Introduction to Bone Health and Kevin Ellis

Hello. It's Dr. Jen. Welcome back to the Heal Your Thyroid and Reversing Hashimoto's summit. So this is such an important topic that we're going to talk about today.

And it's bone health. And who do we have here? But the expert himself, Kevin Ellis, he is known as the bone coach. He's a Forbes featured integrative health coach, podcaster, YouTuber and the founding founder of Bone Coach dot com.

He has a unique three step process and World-Class coaching program called Stronger Bone Solution, where him and his team have helped people with osteopenia and osteoporosis in over 1500 cities around the world to get confident in their stronger bone plan.

And his mission is amazing. It's not just to help over 1 million people around the globe build stronger bones, but to help children and grandchildren prevent osteoporosis and other diseases in the future so they can live long, active lives.

Thank you, Kevin, for being here and I would love for you to share your amazing transformation story with a diagnosis that you had. Yeah, I'd be happy to.

And I'm so glad to be here too. I think this is such an important topic. Your bone health is such an important topic. Hashimoto's ties into that picture, thyroid health ties into that picture, and I'm excited to talk about that.

And so for me, my journey started with my own health issues.

Kevin's Personal Health Journey and Osteoporosis Diagnosis

I would actually take it back to before I was born, when 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.

He was 35 years old at that time. In my entire life I had this fear that I was going to follow down that path to an early grave, not be there for my kids, not have the opportunity to be a father.

And when I was told that osteoporosis was in my early thirties, of all things, I thought my fate was going to be the same. I thought I was going down that exact same path.

And my father was a marine. He did 22 months in Vietnam. He came back. He survived combat, but he got cancer from Agent Orange, of all things, and that's what caused him to pass away.

So I decided I was going to be a marine to follow in his footsteps. And when I came out of the Marine Corps and I started having all these different health issues and I had high stress or sleep, I had chronic digestive issues, I was not absorbing my nutrients.

Some days my energy was almost non-existent. Some days I could barely even get out of bed. And for somebody to go from being really active, this tough Marine, you know, who can endure and who just has all this energy to do all this stuff, to not even be able to get out of my bed and provide for my family or feel adequate.

It was really a damage to the psyche. But beyond that, my digestive health was still, I think, a major factor in driving these these issues. And then I was told I had celiac disease and I was mal absorbing nutrients.

So celiac disease is this autoimmune condition where when you ingest gluten or proteins that mimic gluten, it can

damage the villi in your small intestine.

The nutrient absorption centers are like these tiny little hair like projections and my villi were being blunted and damaged and I had no idea and they couldn't absorb these nutrients that I was taking in.

And eventually what happened is my body still needed those nutrients to execute its daily functions. So where was it going? It was going into the bones and taking those nutrients out to to serve its you know, to serve the needs of the body.

And that eventually led to osteoporosis. And that was bone loss at a really young age. And osteoporosis, you know, when I was told I had osteoporosis, it was a letter in the mail.

It said, hey, you have osteoporosis, go on a gluten free diet. That was the extent of what you know, that the plan that I had and I realized as I did some research and looked it up that fractures and dependance on medication is what my future was at that point.

And I was scared. Honestly, I was scared. I had no idea where to start or what to do. So I went down this path of reading and research and consulting with people, spending a lot of money trying to figure all that stuff out.

And I started not only was I making progress in my own health, I made this discovery along the way that it is not the 30 year old male that typically is dealing with this or trying to get these answers.

It's the woman, you know, 40 or 50, 60 plus. A lot of times that goes down this path and they're presented with, take some calcium, vitamin D, go for a walk, here's your bone drug.

See you in two years for your next bone density scan. And that is woefully inadequate. And that is the reason why I became a coach, built out a team of credentialed experts, have built a community of over 150,000 people at this point and, you know, have programs that help people build stronger bones.

And that's why I'm so passionate about this, because it's the structure it's going to carry you to an active future. You need to preserve it. You need to strengthen it.

So I love your story. It's so important. And a lot of the Hashimoto's motos patients, they have celiac also. So there is a connection there and how when you're not absorbing things, you're your your body smart, trying to keep you alive, trying to keep things in homeostasis.

