## Introduction to Energy and Bone Health

Welcome back to the reverse Autoimmune Disease Summit series everybody. We're talking about healing the energy body this time, which is of course everything.

So we're talking about energy and how it pertains to cellular reproduction of the cells that are needed for every aspect of living. And then we're also talking about the energy body that lies next to the physical body that has the emotional body after it.

And that's influencing how your genetics are expressing and influencing your lifestyle choices. And in this talk, which you're going to discover, it's also influencing your phone health.

So my guest today is Kevin Ellis, better known as Bone coach. He's a Forbes featured certified Integrative nutrition health coach, a podcaster, a YouTuber, a bone health advocate.

And he's the founder of Bone coach.com. After an osteoporosis diagnosis in his early 30s, 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 stronger bones.

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 improving is possible. And when we were just off air, I was talking about how the the levels, incidence of osteoporosis in men is really growing.

And we'll talk about why that is through a unique three step process and a world class coaching program called Stronger Bone Solution, Kevin and his team of credentialed experts have helped people in over 1500 plus cities around the world get confident in their stronger bones plan.

His mission is to not just help over 1 million plus people around the globe build stronger bones, but it's to help our children and grandchildren have the education, resources and nourishment needed to prevent osteoporosis and other diseases in the future so that they can lead long and active lives.

Welcome to this series, Kevin. Thanks so much for having me. It's great to be here. I'm excited. You know, this is such a great topic because, it's so common and so many people aren't getting tested for it.

So I'd like to start off, if you don't mind, maybe first defining the difference between osteopenia and osteoporosis. Let's get some foundational definitions.

And then if we can move to your personal story because it's so compelling. Yeah. No. And that's so osteoporosis literally means porous bone. Right. And it's a condition is characterized by there not enough bone formation.

You've got excessive bone loss or it's a combination of the two of those things. And in osteoporosis, both your bone density and your bone quality are reduced in the way you find out you have osteoporosis is through what's called a Dexa scan or bone density scan.

And it's a painless task, kind of like an X-ray, very low levels of radiation.

## Osteopenia vs. Osteoporosis Basics

So you lay down on the machine, it does a scan, and then it tells you your bone mineral density, the actual mineral

content of your bone. And then what it does is it generates this 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, approximately 30 year old adult.

If you're plus 1 or -1 or somewhere in there, that's considered normal and healthy if you're -1 to -2.5, that's considered osteopenia, which is like a precursor to osteoporosis.

And then if you're -2.5 or lower, so -2.6 and 2.7, so on and so forth, that's considered osteoporosis. Now the greater that negative number becomes, the more severe the osteoporosis.

Now most people and we were talking about this like you said most people that are getting this or they're women 5060 sometimes times maybe not even getting them at that point, but they're getting them as a check in the box.

Their doctors are ordering them. But in my opinion, that's too late, right? So if you're listening to this and you haven't had a bone density scan yet, we're going to talk about the reasons why this would be important.

But you're going to want to get a bone density scan because number one, you don't want to avoid doing something just because you don't want to get the answer to it.

And then also you can't address something until you're aware of it. So, you know, this is really important because a lot of times people won't do scanning, checking, testing if their insurance won't pay for it.

And sometimes your insurance won't reimburse for Dexa scan unless you are at a certain age or you're on certain meds, or you have a comorbid diagnosis that can cause it.

And I would just say, please don't worry about any of that and be willing to pay out of pocket for this for sure. And it's not for sure. And like you were like you were just saying it'll usually be at, you know, a certain age, 65, 70 is is when you're going to be getting those scans unless your doctor or you've got a doctor that is, you know, on the cutting edge and they're like, let's do it earlier.

Yeah. But even then when you get that bone density scan, you're only going to get another one 1 or 2 years later. So sometimes it is best to go to an external radiology group.

And sometimes you can get these bone density scans for 75, 100 hundred and $25 out of pocket sometimes, which, that that might be the way to go. Yeah.

And I do it if I've done, because most of my population has autoimmunity. And, you know, I always talk about the four corner pieces of the puzzle where each unique puzzles and one of the corner pieces of the puzzle I look at is Toxic Burden.

And sometimes, you know, people thought community of got things like heavy metal toxicity. And if I'm doing a provoked heavy metal test and and I'm chelating metals out of the storage containers, which are bone, then I know I'm actually removing it, sort of like Wolverine and X-Men, right?

I mean, what's in that bone? And so then I send them for a death site, like, okay, let's see what's let's see what your bone matrix looks like without heavy metals being stored in there.

And what can we do to now generate healthy matrices in there? So that's another place where, you know, those of you that are listening, you know, think about that.

