Introduction to Bone Health and Guest Background

Hi everyone. Welcome back to mess during the Menopause Transition Summit. I'm your host, doctor Sharon Stills and today is the day we're going to talk about them.

Bones, I know that is something that's on all of your minds as we age. We worry about osteopenia, and I still process. And today I have Kevin Ellis with me, who's better known as the bone coach.

He came properly dressed and he is a certified integrative nutrition health coach. He's a podcaster, a YouTuber, a bone health advocate. He's the founder of Bone coach.com.

He come he's one of the sponsors of our summit. And he actually had an osteoporosis diagnosis in his early 30s. And he realized just how challenging it can be for the average person to make sense of what needs to be done to improve and how to move forward confidently with a stronger bones plan.

So today, not only has he transformed his own health and made continued progress on his own journey, he's now dedicated his life to helping women with osteopenia and osteoporosis, gain clarity and confidence that improvement is actually possible.

He has a unique three step process world coaching, world class coaching programs. I'm so excited I can't talk. I'm stumbling on my words. And his team of credentialed experts have held people in over 1500 plus cities around the world get confident in their stronger bones plan, and I've brought him here for you so we can have this super important conversation, and you can learn what you need to do to help your bone.

So welcome to the summit. Thanks for being here, Sharon. Thanks so much for having me. It's great to be here. Yeah, such such an important topic when I deal with with my patients every day and something that's on everyone's mind.

So I actually didn't know that you had your. We always think of osteoporosis as we own that the women on that. But tell us your story. Yeah. So it's kind of shocking right.

When you see a younger male or hear about a younger male having been diagnosed with osteoporosis at a young age. And for me, it was it was equally as shocking.

I at the time that I was diagnosed, I had all these other health issues that were taking place. I had poor sleep, high stress, you know, fatigue, I had hormone issues and digestive distress, digestive issues.

And then all my health issues came to fruition. And I was diagnosed with celiac disease and then subsequently diagnosed with osteoporosis and, you know, celiac disease.

For those who are not familiar, that's where the ingestion of gluten damages, the rely on the small intestine prevents you from absorbing nutrients. Those nutrients like calcium and vitamin D and phosphorus, super important for your bones.

I was having a hard time absorbing those nutrients, and my body still needed those nutrients to serve, you know, to execute its daily functions. And those those nutrients were being raked from my bones.

And that is what ended up contributing to osteoporosis at such an early age. For me. And I was I was completely shocked at that point in time because I had young kids, that were on the way, that I was just worried I was going to be able to be there for them.

And I set down this path of, how do I figure this out? I have to make improvements. I have to improve my health. My my father, he passed away at a really, really young age.

When I was my mother was five months pregnant with me. My father was told he had cancer, and two months after I was born, he passed away. So I had this fear growing up that I was going to follow down that path.

And when we had kids on the way and, you know, and I was told that osteoporosis, I was like, oh, my gosh, I'm living this nightmare that, you know, I never wanted to live.

So I had a really strong reason to, to figure this out.

Kevin Ellis's Osteoporosis Diagnosis and Mission

So I went down the path of reading and research and consulting with experts and spending a lot of money and trying to figure all these things out. And I started making progress was improving my health, improving my bones.

And I got to the point where I realized in this journey, it is not the average 30 year old male that's trying to figure this out. It's the average woman who is 4565 plus that has osteopenia, osteoporosis, diagnosis.

And they're presented with four things. Take your calcium vitamin D, go for a walk and take a bone drug. And that is woefully inadequate. And that's really the reason why I set down this path.

To create bone coach, became a coach, built that a team, developed these programs and created bone coach.com. Because this was such an important area that I knew I could affect some great change in.

So that was really my, my passion story, leading into this whole journey. Well, I'm sorry of the loss of your dad at such a young age, but such a good reminder that we we are not we are not our family history necessarily, that we change the way our genetics express themselves.

I see that all the time in practice where patients get really nervous because they're turning 53, and that's the time their mom died and that we we have the power to make differences.

And your story is so inspiring that from a serious condition, you totally turned it into rainbows and happiness and health and and benefit for the world.

So that that's super. So all right, let's let's do this now that we know why. Because I would imagine some women are like, well, why is this man going to tell me about my bones?

This is a woman. Oh yeah. So once people trust me, I get that all the time. Once people come into like, our ecosystem and they understand me a little bit, and where I come from, they start to come around and they realize I, I'm, I'm, I'm pretty knowledgeable in this area.