And part of that is taking away from the bone. It can be so I think it's so important what you're doing. And I agree with you, it's not good enough. What conventional medicine does.

And I think the frustrating thing is, is some people, they just take the word for it. They're like, okay, I'm fine on this bone drug and all right, like you were told, you just go gluten free.

How Thyroid, Autoimmunity, and Bone Loss Connect

You know, it's not it's not enough. We really have to empower our cells. We have to treat our body like it's important and read and research outside of just going to the doctor.

Yeah, so I love that. So let's talk about the connection between thyroid health and bone health. So, you know, everyone thinks that our organs don't talk to each other or, you know, sometimes we go to an endocrinologist and then we go to another doctor for our bones, you know, orthopedic doctor, and then we go to an ob gyn like, no, they all connect.

They all talk. So how does our thyroid in our bones talk? Well, I think I think the biggest connection, especially if we're talking about Hashimoto's to the some of the biggest connecting factors between your thyroid health and your bone health. Number one would be if we understand any anything that's creating inflammation in the body that can

contribute to and if your bone loss right if you have an autoimmune condition and that is not in remission, right.

If you have you have Hashimoto's and you have put that in remission and something is still going on there. Same thing with celiac disease or any other autoimmune condition, not even just thyroid.

There can be this underlying fire basically in your body that's taking place that's contributing to and fueling bone loss. Part of the reason for that is that within your your bones, bones are not just this like static tissue, right?

They're actually living tissue. And 95% of the the blood cells that are produced in your body are produced within the bone marrow. It's this soft, spongy material that produces 95% of these blood cells.

And these blood cells, they start out as stem cells and they become either platelets, red blood cells or white blood cells based on conditions in your body.

So if you need help with preventing bleeding or clotting, that's where platelets are going to come in. If you need help with sending oxygen to the body's tissues and carrying carbon dioxide away from the tissues back to the lungs, that's where red blood cells are going to come in.

But if you need help fighting infections, healing wounds, anything to do with the immune system, this is a really important part here. Anything to do with the immune system.

That's where white blood cells come in. The cells that break down bone as you class are a form of white blood cell. So anything stimulating the immune system is speaking in the same language as the cells that break down your bones.

So if you have an autoimmune condition, right, that is not in remission. So Hashimoto's could be an example or any of these other autoimmune conditions that can be speaking in the same language as the cells that break down your bone and that can contribute to bone loss.

I think another big factor would be certain medications too for thyroid health. So in terms of either increasing the rate at which bones are broken down or suppressing bone formation, all of those things could be affected potentially by thyroid medication and then I just think to some of the more actionable things that people can can focus on are things that you're actually putting in your body and are those, you know, leading to inflammation, stimulating the immune system, things like that.

We can actually get into nutrition a little bit in in a minute also. Yeah, but that's such a great point. And I've even had patients that were very hyper like graves and they almost have this bone pain because it's speeding up that resorption of the bone.

So definitely, you know, you want to make sure that your levels are in homeostasis, that they're optimal because they can affect your bones, too. So what exactly is osteopenia and osteoporosis?

I know we use those terms a lot in medicine and we'll be talking about it today and how common is it and how you even know if you have it? Because screening actually doesn't start until later.

And sometimes men are ignored. Right. I mean, perfect example. I mean, most most of the time, it's not going to be your young men. Right, that are getting this diagnosis, that are focused on it.

Part of the reason for that is it has to do with part of it is the medical system. And when they're actually going to run one of these tests or approved one to be covered by insurance, which is usually not so your 65.

So that's one issue.

Understanding Osteopenia, Osteoporosis, and Risk Factors

But the other issue is that there's there's different types of osteoporosis. One is called primary osteoporosis. And that is typically occurring in women, you know, typically occurs in women when they reach menopause, they have a decline in estrogen.

Estrogen has a protective effect on bone. When those levels decrease, as they do during menopause, that causes an increase in the cells that break down bone and that's going to lead to a reduction in bone density if you don't do some of these protective things that we're going to talk about.