If you've had heavy metal collection, you need to be going in for a Dexa one. Yeah, absolutely. And one other thing about heavy metals too, is that, LEDs specifically, you know, stored in the bone.

And a lot of times when women hit menopause and they have that decrease in estrogen that happens in post-

menopausal women. Estrogen has this protective effect on bone.

When those levels decrease, as they do during menopause, it causes an increase in the activity level of cells that break down bone. And a lot of times what happens is if you had that lead stored up in your bone and you start to have that bone loss, you can almost have, like this auto intoxication that takes place.

So is that almost you will. Yeah. No you will I mean you will absolutely have that. So and that's what causes some of like the batting this the cognitive decline, the lack of mood stability, the inability to sleep like some of those things that are just attributed to, well, you're going through menopause, right?

That's actually those are symptoms of heavy metal toxicity because these metals are being removed from your bone by nature as you're going through your bone resorption time. Right.

And the metals are being leached out and it's getting back in front of your brain again. Yeah, yeah. And that's and that's really the that's what we would consider the primary cause of osteoporosis.

When you think about the types of osteoporosis, primary osteoporosis is it's that decrease in estrogen and postmenopausal women.

## Why Bone Loss Happens: Men, Women, and Peak Bone Mass

Right. That has a protective effect on bone. Then when those levels decrease you have that bone loss that takes place. But there's a whole nother cause of osteoporosis.

And this is one that a lot of people don't realize is and it's called secondary osteoporosis is. And that's where osteoporosis occurs as a result of behaviors, disorders, diseases, medications and other factors.

And a really important point I want to make is just because you're a postmenopausal woman does not mean that is the sole cause of your bone loss. There could be another cause beyond just hormones.

We don't want to make assumptions. You have to make objective decisions. So that's super, super important. Well and like we mentioned and I want to steer it back to your own personal story is that this isn't just postmenopausal women.

That's also I was telling it I was telling Kevin off air everybody that I feel like I'm lone provider in the world, that sending men off to Dexa scans as often as I'm sending women, you know, because and what I'm finding because it's considered a women's health problem, osteoporosis because of a lack of estrogen.

So to your point, there are all kinds of other reasons that we get osteoporosis and talk about things like celiac. And I'm finding that also the number of estrogen mimicking and reproducing chemicals that are dumped in our environment that are making men take on estrogen, that that's affecting their bones to.

So they're so they're becoming estrogen dominant. A lack of testosterone is also creating bone loss for them absent. And I'm finding this kind of fascinating because out of all women that I send to get their bones bone density checked, I would say 75% come back with some problem and I would say, 50% of men do.

That's that's pretty close, you know. Yeah. And I just want all of you women that are listening. So think about your loved one to hear your male loved ones.

And don't leave them out of the loop on this because their doctors aren't sending them in. No, they're absolutely not. So if I look at our entire community, tens and tens of thousands of people, if I look at our entire community and we I've got about 95% women in that community, but I have about 5% men, and we have men that we work with that we help, that have osteoporosis.

And it's there are a lot of different reasons why they could have that. Right. So let's even just talk through those

two. Why, what are some of those secondary conditions?

Actually, before I get into secondary conditions, let's talk about peak bone mass, because this is a contributor to people getting an osteoporosis diagnosis down the road.

And what peak bone mass is, is about eight, 90% of your your bone mass is put on by the time you turn age 18. And by the time you turn 30, that remaining 10% approximately fills in.

So that's about as full as your bucket's going to be. If when you were younger, you had poor diet, nutrition, and eating disorder. You smoked or drank excessively, you led a sedentary lifestyle.

You you took certain rights. You. Exactly. You took inhaler, you took certain medications. We'll talk about those in a minute, too, right? If you had those, those could have been things that worked against you in a time where you were trying to reach peak bone mass.

So if you did not have a bone density scan early, like I always encourage people to get them in their 30s or 40s. So if you're listening, you have daughters or children or something like that and get a foundational baseline early on.

But they might not have just reached peak bone mass. So then later on in life, 20 years pass by, we get this bone density scan. We don't know if we're still actively losing bone, and you get your first baseline or shocked, you're like, oh my gosh, you know, I have this visceral reaction.

What do I do right this second? And you may not actually be losing bone right then this was my experience, by the way. I didn't have my first bone density scans.

I turned 50, I'm 57 right now. And I was osteopenia. Yeah. I was like, oh, I can't say yeah, yeah, I was I was really upset, right? Oh my gosh, I actually am so healthy.

But I was diagnosed with rheumatoid arthritis when I was 30. I had four children. And in the course of throwing up with hyperemesis with all four of those children, I never had a recollection.

I never had a cavity until pregnancies. And then after each kid, I had cavities. My bones were also suffering during my pregnancies. Yeah, yeah, yeah.