Yeah. You're, you're, you're, you're in the trenches. You're, you know, you are you are there. So and that is common with celiac disease and gluten. So that's just a good connection for women to have.

So let's talk about just in case. And most people have an idea of osteopenia osteoporosis. But let's let's hear exactly what is it. Just so we all start out on the same foundation of understanding what this actually is.

Absolutely. I think that's a great place to start. So osteoporosis literally means porous bone. And it's a condition that's characterize by either not enough bone formation, excessive bone loss, or it's a combination of the two or the those things.

And in osteoporosis both your bone density and your bone quality are reduced. So the way you find out you have osteoporosis is through what's called a Dexa scan.

Dual energy X-ray absorption geometry. It's a painless task, kind of like an x ray, very low levels of radiation. You go, you lay down on the machine.

The machine does a scan and it tells you your bone mineral density, the actual mineral content of your bone. And then what it does is it generates a score, and that score is called a T score.

And the T score is telling you how much your bone mass differs from the bone mass of a healthy average, approximately 30 year old adult. And if you've got a T score of plus one or -1 or 0, that's an indicator that your your bones are normal and healthy, right?

If you've got a score of -1 to -2.5 that's considered osteopenia or low bone mass. And that's like a precursor to osteoporosis. And if you have -2.5 or lower, -2.6, -2.7 and so on and so forth, that's considered osteoporosis.

And the greater that negative number becomes, the more severe the osteoporosis and the greater the risk of fracture. So most women are you're not getting these these scans done.

And usually in my opinion it's still until it's too late. I would prefer to see people get them done. Baseline done in their 30s, in their 40s. But a lot of times we're not getting them done to their 50s or 60s.

As a check in the box. Their doctor orders them, they get this scan done and then they realize, oh my gosh, I have low bone density. What do I have to do now? And that's kind of the starting point.

Usually where I'm meeting people at is right at the point of diagnosis. Right? I think that's really important. If you are going to use Dexa as a way to measure, then you should be doing your own because everyone has different bone structure and it's inaccurate.

If you're all of a sudden showing up at 50 or 60 and doing a scan, and now you're being measured against this amorphous average 30 year old, and so they can be really misleading.

And so in everything, it's always good to get your own like thumbprint of what you are so you can measure against yourself. It's why I have my patients get their children, start doing blood levels and things just so we can be tracking and seeing.

It's much easier to prevent or to understand if we have something to look back at.

What Osteoporosis and Osteopenia Mean

So you're speaking my language. You're speaking my language here. Okay. So, you actually you just touched on something, though, which is great, right?

Just because you get a bone density scan, that's not the whole part of the picture, right? When you get your bone density scan, that's telling you your bone density, the measure of how much bone you have, the actual mineral content of your bone.

But there's another part of that picture you probably don't have, and that's your bone quality. And that's how that bone is organized. The microarchitecture, the structural integrity of that bone, bone density and bone quality combined to create bone strength.

So a lot of times you only have part of the picture. Now to get that full picture, that full bone quality picture, there is an add on software to a bone density scan called a TBS, a trabecular bone score.

And you can ask for that. And there's also you can go look it up and see if there's one in your area that may or may not have it, but if you can get those done at the same time, you can leave with a measure of your bone density and your bone quality in a better representation of your bone strength, because bone quality is really, really, really important.

I've seen people that have been in the negative threes with their bone density that have never fractured. Right. I've seen people that have been in the negative ones in what would technically be considered osteopenia, that have fractured multiple times.

And a lot of the reason for that is, is that bone quality piece. So super, super important part of the picture, super, super important. And while we're just talking about testing, from a functional perspective until a peptide or urinary, can you speak to that also?

Absolutely. So, I love this question because it goes a little bit further than just taking the bone density scan, as that's the final result. Here's your medication.

Because there's still more to the picture that we need to understand. And you don't know, for example, if when you get that bone density scan, if you are still actively losing bone right now.

Right. And you have to understand that before you move forward. And I always tell people to imagine your your body is like a bucket, right? And a water within that bucket represents your bone mineral density, the measure of how much fun you have.

Imagine that bucket has a tiny hole in it with a very tiny leak. And over time, over years and years, that water level gets lower and lower and lower.

That's what's happening with your bone density, right? Until one day you go and you get that scan and you realize you have low bone density. But when you get that scan, you don't know if there are still holes in your bucket, if your bucket was just not full to begin with.

And you have to make you have to understand those things before you start jumping into a medication. So, in terms of understanding, if you're actively losing bone, there's a test called the CT Low Peptide test, a serum CT that is a great measure for bone resorption, bone breakdown.