And it can also then increase your risk of fracture. Now, osteoporosis itself is actually there. It's about 10 million Americans, I would say, that have osteoporosis.

Another 44 million have low bone density. One in two women, up to one in four men will break a bone in their lifetime due to osteoporosis. And for women, the incidence of low bone density is greater than that of heart attacks, stroke and breast cancer combined.

So it is something to be aware of. And I think the biggest concern for most people is what they saw as they saw maybe a family member or their mother or their grandmother or something that happened with them.

This is actually what I hear most commonly is I saw the progression that happened after a fracture and they they want to prevent that from happening to them.

And first, you have to understand what what is osteoporosis? How do you know if you have it? So osteoporosis, it means porous bone. And it's when you don't have enough bone formation, you have excessive bone loss or it's a combination of both of those things.

And when you have osteoporosis, both your bone density and your bone quality are reduced and that will increase your risk of fracture. A bone density scan is what tells you if you have osteoporosis, and that's determined by a scoring system.

So when you get this scan done, you lay it out on the machine, it scans, it generates these scores. And if you have a score of -1 to -2.5, that's considered as your PMA, we would call that low bone mass.

And then if you have -2.5 or lower, so -2.6, -2.7, so on and so forth. That is considered osteoporosis. And the greater the negative number becomes, the more severe that osteoporosis.

And a lot of people, like I said, they're not getting these scans done until their later in life. And I always like to see people getting them done earlier just to even get a baseline of of where your bones are at now, because you may not have built up enough bone in your younger years to you.

And I, before we hopped on this interview, we were talking about, you know, we've got kids, right? And our kids are in this prime age right now where 90% of your bone mass is put on.

By the time you turn age 18 and by the time you turn 30, the remaining 10% approximately fills in. So if when you're younger, you have poor diet, nutrition, you're eating a bunch of candy, drinking a bunch of sugary soft drinks.

If you are not getting the nutrients you need to form those building blocks so your bones from a young age, the calcium, magnesium, the vitamin D and the vitamin K2, those are all important that can affect you reaching peak bone mass if you are not active or you weren't active when you were a child.

Right. If you led a sedentary lifestyle, if you didn't play sports, you weren't moving in these sharp, short, dynamic movements, stimulating those bones, you weren't doing gymnastics or things like that.

All of those things could have contributed to you not achieving peak bone mass if you took certain medications like glucocorticoids, if you which are like prednisone, for example, if you had an eating disorder, if you smoked or drank excessively, all of those things could have contributed to you not achieving peak bone mass and starting with what

I call a full bucket.

And there are a lot of other causes that we can talk about for bone loss. Yeah, it's kind of scary when we talk about kids because look at the pandemic.

No one was getting out and about. We were all eating bad. Well, a lot of people are drinking a lot. So I'm from Ohio. And when our governor would come on, they would call it wine with the wine.

And it was a big joke. And I'm like, let's stop joking about drinking alcohol. It's a joke. It's not okay. But I digress. But the kids thing is very important because if you're not filled, like you said, filling up your bucket and building that foundation, then you're kind of a step behind everyone else.

And it's really hard with nutrition, with kids these days. I mean, a lot of sedentary sitting, all those big Starbucks drinks, all those tops, lots of sugar.

So we really do need to focus on our children's nutrition and leaky gut as big as you know, as with celiac, if you have leaky gut, you have inflammation that's going to affect the bones.

So I love that you brought up kids because most most people listening today, they probably have children or they want to someday. Oh, sorry. I am so passionate about this area, actually.

So like we focus now on people with osteopenia, osteoporosis, that is who we work with and we've helped a lot of people there. My passion also is kids preventing osteoporosis, preventing disease from progressing.

You know, for me, I have young kids also. I want them to grow up strong and healthy. But sometimes it's challenging. Like as the parent, as the grandparent, you're listening to this right.

Right now. And you're like, gosh, I try, I try. It's so hard. How can I do this? Well, some of the ways. Let's even talk about nutrition for a second. Right.