So there's there's that whole part of the picture too. Right? So we've got the whole peak bone mass part, and then let's talk about some of the other things that can contribute, because it's both men and women that are affected by this.

You brought up a really great point, which are medications, glucocorticoid specifically. So glucocorticoids. Yes. Steroid medications are designed to suppress inflammation.

They mimic natural steroid hormones in the body. They're used for things like rheumatoid arthritis, and prednisone, cortisone. Those are your big ones, right.

The reason why that contributes to bone loss is because it reduces your gastrointestinal absorption of calcium. It increases your urinary excretion of calcium and then glucocorticoids.

And this is the biggest part of this. They act directly on the cells that break down bone to increase their lifespan. And that's going to reduce your bone density. Right.

So just know if you're on these medications if you're on prednisone you're you're going to have bone loss. And that bone loss is at its highest point within those first couple months that you're on it too.

That's the steepest, you know, amount of bone loss. You're going to have another type of drugs, immunosuppressive drugs, selective serotonin reuptake inhibitors.

This is a big one. A lot of people don't know about antidepressants. Antidepressants, right. There's one review of about 19 studies looked at the effect of SSRI on bone that showed they're going to reduce your bone mineral density and increase your fracture risk long term.

And then another big one are antacids. So a lot of times the reason people take antacids are why? Because they have, you know, reflux and heartburn and things like that.

They think they have too much stomach acid, when in reality a lot of people actually have too little stomach acid, and they're actually suppressing what little stomach acid they do have.

And the reason that's a problem is because you need stomach acid to properly break down and absorb nutrients from your food. Like amino acids, amino acids, your bones are 50% protein by volume.

So they need amino acids, calcium, magnesium, iron, B12. If you if you don't have enough stomach acid, your body and your bones are going to be starved of those nutrients.

So long term, being on these medications and I see people that are ten, 20, 30 years sometimes on these medications, you're not supposed to be they aren't buying these short term, these very short term.

Yeah. Yeah. Proton pump inhibitors are some of the biggest offenders. Yeah. Yeah. So those are those are big ones. And then we can even talk about let's talk about some of the autoimmune conditions and other digestive disorders that can contribute to this.

So for me personally, my own story was, I was, you know, I had all these health issues in my late 20s. I had gotten out of the Marine Corps, probably in my my early 20s, I got out of the Marine Corps and I started having all these different health issues.

I couldn't figure out exactly why, but I had, poor, poor stress, poor sleep. I some days I could barely even get out of bed. I had all kinds of different issues that I couldn't put my finger on, I couldn't figure out. And I also had digestive issues.

And then I was diagnosed with celiac disease. So I had been absorbing nutrients for many, many years. And, you know, when you're when you have celiac disease, it's obviously an autoimmune condition where you know, you're you ingest gluten, you've got these tiny little nutrient absorption centers in your small intestine called villi.

And when you ingest gluten, those villi become blunted. And over time they can't do their job. So my nutrients, my roots were effectively damaged and I couldn't absorb those nutrients.

And as I was still going about my day, my body still needs those nutrients to execute its daily functions. Right? So it's pulling from its largest mineral reserves, which are my bones.

Yeah. So then I was diagnosed with osteo process. And then the only reason I was told that osteoporosis, even being a young male, is not because of the doctors that I was working with.

It was actually a physician's assistant who said, you have celiac disease. Has it been checked your bone density? And I was like, no. And I wasn't thinking, you know, the stuff marine, you know, was going to I wasn't thinking that at all.

So I thought I was going to come back as just a check in the box, and it came back and it wasn't even a phone call or anything like that. It was a letter in the mail.

They said, hey, you've got osteoporosis, go on a gluten free diet. And I was like, you know, that's there's more. There's got to be more to it than that.

And I thank goodness you said that.

## Medications, Autoimmunity, and Secondary Osteoporosis

I know I had to get I actually I when I got the letter, I was really shocked actually, I had, I could remember the blood just kind of rushed out of my face and I was like, what does that even mean for my future?

And I looked it up and I started reading about fractures and medication dependance and all these things. And I was I was scared. And I went and I confirmed with another, doctor, I in fact had osteoporosis.

And at that point in my life, you know, I, had a young daughter, son on the way. My father, he passed away at a really young age, and I my my fear as I was growing up was I was going to fall down this path to an early grave and not be there for my kids.

And I felt like I was just living this nightmare. And I ended up having to do a lot of reading and research, consulting with a lot of people, going down this path of figuring out what has to be done to improve your health and improve your bones.