There's also no anti low peptide. That's another way to look at, whether your bones are actively breaking down or not. Because if that activity level is elevated, that can be an indicator of active bone loss.

At the same time that you're looking at the activity level of bone loss or bone resorption, you need to be looking at bone formation markers to the bone formation markers are P one, N, P Pro, collagen type one, and Terminal Pro peptide.

That's a good one. Osteocare Dawson is another one, and bone specific alkaline phosphatase that gives you a really good picture. And if you I would always suggest when you get a bone density scan, try to get as many of those as you possibly can.

At the very least, get your get your CT low peptide or urine intact or something like that at the very least. But if you can get more of those for your baseline, get them, because that's what we need to monitor future changes from 3 to 6 months down the road, especially if somebody is still actively losing bone and something's contributing to that loss in 3 to 6 months.

We need to see if we're addressing those root cause issues and if those markers are improving, that's great. So now you have it like you have the information and you have Y.

So you can go to your physician. And if in hearing why you want this and why they're important, your physician doesn't want to run these levels for you, it's time to go find a different physician right through.

Absolutely. But I run these levels on patients, and I'm always open. If someone comes to me with something, I'm like, oh, I'll just add that into my blood levels like that.

I really so why might a physician not want to run those tests? Well, let's see if you're going to your general

practitioner, for example. And, you know, they're they've just gotten your Dexa scan results back and they're they're giving you the results and they just say, here's your fosamax.

Well, that might be the the right approach moving forward. And then you ask for some of these bone turnover markers and they say, no, they're not going to order them for you.

Part of the reason may be because they're not familiar with their interpretation.

Bone Density, Bone Quality, and Testing

If if a physician orders a test and you know, they don't know how to interpret that test, it could create a liability for them also. So what they may do is they may try to refer you out to an endocrinologist, who then may or may not actually order that test for you.

So I like what you're saying here, Doctor Sharon, because in these situations, if you have somebody that has a functional background or understands that that side of the picture, they're more likely going to be able to order those tests and understand the interpretation of them.

Yeah. And you could you could tell your doctor that, they could get educated and learn how to interpret it. I mean, I am constantly on the phone with labs when I'm running new levels, learning how to interpret them.

So it just takes a little extra effort on the doctor's part. And so you want to have a team who is willing to put in the extra effort for you. So. So let's talk about you mentioned Fosamax.

So before we get to root causes, let's just let's just have the pharmaceutical conversation. Yeah, for sure. What is the standard treatment protocol and why is it not acceptable.

Yeah. So standard treatment protocol is kind of like I outlined at the beginning, calcium vitamin D, go for a walk. Take a bone drug. Now when you're when you're presented different options for bone medications.

And it's not just fosamax there are a lot of other options for bone medications. And there are different use, situations where a drug might be used, or maybe better to use a specific medication.

But what I always caution people with is these drugs are not like taking an aspirin. They have a dramatic effect on bone physiology. So you really have to understand the short and long term implications of use, and things like that.

So there are two categories of these medications. There are anti resort divs which include bisphosphonates and rank ligand inhibitors. So bisphosphonate would be like fosamax.

Rank like an inhibitor would be like prolia. And then there's another category of medications called anabolic. And the anti resort divs. Their whole job is to help slow down the activity level of cells that break down bone.

Okay. And the reason why that can be a challenge and why it may not be the most effective thing long term, is yes, there are short and long term implications and side effects and uses with those drugs. But the probably the biggest concern is that as you're going about your daily life and this is normal for every single person, whether they have osteopenia in your osteoporosis or not, you're going you're doing activities.

You're starting to get these little micro cracks and fractures. You know that your body's that's just normal and natural for for all of us. And then what happens is you have these cells within the bone and say, hey, we're starting to get these little micro cracks.

We need to build stronger bone, right? So you have these bone cells that come in called osteoblasts, and they scoop out that damaged bone. And then these next cells come in called osteoblasts.

And they fill in stronger, healthier bone. That's normal for every single person. Right. You need those cells to come

in and scoop out the damaged stuff.

So the new fresher, stronger bone can be laid down. When you're taking one of these medications, it slows down the activity level of cells that break down bone.

You're going to continue to accumulate those tiny little micro cracks and fractures as you go about doing your daily activities. But if you slow down the activity level, those cells too much, you can't then scoop out that damaged, worn, weakened bone and you won't have that new bone come in and fill in later.

So what happens is, five years down the road, three years down the road, whatever it is, you can start to accumulate more of those. And that's going to lead to weaker bones long term.