How can we make it's not necessarily about removing all the foods or taking all these bad things out. Sometimes it's about how can we add in better choices or swap things out for better alternatives where it doesn't have to be this deprivation mindset, it can actually be like, Wow, I get to nourish my body with these amazing foods.

So let me give you a few examples, right? Instead of like a bag of chips or something like that that somebody might eat like Lay's potato chips or something like that, you don't want that, right?

That's going to be covered in fast food. It's going to have oils on it that are not good and it's just basically going to break down into sugar. So how could you make a better swap?

You could do kale chips. I love dino kale. Those are great. You can actually pull the leaves off the stem, rinse them off, dry them, use an extra virgin olive oil. Mr.

missed them down, sprinkle a little sea salt on top of them, put them in the oven for about 300 degrees for 10 to 12 minutes or so. Get them a light crisp on there.

Not right before they're brown. You pull them out and they're crunchy like chips and the kids will love them.

Nutrition for Stronger Bones and Family-Friendly Swaps

Right. And that's so simple and basic. Another one would be like a lot of people give cookies and ice cream and things like that for dessert. Why can't dessert be something that still maybe has a little sweetness to it but is not having all these damaging effects to our health?

What we do for our kids is we actually do like we let them build their own organic berry bowls, right? So we put the

fruit out there, we let them make designs with it, cut it up small, build their own balls, and then maybe a little tiny little bit of honey or, you know, a sprinkle of cinnamon or something on there.

Let them get creative and get involved in the process. And then the last part of this, if you're thinking about your whole family, not just you and your kids, but also yourself, sometimes the obstacle that I hear for people is that, well, I want to eat healthy, but my husband, you know, is bringing the junk in the house or, you know, my kids won't eat this, get them involved in the process, get their buy in first.

So you come to them in advance and you say, hey, what are your favorite meals? And then you go online and you find a better, healthier version, right?

So if you're following something like a plan for Hashimoto's and putting that in remission, you may be following more of a paleo type or paleo ish type plan.

You can go find paleo versions of those recipes, get that, Hey, if I made this, would you try and get them to buy in first? And then when you make it, it's not a surprise.

They were bought in and invested upfront. So I know I went off on a little tangent there, but I am so passionate about nourishing our families and our friends too.

You become the shepherd for other people in your life. That is so true and it will catch on. You know, if if other people are seeing that you eat different or you're like, no, we're not going to have a treat here.

We'll have a treat at home, or we'll go somewhere that has like better homemade ice cream instead of just the process stuff. So it is really hard with kids and finding swaps.

So they feel normal at school and have the same thing, but it's a healthier version. Instead of maybe cooked in soybean oil, it's cooked in avocado oil, like for chips and stuff.

So it's hard if you're listening out there, just try to implement one thing a week. If it's a spouse, just swap out. Like if they're drinkin pop, swap it out for old pop or Zeba or something.

So I think it's hard to I've noticed that when people don't see the actual health effects and health consequences or they think they're invincible, they they don't have any motivation.

And I will tell you, you know, I know Kev and I both see it. There are bad side effects to eating those foods, whether it's a fracture, you break your hip, you break your wrist, you get to go under anesthesia, then you're just not right.

There are consequences. And we want to prevent we want to prevent disease. That's what this whole summit's about. Heal your thyroid, prevent disease from happening.

Let's prevent bone loss. And, you know, none of us want to fall and break a hip, right? That's everyone's worst fear. So let's be proactive now is the thing.

Now let's talk about the standard treatment. If someone so if someone would go to their doctor, either they broke a hip and then that had them get a diagnosis of osteoporosis or osteopenia, or they just got their DEXA scan and they're in that category.

But they haven't had a fracture yet. They went to their doctor. What's the standard treatment and what are the pitfalls in those treatments? I would say the standard treatment for the majority of people is going to be calcium vitamin D, go for a walk, take your bone drug.

We'll see in two years for your next bone density. And there is so much more to it than that. Like that is woefully inadequate. And we have to understand that, especially with the let's go with the let's start with calcium, like calcium it is it is a the primary mineral constituent of your bones.

Is it important? Of course, yes, it's important. Vitamin D it's involved in so many processes in your body. It's not just a vitamin, it's a hormone. Right.