And that's how I even got into this, this arena of helping people improve their bones was through that. I appreciate you sharing that, because, this does show the compelling nature of what the root cause, why it's so important to discover and have you just follow the physician assistance advice and just on a gluten free diet that would have helped a number of things, you know, in terms of the inflammatory nature of what was going on inside your body, would not have rebuilt your bone matrix.

Absolutely not. You would have just stayed where you were. Yeah, at best. At best. Yeah. Okay. Right. And so yeah, especially when you're so young because that's the that's the at best, right.

And yeah. So yeah so and so as side to get curious. Yeah. And so if you've got gastrointestinal conditions you know if you've got IBD you know you have all sort of colitis.

If Crohn's disease you have celiac disease, any of these things that are contributing to you not absorbing nutrients properly, get a bone density scan, autoimmune conditions.

Right. This this would be a great example of if we've got anything that's contributing to long term inflammation in the body, it's it's going to contribute to bone loss or fuel bone loss if long term.

So you have to be kind of getting ahead of some of these things. Be on the side of prevention. Don't be on the side a reaction. Some of the other can be autoimmune conditions, ankylosing spondylitis.

That's one that that is, important. Rheumatoid arthritis is another one. Lupus. These are all, you know, different autoimmune conditions that I would I would go get a bone density scan and get that checked out.

And like we were saying earlier, if any of your autoimmune conditions, including eczema, that using a topical steroid cream steroid, if you've used a steroid orally, intra respiratoire really topically, you've got to go get a bone density scan, especially for for long term use.

And if you're doing cortisone injections, it may not have this systemic effect, but it could lead to localized osteoporosis, could lead to poor as a bone in a specific area that you continue to get those injections over time.

So just be aware of that too. And I'm not a big believer of non systemic effects. It's not like it just stays there you know no I know I know one of the things about cells which makes up every part of the body, everybody is that it has a semi-permeable membrane name.

There's no such thing as having it contained in one spot. So sure, it's definitely different than oral administration, but you're still getting it everywhere.

Absolutely. Yeah. Yeah. Well, so what I think this is another thing where we're going to deviate from the standard

medical model. Like I was told when I was diagnosed with RA, here's, here's a prescription for methotrexate.

Here's another one for a non-steroidal anti-inflammatory drug, which also can cause osteoporosis. By the way, everyone's taking those, you know, come back when you get worse.

Not if. Monitor. Let's monitor it. Yeah, yeah. Come back to your workplace. And I remember going, oh, hang on, I'm really, really disciplined. I run marathons, you know, I'm like, I make my own food is there anything else I can do?

And I remember her saying, now this is you know, I told her my grandfather had ra when she asked, and this is genetic. That's it. And so there's there's no hope.

I remember on my way home, coming from this, like opening up the door and peeking out from my Western medical training and going, I wonder if there's anything outside this door.

You know, I actually had never explored outside of that paradigm. And so we're going to venture outside that door right now, because the same thing happens with osteoporosis that people are told you cannot regrow your bones.

You cannot regrow that. Yeah I was talking about that. But that's not true. Right. You have cells that are okay. I never took the meds you know like yeah you absolutely can.

So I want to I wanted to see if you can address that for people. Take them outside the door. Yeah I know so you you've got cells inside your body that are specifically designed to help you rebuild your bones.

Right. And you've got these cells called osteo class. These are cells that are they they break down and restore bone. You've got these cells called osteoblasts that build bone.

They help you form new bone. And then you have these cells called osteocytes and 95% of your bone cells and are osteocytes. And these are really important and fascinate cells because they are orchestrators of this whole bone remodeling process.

So your bones being broken down and new bone being formed, and a major part of their role is sensing mechanical loading and micro cracks and micro damage.

And they transmit this signal and communicate to these other bone cells the Ace2 class, the osteoblasts. Hey, we need to become stronger to adapt to this new, you know, load that is being placed on us.

So it could be exercise or loading or any and anything like that. So in the context of mechanical loading and understanding the role of our bone cells and that that's pretty well understood, I do want to tie this to autoimmunity.

Also an inflammation. What's really interesting about these astrocytes is that there's recent data that shows that inflammatory conditions. So those digestive conditions, autoimmune conditions, osteocytes will express multiple pro-inflammatory cytokines.

And that's going to be associated with an increase in bone breakdown and a decline in bone formation too. So we do want to make sure we're reducing that inflammation, but also providing the stimulus needed to grow new, stronger, healthier bone.

So how do you do that? Exercise is one of the most important elements of rebuilding stronger, healthier bones. And for your bones, you need two different types of stimuli.

You need muscle pulling on bone, and you need impact. And the most effective interventions. They're going to use one or both in combination. Right. So muscle pulling on bone is going to send it's a mechanical signal that's sending a chemical signal to tell those bones to become stronger.