So that is one of the biggest concerns with those medications. That's for bisphosphonates. And I'm not saying that in every situation that might not be helpful for some people.

There may be I see smaller percentages of people where that may be necessary and important, but the vast majority, there's so much more to be done before you even do something, or get to that point.

So that's the that's one of those, one of those categories of medications. The other one are antibiotics. And a lot of times an anabolic medication, they're designed to help build bone and build it faster.

And the reason why those drugs might be important is because if somebody is coming in and they have poor quality bone and they've maybe fractured multiple times, that is usually going to be a situation where a physician is recommending an anabolic medication.

And if you take an anabolic medication, those drugs usually have a length of time that you can use them for 13 months, two years. There's like a maximum limit.

You would want to use those medications. But what a lot of them don't tell you is you have to then follow that medication with an anti resort of medication.

So there are just a lot of things there's a lot of education. It has to be done before you consider going that route. So I would say 85 to 90% of the people we work with that I talk to, there's a lot that can be done before you would everything, you know, get to that point or consider that point.

So literally all up the ante to 100%. Yeah, I never put patients on those meds. I mean, you did a good job of explaining why they don't really work very well.

And also they just have a myriad of side effects that are nasty. And so we're trying to solve a problem. We're not really even solving it. And then we're creating a whole nother host of problems.

So I'm sure some of you are listening are on these meds. And I'm not saying to stop them today, but, you know, this is this is a wake up call. There's other ways.

And you can go on a journey of figuring out how to get off of those and what you need to do. So let's let's talk about some root causes, like why why does this occur to begin with.

Well, so let's let's talk about there are different types of osteoporosis. Right. So there's primary osteoporosis that occurs as a result of a decrease in estrogen and postmenopausal women.

Estrogen has a protective effect on bone. When estrogen levels decrease, as they do during menopause.

Bone Turnover Markers and Functional Lab Testing

That causes an increase in the activity level of cells that are going to break down bone, right. So that's primary

osteoporosis. Then we have a whole nother cause of osteoporosis, which is secondary osteoporosis.

And that's where bone loss and osteoporosis occurs as a result of behaviors disorders diseases medications and different conditions. And that's the category I fell into.

And a lot of times that's the category people, because we I've we've worked with people that have anywhere from their late 20s to their mid 90s. And so a lot of times it's not just hormones that are contributing factors.

So we don't want to make an assumption that, oh, it's just hormones and move forward. You have to rule out the root cause issues too. So, we can in terms of the actual root cause issues, let's get into some of those.

So there are multiple different ones medications. Let's talk about some of the more common medications that contribute to bone loss. Glucocorticoids. So these are steroid medications that are designed to suppress inflammation.

And what they're doing is they're mimicking natural steroid hormones produced by your body. They're often used to treat things like asthma, autoimmune diseases like rheumatoid rheumatoid arthritis, prednisone and cortisone.

Those are some of the big names there, right? Bone loss is a common side effect with those medications. And that's for a couple different reasons. The first one is that it's reducing the intestinal absorption of calcium.

And it's increasing their urinary excretion of calcium. So you've got a calcium deficit. Primary mineral constituent of your bones is calcium. The other part of this is glucocorticoids.

They're directly acting on those those bone cells that break down bone the asset class. And they're increased their lifespan which is going to reduce your bone density.

So if somebody is on those medications, just know that bone loss is going to be a side effect of those medications. SSRI is selective serotonin reuptake inhibitors.

That's a class of drugs that are typically used as antidepressants. There was a review of 19 studies on the effect of SSRI on bone that indicate they have a negative effect on bone marrow density and increase the risk of fracture.

Right. So that's that's an important one to and then antacids. This is a big one that a lot of people, a lot of people aren't aware of. So a lot of times when someone has heartburn, right, or acid reflux, what are they taking?

They're taking Tums. They're taking, some kind of something to reduce that stomach acid. But usually they have too little stomach acid that they're trying to suppress.

And the drugs that they're taking are, proton pump inhibitors, like a map. Brazil. Nexium, Prevacid, H2 receptor antagonist drugs like nicotine or Zantac.

I took those for a number of years, and I was suppressing the little stomach acid I did have. And the reason that's a problem is because you need stomach acid to properly break down and extract nutrients from your food amino acids, calcium, magnesium, iron, B12, all those nutrients are nutrients that you need.

And if you're suppressing that stomach acid and you've got those stomach acid, that's going to be an issue for you. You're going to have a hard time with those nutrients.