So it is incredibly important for your health. Most people know that. Then the last part, we'll talk about exercise more in-depth in just a little bit.

But walking is not going to be enough, right? It's great for your health, but it's not going to be enough, especially to support maintaining bone health and even building bone strength.

And then the last part is the medication piece. And this is the recommendation that people get oftentimes when they go get this scan, they get the diagnosis.

And in a matter of 15 minutes, they have a prescription for a drug that has, you know, a dramatic effect on bone physiology. It is not like taking an aspirin or some other medication.

Right. This is there are important considerations and risks and side effects and short and long term implications of use of using these different drugs.

And that there are two different categories of drugs typically that are going to be recommended. There are anteriores or bibs that are designed to slow down the activity level of cells that break down bone.

And there are anabolic designed to build bone, build better quality bone and build it faster. Any resort device would be your bisphosphonates and your rank ligand inhibitors, so your bisphosphonates would be like your Fosamax, your bone, even your active request.

Those are your bisphosphonates. And then your rank like inhibitors would be like Prolia, the safety and efficacy. Let's talk about bisphosphonates because this is one of the more common ones that people are going to get prescribed.

The safety and efficacy of these drugs is not really well known beyond five years and what's really important to keep in mind is, as you and I are going about our daily lives, doing our daily activities, we're for everybody.

We're starting to get these tiny little micro cracks and micro fractures and damage in our bones. That's normal, right? So you're doing a hard workout.

You're going to move in and directions that you're not usually moving. That's going to happen. And then what happens is you have cells within your bone called astrocytes that sense that damage and they send out a signal that say, hey, there's damage like we need to.

We need to come repair this. And then you have cells called osteo class that receive that message and they come in and they scoop out that damaged bone.

And then right behind it, it's a coupled process. You have osteoblasts that come in and fill in that stronger, healthier bone. When you take some of these medications, you can actually slow down that process too much where you start to accumulate that old, worn, damaged, weakened bone over time.

So even if you take some of these and your bone density scores show as being higher, the quality may not actually be strong, like the bone may actually be stronger.

So bone density is the measure of how much bone you have. The actual mineral content of your bone. Bone quality is the structural integrity of that bone, the microarchitecture how that bone is organized.

Those two things combine to create bone strength. So again, even if your bone density shows higher, that quality may not be that great. And the bone may not actually be stronger.

There are also side effects that come with a lot of these medications. I know that the brain clogging inhibitor, Prolia that I just touched on, you know that if you if you take that medication, you can't just stop it.

If you stop it, it will actually increase your risk of vertebral fractures. So then what you have to do is you have to follow it with a medication just to not have those rare type of fractures.

So and same thing with the the anabolic medications, too. They're just important considerations. And I'm not saying that for every single person I wish I wish I could just say, you know, no medication for anybody.

Sometimes it makes sense. But the majority of the time there is so much more you can do before you get to that point. Yeah, and I think there's a lack of informed consent when patients are placed on these drugs.

And if you dig into the literature, as you alluded to, you're you're building up a bone that's not as strong, it's not as dense because your osteoblasts and osteoblasts aren't working like they're supposed to be.

And, you know, I don't know why we we mess around with so much of like what God intended or what he's to be able to do. And these medications are a little bit nerve wracking because sometimes they're they're put out.

There is the only option. This is all we have. But if you dig into the literature, yes, the vertebral fractures, you know, they're looking at these bone densities, but they don't actually help with fractures.

So it's it's so weird to me that this is kind of just here's a script. This is all you can do. Oh, you have osteoporosis, you have osteopenia. And patients come to me and they're like scared about this.

They're like, I don't want to go on this medication. My gut is telling me I don't want to go on it, but this is my only option. I'm like, it's not your only option.

So it's it's very frustrating. I think especially when we know that we could do better. So that's I'm glad you broke down the actual mechanisms of how these medications work, because this is not communicated in a doctor's office most of the time.

Yeah. And the other piece of this too. So the anabolic those are the other category of medications. Those are the ones that are designed to build bone, build better quality bone, build it faster. Right.