But then you've also got the impact that you've got to work into there as well. What are the different types of

exercise? Most people, when they're told they have low bone density, they say, hey, go do some weight bearing exercise, go for a walk.

I can tell you right now that's not going to be enough, right? Walking is great for our health. Definitely something to continue if you've already. You're already incorporating it into your plan, but at the same time you have to do more than that.

So when we're talking about weight bearing exercise, I'm talking about any exercise where your bones and your muscles have to work against gravity to keep you upright.

And that's placing a good kind of stress. Your on your feet is placing a good kind of stress on your bones. So this would be the walking, the running, the jogging, the hiking, the dancing, the gardening, even even, lower impact things.

Could be your Pilates ladies, your yoga, your tai chi. Those are all considered weight bearing exercises, right? Those are important non weight bearing exercises are not putting that stress on the bones.

So this would be exercises like cycling seated rowing swimming swimming is a big one right. You can't just even if you go in the pool every single day and you go do long laps and you feel great and you get out and you're like, wow, I feel so good today.

Don't count that as your only form of exercise. There has to be more stimulus than that because you're not placing. That's healthy stress on your bones.

And this has been seen in astronauts too, where they don't have that stress in space that they're they're not working against gravity. They don't have that stress in their bones.

And it reduces bone density. That's another co-morbid condition.

## Kevin Ellisu2019s Personal Osteoporosis Story

Everybody, if you are an astronaut, yeah. You're asking the gravitational field is a risk. Yeah. And so what is the other type of exercise then that we need to incorporate?

Well, that's muscle strengthening and resistance training exercise. Right. This is where you've got your dumbbells or your heavy resistance bands or even your own bodyweight.

If the intensity is at at the level it needs to be. And the studies that show the greatest effect on bone, it be the 5 to 10 repetition range, is where you'd want to be at.

And there was a researcher out of Australia. Her name is Doctor Belinda Bakshi. She did something called Lismore Trial where they they did overhead presses, deadlifts, squats, chin up with drop landings that showed that was safe and effective for helping improve bone strength.

So, there is research out there that shows you can improve your bone strength. It's absolutely possible. I've seen plenty of examples of that. I know how to read bone density scans and things like that.

So I know when it's an actual improvement versus, an error in positioning interpretation. So I know it's it's possible to do that. And just for scientific validity here, get your Dexa done, your follow up Dexa at the same place and by the same, practitioner.

Yeah, yeah, yeah. Because you will have a variance in different machines that you use to and there's another reason why bone density scans are only done every 1 or 2 years is because if the amount of change that's physiologically possible, that can take place in a year for most people, if you have a 3 to 5% improvement in a year, that's really good, right?

If you have a 10% improvement, that's, you know, that's very rare, almost unheard of because in most situations, the only time that's going to come back at 10%, they usually the only time that's going to happen is when somebody goes from being relatively sedentary or not very active to then ramping it up, but even then that has diminishing returns.

So we just want to keep in mind, make sure you I have people come to me all the time and they talk about reversing osteoporosis, with, you know, really low bone density numbers.

And we just have to understand what's actually possible in a given time period, too. For her, it was going from from sedentary to active. So and then proper supplementation.

But also she was very estrogen deficient recently gone through menopause and hadn't gotten like the rhythm of where to land with that. And so we did that for her.

And so then that's why she had such a great improvement. That's great. I'm going to do something unique that you haven't had done. I'm going to turn on a light real quick. Wow. Okay.

I'm going to pop my head down real quick and. Okay. It was getting a little dark here, so, it was kind of cool. The contrast of the time. It's coming out of the darkness.

So I was like, cool. But then, yeah. So exercise, exercise really, really important has to be part of your plan, right? You're not going to rebuild bone strength if you if you're not doing your exercise to.

So when you're working with people, I'm pretty sure you're also working with their diet because I think a lot of people don't realize how involved the gut is with, like, with everything.

Right? But also, as you were saying when we were talking about celiac disease and not absorbing what we need to absorb, then it affects bone. So we're talking about gut health and diet and rebuilding bone.

How does that all work in. Yeah, I mean gut health kind of like I was talking about earlier. Right. You have these a lot of people focus so much on eating the salads, the smoothies, the supplements.

Trying to I, I almost say think of your body and your bones as being like plants. Right. In order to to grow, they need the right conditions and right nutrients.

Right? So many people focus so much on the salad, the smoothies, the supplements that they're not considering that soil. And your gut is like the soil.

It's, you know, that's where you're absorbing everything. So you have roots in your soil. Those roots are those villi. If those will either damage or something's preventing you from absorbing those nutrients, you're going to have a really hard time getting the proper inputs.