So that can be something that contributes to bone loss and osteoporosis long term. Also, I know like this interview. Yeah. You're everything I have to tell you.

One of the very first things I do is check hydrochloric acid, stomach acid, and most people, it used to be I mean, I've been practicing for over 20 years.

So used to be it was like over the age of 30, 35. It started declining. It's declining now. I have children in my practice who have no stomach acid, and it leads to asthma and it leads to all sorts of issues.

So it's it's a chronic condition and there are different ways to check. You can do the fancy Heidelberg machine if you have someone near you who has it.

Or you can do a hydrochloric acid test by challenging yourself. Also something just for you listening in your, complete metabolic profile. You can look at your globulin levels and globulin should be between 2.4 and 2.8.

And if it is lower or it is higher, that often means you are a hypochondriac or you don't have enough stomach acid. So that's such an important piece of bone health that no one ever really puts together.

So I'm so excited you brought it up. Absolutely. Yeah. No, it's so important. So important. Let's say so let's talk about some of the conditions, right.

Some of the other things that can contribute to, to bone loss are secondary causes. Any any GI disease. Right. If we've got a Crohn's disease, ulcerative colitis, celiac disease.

Perfect example. Right. Perfect example right here. When you have those nutrient absorption issues are going to be a contributor most likely. And if you have celiac disease you also have the autoimmune component there too.

So it's not it's not just a matter of not being able to absorb certain nutrients.

Medication Approaches and Their Limitations

It can actually be if you've got one autoimmune condition that opens up essentially Pandora's box into other autoimmune conditions where you could potentially have an attack on bone cells, too. So especially if somebody has an autoimmune condition, we need to start approaching things in a way that's going to help us put that autoimmune disease into remission, so that that's one of the first places you have to start if you have an autoimmune condition and if you have an autoimmune condition and you're still eating things that are leading to joint pain and digestive issues and whatever, you got to start there first.

Start with your nutrition, your, you know, improving your sleep, reducing your stress, all that stuff that you probably already learned and talked about.

And Doctor Sharon probably does an amazing job with, with, that's the stuff you have to address. Can never hear it enough. I know it's easy. Okay, let me add another note in there for that.

What is that you mentioned? Behaviors associated. What what what do you mean by that. Well, well so leading a sedentary lifestyle for example, that's one you know, we were talking about, the metaphor of, a bucket before, right?

And I mentioned how some people might not actually start with a full bucket. They might not reach peak bone mass. So, 90% of your bone mass is put on by the time you turn age 18.

The remaining part of that bone mass, the remaining 10% approximately fills in by the time you turn 30. So but by the time you turn 30, your bucket is is about as full as it's going to be.

Okay, so if when you were younger, you had, poor diet nutrition, if you led a sedentary lifestyle, if you smoked or drank excessively, if you had an eating disorder, those, all those things can contribute to, to bone loss or not achieving peak bone mass or even to to this day.

You know that could be contributor to active bone loss as well. So, so and can't go back and fix what you did because I was able to check a few of those off myself.

But it's it's little. It's how you do it. That information in the moment. So prevention is always preferred. But taking action at any time is always also a good thing. So diet what do you recommend for bone health?

Well I'm sure you've already touched on this one, but I'll go ahead and reinforce it from the bone health perspective. Also, because I feel like you and I are driving really good on this.

So sugar, okay, let's talk about sugar for a second. Reducing your sugar intake is key for bone health. Sugar damages bone by triggering an inflammatory response.

It lowers your vitamin D levels. It depletes your bone. Healthy minerals. So your calcium, magnesium, chromium, copper it inhibits intestinal absorption and calcium.

And it blocks the absorption of vitamin C. Vitamin C is super, super important for your maintaining a healthy skeleton. Basically. And when I'm talking about sugar, a lot of us think about just, you know, the white domino sugar or whatever it was.

That's not just the sugar I'm talking about. I'm talking about your breads, your cakes, your cookies, your processes, your pizzas, your crackers, that kind of stuff that all breaks down the sugar in your body.

So you just have to be aware of those things. And that was one more plug for reducing your sugar intake if you needed it. Are you okay with, in your program, fruit, or do you feel like that fruit?

Fruit is okay? You know, we're focusing. We would focus on, like, berries are great. High vitamin C, high vitamin C foods. Those are great. But then you also want you obviously want to mix in, other important nutrients and foods as well.

So, your lean, healthy proteins and yes, that can include animal proteins. So that's, that's an okay addition to have and probably an important one to have as well.