And they can do that as long as there's not an underlying cause, you know, contributing underneath. But again, there are the side effects and short and long term implications of use those drugs you can't take for more than for longer than a certain period of time.

And then when you come off of them, you have to follow them with an end to resort of also just to not lose the bone, you just gain. So keep those things in mind too as you're making these decisions and also understand like, look, medication is over here.

Everything else that you have to do and there's a lot that can be done is over here.

Conventional Osteoporosis Treatments and Medication Concerns

So regardless of whether medication is in the picture or not, you still have to do all of these things right here. And we can talk about what those things are.

Yes. Let's touch base on diet a little bit. What is there a perfect diet to prevent osteoporosis or to reverse it? And it's just this is such a good question because nutrition is essential, right?

It's essential for life. It's essential for healing. It's essential for having the building blocks. We need to build a stronger, healthier body and stronger, healthier bones.

Now, a lot of times when it comes to diet, nutrition, I think everybody needs to understand we're all biochemically and genetically unique individuals.

You're going to respond to different foods and supplements and dietary approaches differently. And also, if you are somebody who you might hear people talk about, you know, this specific superfood is great for this, this and this, that's great.

Make note of those things may be helpful for you, but they also may not. Right? If something creates inflammation in your body, it's not going to be a health food for you.

So when you're approaching diet and nutrition, I always encourage people you're going to have things that don't work out. You're going to have hope that you put behind this one food or this one supplement.

And you know what? Sometimes it's just not going to work. If you can change your mind to just think, approach things with curiosity instead of expectation that disappointment is going to disappear.

I said one more time, if you approach things with curiosity instead of expectation, your disappointment will disappear. So not just with diet, nutrition, but anything else too, that can be really, really helpful because if it does work out, it's a pleasant surprise.

So and then from a diet nutrition standpoint, especially if you've got Hashimoto's right, or you're working through other autoimmune conditions too, and you're trying to put those things into remission, your diet or you have Candida or SIBO or something like that, your dietary approach is going to be adjusted and tweaked then somebody who doesn't have those things.

So keep that in mind as you start planning this out, as you if you are trying to put an autoimmune disease into remission, one of the most important or one of the not most important necessarily, but one of the best sources of calcium that people hear about, which is an important nutrient is dairy, right?

Can I do dairy? What what is that going to look like? Should I incorporate it or not? That's a big question. I again and if you have an autoimmune condition, that might not be the right approach for you and especially cows dairy, if you can't tolerate sheep or goat or something like that, maybe camel milk might be okay, right?

Camel milk or camel milk kefir or something like that could be okay. But again, you just have to kind of test these things to understand. And then if you're consuming any dairy products, whether you're on an autoimmune condition or you have an autoimmune condition or not cultured and fermented would be the way to go.

Right. So it's not drink a bunch of milk. That's not a great approach. I would say focus on things like kefir or a 24 hour yogurt or something like that that is also providing you with additional nutrients and some beneficial bacteria and yeast and things like that.

So that's kind of a note, but dairy is not necessarily for everybody. And then when it comes to nutrition, it's like, okay, if I can't do dairy and I can't use that as a source of calcium, what else can I possibly do?

Well, you could do bone in fish, right? You could do sardines or mackerel or can wild sockeye salmon get these BPA free cans? Right. But get the bones in.

And the reason you want the bones in these fish is because those bones contain all the nutrients that your own bones need in the right ratios. That nature put them in.

Okay. They also contain protein, sardines, mackerel, salmon. They all contain protein. Protein is essential for your bone health. So your your bone structure is 50% protein by volume.

So they need amino acid. So when you consume things like fish or meat or something like that, you're going to get those amino acids. And then the last part of this would be omega threes, omega three fatty acids.

So you get omega threes are like dampeners of inflammation. So anything contributing to inflammation like we talked about that contributes to and fuels bone loss.

So that can be great and then other sources of calcium could be cruciferous vegetables. Also, you could bring in steamed broccoli, steamed brussel sprouts, you could do some collard greens, you could do arugula.