You need to build stronger outputs, whether that's healing a cut on your hand, growing your hair fingernails, or rebuilding stronger bones. So your gut plays a massive role, in your health.

But also if you have digestive issues, as I was talking about earlier, that can also contribute to bone loss as well. It can create inflammatory inflammation.

That's going to continue the bone loss as well. So that's a really important piece. And then in terms of diet and nutrition, it's not like a lot of people ask me, is there a perfect diet for osteoporosis and for bone health.

## Can Bone Be Rebuilt? Cells, Exercise, and Loading

And they hate my response because, you know, we're all biochemically and you love your response because it's the one I give and we're all biochemically and genetically unique individuals.

We're going to respond to different foods and supplements and dietary approaches differently, which is why there is no single dietary approach that is going to be perfect for every single person.

Now, let's say if a lot of people have autoimmune conditions, right. If you're listening, this is the Autoimmune Summit. Yeah, you're going to be starting out most likely having a little bit more restriction that somebody that maybe doesn't have an autoimmune condition.

Right. You may be on that paleo ship or something like that. What you have to take that into consideration and you'll eventually build in and add in more foods as your gut health improves, as symptoms improve, that's okay to do.

One of the biggest challenges I see for people that have autoimmune conditions is, how do I get enough calcium in my diet to one of my favorite foods?

It's really good for a lot of different people, and it's great for if you're on paleo app or whatever is fish. But not just any fish. Canned salmon and mackerel and sardines that have the bones in them.

Okay, why do I like the bones in them? Well, number one fish have protein. Your bones are 50% protein by volume. So you need those amino acids. You need it to rebuild your muscles and your bones.

Number two, those bones, they're not hard, pokey bones that are going to hurt your mouth. They're actually going to melt in your mouth. Not that I'm really building the case for fish here, but they've got all the minerals and kind of get my people the sardines.

So yay, you have to actually, we put together some awesome sardine recipes and, mackerel recipes and all that stuff. So, give that to. Yeah, well, we got it on our YouTube channel.

We've got them on Bone Coach YouTube channel, but we'll also get a recipe guide or something to your people too, if you want. Okay. Perfect. Yeah. But yeah, so they've got all the minerals and nutrients in the ratios that nature put them in.

Right. So that's awesome. And then the third best part of these are that you get omega threes and omega threes. These healthy fatty acids that are going to help dampen inflammation.

So I love getting these these canned fish. So so they're not taking on a bunch of the toxicity of the ocean. Right. And I've found and I may be of late adopter on this because I was hit.

I just found that some companies are testing for mercury in their fish. And I am not going to remember the name of it. You can you can go and look look them up.

Yeah. I found this really wonderful mackerel that has like it says right on the box. It's been tested. No mercury. Right. That's great that are really worried about what you should be should be worried about this.

So you know it kind of helps us to say okay, so there are tests. There is testing that's being done as it's coming out of the water. And then before it's canned.

And you can use this to rebuild bones and for a number of other things like it's just so good for you. Yeah. Absolutely. So one of my, one of my other favorite ones is and I've been a champion of this, food for years.

Arugula, arugula, leafy green, same cruciferous family vegetables as broccoli and kale. It's rich in potassium, folate, vitamin C, vitamin K, and calcium.

And and what's really important is it's bioavailable calcium, too. So if you're if you're eating one of those three ounce plastic clamshells, I'm not really a fan of the plastic, but, if you're eating one of those clamshells, that's about it's got about 200mg of calcium in it.

It's bioavailable. That's great. And this is super interesting. I just learned this recently, even though I'd been a fan of it for a long time. Arugula also has a bioactive compound in it called, Arison.

And that helps turn off osteoclasts, which are the cells that break down bone. Right? It's also got antitumor and antioxidant activity and properties.

But, that is really interesting from a bone perspective too. So and the other reason I like a regular is because unlike spinach, which is a common grain a lot of people use, arugula is low in oxalates, right?

Oxalates are considered an anti nutrient. They bind up bone healthy nutrients. And they're going to prevent you from absorbing those nutrients. And if you've got digestive issues kidney stones, arthritis, joint pain those can be some indicators that you may have a hard time breaking down and degrading that oxalate.

So you can swap that spinach for the arugula as well. And an innovative medicine, you know, 10,000 year old sister science of yoga. The arugula is considered a bitter with some important when it comes to getting that digestive fire built, i.e.

stomach acid. So it's a really important one. You know, instead of taking a proton pump inhibitors, you know, start eating more regular. Yeah. Because, I mean, most people's diets today are devoid of any bitter foods, right?

Unless they're drinking coffee, in the mornings. Arugula is, probably your only other bitter source. Or for most people, I would say some people are eating other bitter foods, but, that's a great one to incorporate.