And let's, let's even just talk about protein for a second. Your bones are 50% protein by volume. So they need amino acids a lot of times this is one of the areas I see people falling very short on.

They think they're getting enough protein, but they're actually not. So I would highly recommend that, you know, for insurance purposes, if you're getting 30g of protein, a meal like that, that's great.

That's really, really good. But you need to at least be getting about 0.5 five grams of protein, you know, per pound of body weight. So if you're weighing 100 pounds, you're getting at least 55g of protein a day.

But I would probably just from an insurance perspective, I would try to get about 30 and try different meals. So yeah, and I've spoken about like a pound per pound, like an even.

Yeah. You know, get eaten your weight in protein in grams. Yep. And I'm like that's the very, very minimum. Like so what I'm talking about is some people don't even hit that when I see them.

So you've at least got to get there. But then if we're talking about actually building muscle strength, which is going to help improve your bone strength as well, you your muscles are made of protein, right?

And amino acids too. So you need additional protein to help support that growth. And I'm just going to go back to because I am hydrochloric acid obsessed.

You have to make sure you have enough hydrochloric acid, because I see so many patients who are eating enough protein and they're not absorbing it because they're hydrochloric acid levels weren't optimized.

So you always got to be thinking, we're not just what we eat or what we absorb, and we always going to be thinking kind of backwards because it's good to do these things, but we want to make sure if we're doing them, that we're

actually getting the benefits from them.

Absolutely. And then one of my favorite sources of protein, which also has a it's a great source of minerals as well, is any of those smaller fish, but especially if they still have the bones in and I'm not talking about the hard pokey bones that you know, might be your mouth.

Root Causes of Bone Loss

Like if you go to Vital Choice, for example, has, they've got canned salmon, they've got canned sardines. Those are great because what do they have? They have protein in them. Great source of protein.

But then they also if you get them with the bones in those bones, have all the things that your bones need as well. They don't just have the minerals, they have different growth factors and proteins and things like that that are going to support your own healthy bones.

And as a bonus kicker, if it doesn't feel like I'm already selling you on sardines, this is the final kicker. Omega threes right. Omega threes are the dampeners of inflammation.

Anything that contributes to inflammation in the body is going to help accelerate bone loss. So it's a great great addition to include in your plan I love it I love it.

So don't be picking out those bones. Don't do it. Don't do it I'm not benign. Say I, I've always eaten the bones. I guess I just intuitively knew is a good thing to do.

People would think I'm weird. No. Yeah. You're plenty of culture. Is that, there are plenty of cultures that do that, too. And, you know, they'll pulverize different, different bones and things like that to incorporate them, to make sure they get enough calcium in their diets as well.

So, super, super important. You mentioned omegas and you've talked about hydrochloric acid. You mentioned calcium. Could you talk just a little bit about calcium?

Vitamin D, what other nutrients you like for proper bone health. Absolutely. Okay. So vitamin D that's a that's a no brainer right. That's that's one of the most important nutrients for not just your bone health for overall health.

So super important. And then I would also in terms of supplementing with vitamin D, ideally we're trying to get as much as we can from the sunlight and things like that if you're able to.

But that's not always going to be enough, right? Especially because when you get to winter time in probably most of the areas that most people are living, the sun's rays aren't going to be strong enough to generate enough vitamin D production.

So sometimes that may be a case where you're going to want to supplement in colder weather months and things like that. But before you just start supplementing blindly, get those levels tested, get your parathyroid hormone testing right, get your calcium levels tested, get all those things tested before you start supplementing, because you don't want to just start supplementing and then find out you have some other health issue that needs to be addressed first, and then you can't actually have too high a vitamin D levels, right?

So the normal range for vitamin D is low at 30. If we're in the US 30 NML to 100 NML that's a wide range. That's a really wide range. And if you're over 100, that can actually be a contributor to bone loss as well.

So you don't want to have too high levels of, vitamin D also. So vitamin D is important. Vitamin K2 is also really important. Another fat soluble vitamin.

There are I would say there are a lot of different forms of vitamin K2, Mk4 and Mk7 are probably the most important ones that people hear about most. When it comes to bone health.

Mk4 has a shorter half life. It means it stays in your blood longer, and then Mk7 has a longer half life, so it stays in your body. You know, a couple days you can get these from different dietary sources, which is great.

So the K2 Mk4 you're going to get from things like beef liver or grass fed ghee and butter or dark meat chicken or pastured egg yolks. That's where you can get that Mk4.