Rugal is one of my favorite, absolute favorite leafy greens. And that one not only has bioavailable calcium, it also has vitamin C, vitamin K and a whole host of other nutrients there, too.

So those are some good ways to start making some swaps and bringing in some other foods. And then I think another big one is, is try to close as many gaps as you can with diet and nutrition first and then handle diet nutrition first, then close the gaps or supplementation if and when necessary. Area That's great advice.

Like I say that a lot like the goal is not to be on a million supplements. The goal is to have a good diet and then add in the supplements as needed. So I love those examples.

Yeah, arugula is so good and I love I love broccoli and kids. Kids usually like broccoli too. So that's good that in the kale chips. Now, I don't know if I could get my kids to eat bone in sardines.

Do you have any tips for that? You know, it's interesting. Like when our when our kids were like when they were still in a highchair, I could get them to do it, but I would drizzle a little bit of primal kitchen dressing on them.

So Primal Kitchen still is for those who aren't familiar. By the way, I have no affiliation with Primal Kitchen. I'm just saying, like, that is that's a good brand if you're trying to get away from dressings or sauces that don't have canola oil or soybean oil as like, these seed oils is the main ingredient switch to something that's like an avocado oil based dressing, and that can help bring some flavor to some of these meals, because that's another thing like just because you have an autoimmune condition or Hashimoto's or something like that doesn't mean your food has to be boring and not have any flavor or life or taste to it.

It still make things taste good and this is just one way to do it. So what I would do is I would just drizzle a little bit on there, you know, get them to try to eat a little piece.

Kids, though, it's harder to get them to eat those things. Right. But I will say for kids, I talked about berries earlier. Vitamin C is actually a really important nutrient for your bones, too.

And I also touched I touched on sugar, right? When you're eating a lot of sugary foods or drinking sugary soft drinks, that's not good. And it actually has a connection to vitamin C in your bones.

So sugar, it's damaging your bone by triggering an inflammatory response.

Diet Strategies for Bone Health and Autoimmune Support

It's reducing your vitamin D levels, it's depleting bone healthy minerals. Your calcium, magnesium, your chromium or copper. But it's also blocking the absorption of vitamin C and vitamin C is key to developing and maintaining a healthy skeleton.

Whether you're a kid, whether you're an adult. Vitamin C is actually remember how I said your bones are like this protein, collagen protein matrix upon which minerals are laid.

Vitamin C is stimulating pro collagen. It's enhancing collagen synthesis and it stimulates alkaline phosphatase activity, which is a marker for bone building cell formation.

Right, which is pretty cool. So on the other side of it too, not only can vitamin C help with supporting and maintaining healthy bones, it can also help with prevention of bone loss, too.

So that's a great one. Berries are a good source of vitamin C if you are. If you only have access to berries in your local grocery store, get organic blueberries or find organic strawberries, you know, raspberries, whatever.

Always get them organic. There was the Environmental Working Group did some studies on this and showed that the most chemically laden foods out there, the most dirty foods out there are your berries.

So do not ever compromise on that if you can if you can absolutely help it or go to the farmer or the farmer's market and ask the farmer, too, you need to ask the farmer, do you spray?

I do spray your crops and understand that upfront so that you're not slowly getting this kind of leak of pesticides into your diet. So berries can be a great one.

You can also go online and find frozen berries that may have a little bit higher antioxidant levels. And and some of those berries would be huckleberries are a great source of antioxidants.

Vitamin C, and then another one would be ling and berries and gosh, grown your berries and a couple other ones. So those are those are some great choices.

And then lemons, limes, those are great sources of vitamin C and then your your vegetables that I would say peppers are high, a source of vitamin C from a vegetable perspective, but they are a nice shade.

And if you have an autoimmune condition and you are not incorporating nightshades, then that's probably not going to be the right fit. So that's when you can bring in those steamed, cruciferous vegetables your broccoli, your Brussels sprouts, your loss senado or dinant kale.

I talked about the kale chips earlier. Right. Those are all can be can be helpful additions. Yeah, vitamin C it is. It's so important not only for our immune system, but yes, bone collagen production.

