major muscle groups. So think of it like squats, deadlifts, overhead presses.

I know what so much, but I every time I do them I'm like, this is really important. This is really important. This is

really important. And I hate them.

You know, so many people, even I get in that in the mindset sometimes. Like, man, I know these are going to hurt in the best possible way. That's possible.

I always, you know, I always think of I like deadlifts because I always think my booty is going to be lifted up with these deadlifts. So I always think, like, what's that one part of my body I don't want flat pancake, you know, old lady.

But so those deadlifts like I'm all about them. Yeah. So. So anyway, at least we covered three. I think we covered three of the big exercises and we got to keep it funny of it.

I know we keep it light. We'll keep it funny. I can be the funny one. And you and you, you be serious. Okay. Yeah. Of course. Let's let's stick with that.

Am I making you blush? No, not at all. Okay, good. All right, so we got three exercises down now, right? So we got to get weight bearing impact, muscle strengthening, resistance training.

Add all those into your routine. And you know, if you're listening to this and you just heard squats and deadlifts and you're like, I don't even know how to do those or that sounds super intimidating.

The great thing is you can go to a personal trainer at your gym, and you can book an appointment and say, hey, I know I'm supposed to be doing this and go set up an appointment, get in there, learn the body mechanics and the proper form for your body for you.

Start low, start slow, slowly progress up. Don't leave any ego you might have out of it. You definitely don't want to have an injury as you're as you're trying to build build stronger bones or build muscle.

No, just start with no. Wait at all. Start doing deadlifts and squats with just your body weight. Yeah, and get the form right and then wrap up to, you know, maybe you're in that 5 to 10 repetition range is a great place to be.

Any other exercises or do we cover it? I think that's a good starting point for people. Yeah it is. This is so helpful. I know everyone listening right now is rapidly taking notes.

Yeah. So this is and that's I mean we've covered now, you know tier one couple of tier two supplementation falls into that. And then tier three kind of gets into stress reduction sleep improvement.

All those are important. Well I think we should touch on those. And then and then I'm going to ask you a really important question after that. So touch on those.

Okay. Stress reduction is important because if you are somebody who runs high stress or you're a worrier or you are constantly stressed out about finances, relationship issues, you know, maybe, maybe you're in an unhealthy relationship right now and that's, you know, affecting your health and other things.

You have to consider all the things that are possibly impacting your internal and emotional state. Those things all play a role in your health, and sometimes that can be one of the biggest things that we need to start with to is that internal emotional state.

So reducing the stress and I'm not talking about just a long slow exhale at the stoplight. I mean like cultivate whether it's a breathing practice, a meditation practice, you know, all those things could be potentially helpful.

I won't go into the specifics of that, but just know it's important. And then sleep is where your body, your bones are renewing and repairing, and you want good quality sleep and you want to get to bed at a reasonable time.

You don't want to be looking at screens right before bed. You know all the stuff you probably already heard in

different. Laura's probably talked about this.

I said, I just said today in an earlier today, I said, sleep is the most underrated and most powerful bio hack that you have at your fingertips for free.

Yeah, yeah. So I would say focus on those things. And again, I'm, I like to focus on data and looking at objective markers and making adjustments and improvements and retesting those markers.

All right. So here's my big important question. Because I know there's a lot of women here that want to know right now if our women here listening have already been told you have osteoporosis or you have osteopenia.

Should she view that diagnosis as permanent, or can she improve her bone health? And what have you seen in your work with thousands, 500,000 people? Yeah.

Osteopenia, osteoporosis are reversible. You can reverse osteopenia and osteoporosis. And it is great to set that end goal. But don't focus on the goal.

Focus on near term. Focus on the markers. Focus on one step at a time. Making the interventions. Because this is what your day to day looks like. It's great to have the goal.

The goal is usually not. I'm going to reverse osteoporosis. The goal is usually I have a daughter who I'm sure one day she's going to have kids if she doesn't already, and I want to be there when my grandbabies are born and I want to be out in the yard playing with them up and active, that to me, that's the thing that you kind of anchor is the vision for the future and take all the actions moving toward that.

That's what reversing osteoporosis gets you. That's what building stronger bones gets you. So I would think, yes, you can reverse those things. There is a way, step by step to do that.

And I'm not going to say it happens overnight. There aren't quick fixes with bone. I wish there were, but there aren't. But there's it's you can do it and you don't have to guess.

If you could go back and give every woman a piece of advice when she entered perimenopause. So we're talking women in their 30s, right? So ladies listening, if you have daughters and granddaughters, listen up.

Stress, Sleep, and Reversing Bone Loss

If you could give them one piece of advice, Kevin, to protect her bones for decades. You have a daughter would. What would it be? What are you telling her when she enters perimenopause?

What's your daddy advice? Yeah, so I'll even go. I'll go a step for that too, because I think a lot of people in our audience here that we're talking to.