The Mk7 is going to come from hard cheeses, fermented foods, sauerkraut, kimchi, natto, and bacterial fermentation in your gut. Also. So the reason why K2 is important is because K2 is actually making sure that the other nutrients, especially the calcium, is going to where it's supposed to, which is in the bone and not in your soft tissues like your arteries and your, you know, your other soft tissues too.

So super important nutrient, especially if somebody is, is trying to figure out that whole supplement picture. So yes. Thank you. Yeah. I don't let patients take vitamin D without taking K2.

And my experience with vitamin D is that because it's a fat soluble vitamin, you really want to take it in a liquid form where it's emulsified. Your body will absorb it better.

I've just seen this time and time again. So just a little tip there and going circling back to the sugar. I just want to acknowledge that we know it's easy to say stop sugar.

And we also know that sugar is more addictive than cocaine. And so, don't beat yourselves up if you if you are a sugar junkie, you know, you might need to work with someone.

It might be a process, but if you can do it cold turkey and you can suck it up for three days, and those three days are not going to be fun because you're going to be craving.

But once you get through those first three days, the cravings really stop. And as often when you've been craving sugar, it's because ding ding ding, you don't have enough protein. So.

So while you're going off the sugar, really listen to it. Kevin was saying about really getting your protein levels up. It's going to help with that process.

Absolutely, absolutely. There is one other nutrient that I think it's important to, to give a special shout out to, which is magnesium with you, so, so important primary.

One of the primary functions of magnesium is that we need it to make proteins in our body. So like when you eat proteins we're talking about protein here.

How important it is for your own health. What happens is you obviously break those proteins down into amino acids that we can then rebuild in our bodies into various proteins.

In order to rebuild those proteins, you need magnesium to do that. So just about everything in the body is protein or is made of proteins. So that's that's just really, really important for people to understand.

Nutrition for Stronger Bones

And then magnesium plays a key role in converting vitamin D into the active form that promotes calcium absorption. Right. So that's super important too.

And then people have to understand is that as your calcium and your vitamin D intake increases, so too does your need for magnesium. So when you're if your doctor has ever just said take your calcium in your vitamin D, but you never heard about magnesium, your need for magnesium is going to increase as you start to increase those other things as well.

So really, really important, very important. Do you have a special form of magnesium you like to recommend? A big

slice and a key laid is grain. Manganese.

Yeah. Magnesium is glycemic or glycine. Is it. Those are great forms as well. Yeah. And magnesium is one of the most depleted nutrients in our body. It gets.

So if you're craving chocolate another sign, you're probably magnesium deficient. Yeah. Stress depletes it. You know, I talk about stress always because it's such a major factor.

And the way to check your magnesium. Don't just let them run it in your serum. Get an RBC, which stands for Red Blood Cell. Because that's where magnesium hangs out inside the red blood cells.

So you'll get a more accurate level of how depleted you are or aren't. Yeah. And another, another good form of, magnesium. Magnesium malate is another good form too.

So, Yeah, those are those are good ones. Well, this has been fantastic. Have I have we missed anything? What do you what do you want to touch on exercise for a second.

Sure, absolutely. Yeah. You mentioned being sedentary, not being a good behavior. So what do you recommend for movement. Yeah. So exercise is super, super important for your bone health.

It's plays such an important role. And you need two different types of stimuli. You need muscle pulling on bone and you need impact. The most effective interventions are using one or both in combination and what's happening is let's talk about the muscle pulling on bone.

You have a mechanical signal that sends a chemical signal that's telling those bones to become stronger. And then the impact is also important to a lot of times I had mentioned when somebody is told they have osteoporosis, the last part of what to do is go do some weight bearing exercise, go do some walking.

I'm going to tell you right now, walking is not enough. Okay, that's not enough. Even if you've addressed all your underlying root cause issues, walking may help you maintain, but it's not going to.

You have to have more to your plan. So the other weight bearing exercises you can incorporate. And when I say weight bearing exercise, I mean some weight bearing exercises, exercise that your bones and your muscles have to work against gravity to keep you upright right there activities that you're doing on your feet.

So that's running, jogging, hiking, dancing, gardening, playing tennis, high impact aerobics, jumping rope, playing soccer or any of those things can fall in that weight bearing exercise, which is great.

Like there are a lot of activities that fall into that, and probably a lot of things people love doing in there. But then there are other activities that are non weight bearing that are not going to be helpful for bone.

So cycling, paddling or canoeing or kayaking, swimming. Right. Those are not providing the stimulus your bones need for, you know, for actually becoming stronger.