Yeah. And I do genetic testing and all my patients and I would say 90% of people with autoimmunity don't have the genes to break down the caffeine. And, causes inflammation for them.

So coffee's not on the choice of bitters. Everyone, for sure. Yeah. I will point out one other food that I, or group of foods anyway, that I think is really important for bone health, vitamin C, rich foods, right?

Vitamin C is a key nutrient for your body and your bone health. Obviously, it's linked to a lot of other, impressive health benefits. But for bone specifically, our bones are made up of this collagen protein matrix upon which minerals are laid.

And where vitamin C does is it stimulates pro collagen. It enhances collagen synthesis, and it stimulates alkaline phosphatase activity, which is this marker for osteoblasts bone building cell formation.

That's pretty cool right. And the great thing is you can get some of this stuff in your diet too. So berries, citrus fruits, Kakadu plums, asteroid cherries.

Those are some sources. There are some vegetables sources to the highest sources of vitamin C for vegetables. Those would be your red and yellow bell peppers.

But if you're autoimmune right near avoiding the nightshades, probably not going to incorporate those. So you would look to dino kale or last Senado kale.

That's one lightly steamed broccoli, brussel sprouts, red cabbage those kinds of things. That's how you can start to build in those vitamin C rich foods to your diet.

Beautiful. On calcium. One of the little known ones that's one of my favorite is the sesame seeds. I love having a snack with raw tahini you know, and like apple slices or baby carrots.

You know it's a really nice one and it gives you a lot of calcium.

## Gut Health, Diet, and Bone-Building Foods

Yeah. Yep. You can absolutely incorporate that. Yeah. So is there like how would you work with people on a bone building program. I mean, this is your dentist.

What you do. So how do you work with people. Yeah. So we have it's not actually not just me, sitting here turning the lights on middle of an interview.

It's. I've got a team of about 15 people. We have a whole customer support division and things like that, and we have online programs that we walk people through step by step, called the Stronger Bone Solution.

But in that our process is, is really simple. It's the first thing you have to do is you have to identify and address the root cause issues contributing to bone loss.

That's the first thing, right? You have to get your bone density scan. Understand if you're still actively losing bone right now, there are plenty of there are some tests that can help you with that.

One of them is called the CT serum CT Low Peptide test. There's another called the urine. And those tests help you understand if you're still actively losing bone right now.

But then once you get your lab results back, what do those results actually mean? And then starting to address those issues. And that's usually in conjunction with a health care practitioner that you're already working with, could be a functional medicine practitioner or natural doctor, or your team of MDS or whoever you're working with.

Right. That's kind of the first part. The second part is the nutrition part. So diet, digestion, absorption, you have to get those things things lined up.

And a lot of times you I remember you specifically said this earlier when you were told you had osteopenia was I and I hear this a lot, probably 50% of the time is, I exercise, I eat right.

What happen? Like, how is this possible? How did I get here? Now, a lot of times, even if people are eating healthy, you might not be getting the right nutrients in the right amount.

You might not be absorbing those nutrients, and those nutrients might not be making it to the cell level. All three of those things have to line up. That's kind of the second part.

And then the last part is, you have to build stronger bones in a way that prevents fracture and injury. So you going to get the right exercise plan in place, reduce your stress, stress.

And I'm not talking about the physical threat of a lion. I'm talking about psychological stress. Fear, worry emotionally charged thoughts, financial challenges, family conflict.

All those things can contribute to your stress. So you have to address that and sleep right. Sleep is a if you've got poor sleep, it's pretty well documented.

That will reduce your bone quality. So you want to make sure you're getting to a point where you're actually sleep and well, and then addressing the hormones and things like that so that kind of across the board is the process that would be used to get somebody to the point where they're actually being able to improve their bones and their health.

Beautiful. I, found out much, much later that, like you, I'm very gluten intolerant, genetically. So, you know, running marathons, coming home, having a big bowl of Greek yogurt with granola and blueberries and walnuts on top, and then absorbing it loaded within three hours, you know, like like I was nine months pregnant, and I thought that was normal.

Everybody bloated after they, you know. Yeah. These are the kinds of cues that your body will give you. And, you know, that kind of stuff is not normal.

Yeah. No, it's not, it's definitely not. But, there's there are some really talented people out there, whether it's us, whether it's, you know, your team and you and all the other people that you've interviewed on the summit.

They're there ways to get help for the things that you need to get addressed. So, seek out those people and don't try to figure these things out on your own, because it's a long journey to do that.

I want to encourage everybody to see Kevin and this team, you know, this this, bone health piece is an often missed part of the whole puzzle, and it's so important.

I mean, this is your structure. This is the thing everything else lies on, you know, and hangs on. And it's one of the things that women die the most from when they're old.