They have kids of their own and maybe even their kids have kids too. And so just know 90% of our bone mass is put on by the time we turn age 18. The remaining 10% fills in by the time you turn 30.

So when we're younger, that 0 to 18 window, we need kids to be up and active. My daughter resisted gymnastics, doing tumbles and flips and that kind of stuff, which is great for bones.

Or if you've got young athletes, get them out on the field. Short, sharp, dynamic movements help build strong, healthy microarchitecture and all that's doing when we do that at a younger age is laying the foundation for an extra five, ten, 20 years of good quality at the end of the life.

So just know as your kids are younger too. From a nutrition perspective, I know it's we can get frustrated, oh, they don't want to eat this or they don't want to do this.

Teach them. Teach them about what is in the food. You need to learn first though, so you need to learn first. You learn what's in the food, the benefits of the nutrients within them, what they do for your body, and how doing good for your body translates into them.

Being smarter in the classroom, stronger on the field, faster in sports. And then you take that and you say, you know what's really interesting about this? Onion.

Onions are one of the best cancer fighting foods. And I teach my kids this, by the way. I teach my kids this kind of stuff and I just educate them. I don't obsess about the nutrients.

I don't force it on them. I, I engender this desire and love and curiosity and and then that starts to grow. And next thing you know, they're getting their kids, they're their friends eating onions.

You know, that's just one little example. But, you know, they're all smelling I know. Well, nothing like grilled onions for sure. I mean, you can get kids to eat grilled or sauteed.

They caramelize. They're delicious. Yeah. Yeah. But I would say, like inviting, creating an environment for those conditions, inviting them in. Making it fun.

Eggs are an easy one to start with. You know, I don't know, there's just so many examples of that. Instead of, like, the regular traditional desserts, have them help you build organic variables and things like that.

That's going to help them get interested in nutrition from a young age. Yeah. And what that does is adds years to the end of their life. So that's that 0 to 18 window.

Now if you're 30 listening to this or you know, as you're going through or as your kids are starting to enter from high school to college, of course they're going to want to, you know, do whatever college kids do, I wouldn't know.

Oh, you wouldn't, sir. Well, you know, but anyway, anyway, what I would say, though, is if they have that foundation going into those years, it might help lead to some better decisions at that time.

Some better decisions. Right? I know college is one of those one of those times where, thank goodness we're young. We made it through because we didn't always make good choices.

I don't I it's so funny. I saw a meme on Instagram and I totally resonated with me. I don't remember drinking a single glass of water during college, you know?

I mean, I went I went in the Marines right after high school. So, I mean, point is like, we didn't obsess about it. We didn't care about it. Obviously, I drink water, but I don't remember ever caring about it.

Right. Yeah, I had a drink when I was thirsty. I went to college in the early 90s. There was no water bottles or, you know, water for sale all over. You just went to a drinking fountain. Got a drink?

Yeah. Well, so now let's get to 30. Right. So you get to 30. Now, 30 is about the time that we're hitting peak bone mass. And think about that's typically about as full as someone's buckets going to be right.

And when you get to 30 what you should be doing around that time or if again anybody is listening is if you do not yet have a baseline, a bone density, a bone quality, a bone turnover, get the markers so you have an objective foundation from which to monitor future changes.

Because sometimes what happens is, you know, a person I work with mostly women, you know, 40, 50 plus that already have osteopenia, osteoporosis. Most of the time what happens is they're coming to me with the diagnosis, but not all of them know if they're actively losing bone right now.

And sometimes that bone loss happened in the 20 years prior from medications that you took from, you know,

some people had eating disorders, some people had, you know, weren't getting specific nutrients or leading sedentary lives or injuries or whatever.

Right. And then 50 comes or 60 comes. You get a bone density. Oh my gosh, I have osteoporosis. Some of that could have happened in the past 30 years. A lot of times people are losing bone now.

But some of that could happen in the past. So get your objective measurements and then start making some changes. So Kevin, you've actually developed quite a platform and a community and an app.

Can you talk about that a bit? I mean, you're a regular in my community. We bring you in and we have you teach on all of this that we've covered today.

But there's a lot of people in my community that are also members of your community, which I think is really important. I'm over here focusing on gut health, detoxing, cellular health, mitochondrial health.

And your full focus is let's get those bones dialed in. So what have you created? Yeah. So what I basically been doing the I built bone coach about seven years ago, and I grew this big community, hundreds and hundreds of thousands of people.

And over time, what I saw is people had a hard time getting markers from their doctors, specifically bone turnover markers. I ended up creating a company so people could go around their doctors to get those markers done.

It's called policy so much. It's called IQ. We're now the biggest provider in the US of those markers. And I don't just to be 100% clear, I do not tell people to get those markers because I built a company.

It's the other way around. It's people couldn't get them. I was like, how do we solve this problem for people? And I created a company to do that. And then as I started that company to focus on just helping people get these bone turnover marker tests, I realize this very reactive model, the conventional medicine model for osteoporosis is very reactive.