Now it's not to say that you shouldn't do those things right. If you love to cycle and ride your bike and it makes you happy and reduces your stress, and you're just looking at the sunset, you know, as you go off into the distance, that's great. Do it.

But don't count that as your only form of exercise. Same thing with swimming. Don't count it as your only form of exercise. Doesn't mean you should avoid the pool.

Get in it. If you love it and do it. But don't don't have it be the only thing. Now let's talk about the other part of exercise that you have to be doing, which is muscle strengthening, exercise resistance training.

You can use heavier weight. You can use heavier resistance bands. You can use, free weights, you can use

barbell weights. But the movements that we want to be doing are the bigger compound movements, right?

The squats, the deadlifts, the overhead presses, those kinds of movements are the ones that we want to incorporate. Now, for somebody listening to this, you might be like, wow, that sounds intimidating, especially if you haven't done any working out or anything like that before.

Or at least, you know, in a setting like a gym where you've got a bunch of weights, that's okay. Find somebody you can look at and evaluate your body mechanics first.

Don't just go on YouTube and say, I heard this guy say, you know, go do some deadlifting. And then we jumped in and did it. You want to find somebody who evaluates your body mechanics, make sure you have good form and take take time progressing up to the the 5 to 10 rep range is that's the intensity that the studies show is going to be best for for supporting your bone health.

Okay. But you don't just want to ramp up to that point, right from the start. So be patient with yourself.

Exercise, Hormones, and Prevention

You'll eventually get there. And the last note I'll make is that it's not like 1 or 2 exercises are going to be the end all, be all for your bone health.

Bone remodeling is a really slow process, so develop a plan being consistent with that plan, doing the right things over time. That's what's going to give you the best shot of improving your bones long term.

Fantastic advice. And I would also just like to I know you mentioned hormones, but we didn't really talk a lot about hormones and hormones are so important.

It's one of the things I'm always telling patients, even if you're not symptomatic and you're not trying to get rid of hot flashes, you still want to be using bioidentical hormones.

And one of the reasons is for prevention of osteoporosis, among other things. So could you just speak to that before we finish up? Yeah. And I'll just I'll just reinforce what you just said.

I mean, considering bioidentical hormone replacement therapy, especially the earlier on to like, preventing bone loss, it's so much easier to slow and stop and prevent more bone loss than to build it.

Once you lose it, both are possible. You can build bone strength at any age. It just becomes more challenging the older you get and the more bone you lose.

There are fewer cells involved in that process. That process becomes less efficient. So the more you can do upfront on that side of prevention, bioidentical hormone replacement therapy can absolutely play a role in slowing stopping, preventing more of that bone loss.

You're going to be better off longer term. So so this is definitely an interview that you're going to want to share with your children, your daughters, your sons, your nieces, your nephews, because it's something we want people to learn about early.

And like Kevin said, there's still hope. We can still make differences. I have women come to me in their 60s, their 70s, and we can still make changes.

It's never too late, but if we can learn earlier. So share this episode with everyone you know, because it's so important. So this is just been fantastic.

How can we learn more about you and your three step program? What is the three step program? Well, so the three steps are identify and address root cause issues of bone loss, nourish your body and absorb your nutrients

and build strength of body, mind and bone in a way that prevents fracture and injury.

So we teach people that through different programs that we have, where we guide them step by step along the way. So if you have osteopenia, osteoporosis or you know, somebody who does and they're struggling to make sense of all this, know that there's help out there.

There are people who understand this, who know how to help you. And, Sharon, you brought up a really great point is that I've had many, many conversations with people, thousands of conversations at this point.

And one of the things that I hear is that people don't just want to learn for themselves. They are talking about their daughters or their daughter in laws or somebody else that they want to learn, so they can help prevent that.

And that person as well. And that's I love working with the people we work with. I work with people mostly 45 to 65 plus. My real passion is in the side of prevention also, and eventually our our focus is going to be on preventing disease and osteoporosis in kids from a really young age.

So super, super important. But yeah, that's, that's a little bit about us. Love it, love it, love it. And I was just sitting here thinking, you know, how much time do we really spend?

Like thinking about our skeleton, you know, it's covered with all our skin and the hair and everything, but perhaps take a moment after listening to this and just really meditate and give thanks to your skeleton that supports you and helps you move through life and show it a little TLC.

So this has been fantastic. I know everyone learned a lot. Thank you so much for being here and contributing a super important piece for women and men on their hormonal journey and mastering their menopause transition.

So we'll see you all soon. Bye.