Yeah. Broken hips, fractured bones. And, you know, that's that's the thing that will deteriorate your health faster than almost anything. So yeah, this is really important investments.

This this this is A41K right here. Right. Yeah. That's I mean there's the usually I mean we work with people that have anywhere from no fractures to 5 to 10 or more fractures.

And I can tell you the people that have 5 to 10 or more fractures, there is not a single person that we work with that has not said, I wish I knew sooner.

Yeah. So if you're listening to this, you know, take this as your sign, become educated, become empowered, and, start making progress. But Max is not the answer.

Please. Oh, and Fosamax, let's. If we've got a second, let's just touch on that. Okay? So let's talk about the conventional announcement. Yes. Let's talk about the conventional options that will be presented.

Right. If you are told you have osteopenia or osteoporosis, you will be presented with a medication in 90% of the cases. Right. Or it's going to say calcium vitamin D, walking, take a bone drug, the different types of bone drugs.

Now I want to point out this is not like taking an aspirin. These drugs have a dramatic effect on bone physiology. And there are two different classes or categories of drugs that we're looking at.

They're anti resource divs. So this would be your bisphosphonates and your rank ligand inhibitors. And these are designed to slow down the activity level of cells that break down bone.

And fosamax is in the phosphate category. Right. There are a lot of symptoms or you know, side effects and short and long term implications of use. But one of the biggest things with Fosamax is that the safety and efficacy of fosamax is not really known beyond five years.

So that's important. And then what happens is when you're taking bisphosphonates for extended periods of time, you can actually get to the point where, every single one of us, on a daily basis, we're doing activities, we're moving about, we're we're placing the stress on our bones, and we're starting to get these tiny little stressors, micro cracks, fractures in our bones, tiny ones.

That's normal for every single person in those cells in the bone sense that damage. And they send the other cells to the site to scoop out the damaged bone and fill it in with stronger, healthier bone.

## Bone Health Program, Medications, and Final Advice

You can actually slow down the activity level of those cells so much that you start to accumulate that old worn, damaged, weakened bone. And over time that can lead to more brittle bones.

Right? So really important thing that a lot of people don't, a lot of people aren't aware of at that point of being present on the medication. And then there is a whole nother class of medications called anabolic.

And these drugs are designed to build bone and build a faster and build better quality bone. That happens, but you have to be aware on that medication.

You are not just going to take one medication, you have to follow it with another, another medication. And that is usually the case when you start down the path of osteoporosis.

Medications. You're usually not just starting one. You're committing to multiple medications down the road. So with a host of long term complications potentially and side effects probably.

So yeah, it's not. All right. Well I appreciate that public service announcement. Sure. And to help out with that one, is there anything that we haven't covered that you think is really important.

But we need to cover? I would just say, I mean, on any health journey, this would just be a general note, right? On any health journey, be kind to yourself.

Be patient with yourself. No one figures it out. Day one. There's going to be a lot of trial and error. You're going to be upset. You're going to be sad that things didn't work out.

You're going to be you know, you probably invested a lot of time and money and energy and effort keep going. You will figure it out. All you have to do is do things 1% better tomorrow than you did them today.

And you'll you'll be well on your way to better health and an active future. And I'm speaking from the heart there because I, I've been in that situation.

So and I would say 95% of my patients that find me are angry. They're really mad by the time they get to me, because they have spent a lot of money on different things that they feel like cabinet work.

And I just want to add to that and say, that's information that you needed to gather, right? In the scientific inquiry, we are looking just as much for what's not the cause and fix as we are for what it is.

And so anything that you've tried, it's not that it didn't work, it's that that's the thing that now you can add to the list of, okay, so now we know that it's, it's you know, this is all information that's important to flush out your pencil, which has thousands of pieces in it.

Exactly. Yeah I it's it's I think that's important because that anger and that feeling of I'm doing everything right, that perfectionism. And that's a driver inside that actually makes you sick.

And that's it. Yes it does. It really does have a lot of immunity that I find as a perfectionist person type is type is I'm a type A liar. Yeah, yeah.

And it is that like seeking the formula instead of recognition that, you know, the, the, the road to success is not a straight line. It goes like this. Right.

And there are all kinds of graphics and means that indicate that. And you can laugh when you see it, but it's actually breathe into it. That is actually accurate.

And that's what your phone matrix looks like too, by the way. Yeah. Yeah, absolutely. So so I appreciate your time and your wisdom and your expertise.

Thank you so much for sharing it with us. I yeah, this is great. Great chat great chat. Glad I could be here. All right everybody again this is Kevin Ellis with bone.

Coach and his team really reach out and let's get your bone structure healthy. Until next time. So yeah bye everybody.