It is just like we talked about, you're not getting a plan in 15 minutes, and you're going to be told to come back in two years and see how your medication did.

And that is reactive to reactive medicine.

Bone Coach Tools and Final Takeaways

I'm turning we're turning bone coach IQ are turning this entire osteoporosis space into predictive. And I want I created this osteo IQ bone health intelligence app.

It's the only bone health intelligence company in the world. If you think of think of most people are familiar with aura. Think of it like aura for bone health.

But for the person that has osteopenia or osteoporosis, the utility is significantly greater. And what it does is it helps you track all of your results on phone quality.

Bone turnover, one single place. See how you're trending. Then it lays out the interventions. Tier one pharmacologic, HRT, bone medications. You document what you're doing.

Tier two external nutrition, exercise supplementation. These are the things you're doing. And it'll also give suggestions on these are the things you should be doing.

And then tier three stress sleep and then obviously addressing underlying issues. And then you track your progress. Pull a lever, track your progress Paul Lever track your progress.

And what I'm really doing here. And I've invested hundreds and hundreds of thousands of dollars into this because I believe in it so much, is that we are obviously, the utility is high for the person that has a diagnosis of osteopenia, osteoporosis, and they want to improve.

And when you have 100,000, 200,000, 300,000 people with osteoporosis that have specific results that are pulling specific interventions, documenting those things in a HIPAA compliant way, by the way, documenting those things, seeing improvements in their markers.

That doesn't just help that one person that helps the collective. Hundreds and hundreds of thousands of people know, if I make this intervention, this is the likelihood I can expect of hitting this specific result.

And so it is basically a predictive model that we're going to be launching this osteoporosis research institute. And we will publish research from what we learn to the Osteoporosis Research Institute.

And this will change the entire future of bone health forever. I believe it, I really do. Kevin, I was entrenched in the osteoporosis world for a very long time, and I wholeheartedly believe in what you're doing.

I see what you're doing, and I truly believe that it is going to become part of the standard of care, even in the conventional space, you're going to build something that works better. That is better.

People get better results. You're going to lower the fracture incidence in menopausal women, and there's going to be no other option but to pay attention to what you've created.

There will be no other option. You will become part of the standard of care. Yeah. And I, I see it, I know 2 or 3 years from now doctors are going to be using this tool, even if it starts with functional nature path integrative physicians. They will be using this tool.

We already have researchers. We have data scientists already brought on board. You know, we're building a predictive model. And it's really cool. I've worked in this space for a long time now and I have never seen this is it's a technology we built.

And most people in my audience would not consider themselves tech savvy. And we have designed this in a way for the non-tech savvy person. And to see a 70 year old woman or a 65, 50 whatever year old woman upload five years or 20 years worth of bone density scans and be like, wow, this is so cool!

I've never seen this. I've done thousands of calls over the years. I've never seen people get this. And that's what I do in this Bone health Intelligent tour doing.

I'm so excited for you, Kevin. I'm so excited for what you've done for womankind mankind too. But it's mostly a women's issue. 80% of women will get osteoporosis, whereas only about 2,025% of men.

So and it's has direct direct relation to our drop in estrogen. Right. This is a big piece of it. So what you've done is outstanding Kevin I'm behind you 110%.

Always always I'm here to shout from the rooftops the possibility for women in bone health. So thank you, thank you, thank you for sharing all of this.

Thank you for the easy way that you break this down. You created so much value in this talk today. All kinds of bullet points that people can just write down, take notes and start doing right away.

And Kevin, if they want to get involved with you. Where do they find you or their particular websites they go to? Yeah. Thank you so much. Yeah. So you can always find me at Bone Coach.

That's the coaching company. So if you're like, hey, I have osteopenia, I have osteoporosis or you know, somebody who does tell them to go to bone coach.

We have a whole team of credentialed experts, PhDs, MDS, functional health experts all focus on helping people build stronger bones in an objective, data driven way.

And you get live support and community and all that stuff. And it's super low cost memberships. So go to Mon Coach and do it. It's really easy. The other place clique. Or you can go there to get bone turnover markers there outside of your doctor.

If you become a member, you actually get them a lot cheaper as a member of Bone coach. So and then the last one is Healthy Bones, which is professional grade supplements for stronger bone support.

So I truly built my entire life, you know, my life's work is around bone health specifically. So good. I feel like I have a front row seat to watch you take on the world.

It's so good. It's so good. It's so good to be your friend, too, and to have access to you to come and speak to our community, my community, and and share your knowledge.

And it's really fun being someone who came from the osteoporosis conventional world to see someone like you just creating the biggest ripple, it's like you just threw a boulder into the lake and just disrupted everything.

It's so good. So I can't wait, Kevin, for this to just keep growing and everybody viewing right now. I highly, highly recommend you go check out Kevin's websites.

Thank you, Kevin, so much for being here today. Until next time everyone. Take good care. Bye.