So all the ladies listening that are worried about their collagen and their skin so important and getting it through food is great and yes peppers it they are surprisingly they're higher in vitamin C than than oranges so and yet don't drink orange juice a lot of sugar, you know, just eat your oranges.

So that's another thing is the fruit juices are really high in the sugar and that's going to affect your bone health. That's going to affect your gut health, inflammation, thyroid, all of that.

So eat that when you can for that fiber. Yeah. So what about exercise? What you I know you were talking a little bit about it's the short explosive movement, since it's important for kids is growing up to be out there running around.

So from a young age to an actual diagnosis of osteoporosis, what kind of exercises are helpful. Yeah. And we can even kind of span let's even just talk about in general, like I said before, walking for exercise is like most people are just told, hey, do some walking, you'll be fine.

If we actually think about that. When you're walking, you're only really working or providing a stimulus to the lower half of your body. What about your forearms where a lot of fractures happen?

Right. What exercises your forearm getting as you're doing walking? It's not much, right? It's nothing. There's no stimulus really being applied to that.

And your bones need two different types of stimuli and they need muscle pulling on bone and they need impact. So when you have muscle pulling on bone, there's a mechanical signal that sending that chemical signal tell those bones to become stronger impact is also important.

That's where I was talking about those those short, sharp movements, dynamic, different directions, those can be really helpful. And then there's different types of exercise that someone could incorporate.

Let's break down each of those. There's weight bearing exercise, which is where your body and your bones have to work against gravity to keep you up right there.

Things that you're doing on your feet and when you them on your feet, they're placing a good kind of healthy stress on your bones. So, for example, walking is a weight bearing exercise and good, right?

Walking, jogging, hiking, running, dancing, gardening. It doesn't have to be like a formal exercise necessarily be weight bearing or it could be pilates, yoga, tai chi, qigong, those kinds of exercises.

All of those are weight bearing, right? So we want some weight bearing in our in our exercise plan within weight bearing. There's also non weight bearing too.

There's non weight bearing exercise. This is where your body and your bones do not have to work against gravity to keep you upright. They are not placing a good kind of healthy stress on your bones.

So this would be the most important ones would be biking or cycling. Right. Especially really long distances. That's not going to be the best thing for your bone health.

But then another big one would be swimming. Swimming is your body and your bones are not working against gravity at all. They're this is the same kind of thing.

Astronauts to deal with in space. And they can you can lose bone density in short periods of time. If you're not using if you're not using it, you can lose it.

Right. So it's not to say if you do like to cycle or ride your bike or you know, you are swimming and you enjoy it, it's not to say that you can't do those things or that you shouldn't ever do those things.

I think that would be a little extreme to say, but don't count them as your only form of exercise, right? Don't get in the pool five times a week, do ten laps, get your cardio in, get out and feel like, hey, my workout is good.

Because if you do that ongoing, you have not given your body the stimulus that it needs to become stronger. You need to incorporate this last piece of exercise that I want to talk about now, which is muscle strengthening and resistance training exercise.

You have to bring this into your plan. So an especially if you're somebody that has Hashimoto's or thyroid conditions and you're not going to want to run really long distances or cycle really long distances and completely drain your body.

Exercise, Protein, and the Stronger Bones Plan

You want to get the biggest bang for your buck in the shortest, shortest period of time and providing a good stimulus to your body and your bones and listen to your body.

Also, don't you don't necessarily have to push beyond your energy levels at that given time, too. So there's a balance there. And when it comes to resistance training and muscle strength and exercise, you can use resistance bands, you can use the weights at the gym, you can use machines that at the gym.

If you're not that comfortable, you're just kind of starting out. You can do that. You can use barbells, you can use dumbbells. And the great exercises to incorporate would be ones work a lot of the major muscle groups, right?

So squats. Squats are fantastic to incorporate deadlifts. I know that sounds intimidating, right? Especially if you're not familiar with working out. But those can be a great addition.

If you have never done deadlifts before. I would not just go watch a video on YouTube and jump right into it. Right. That could actually lead to injury.

But find somebody to understand your body mechanics to help you figure out how to start where you are with the knowledge you have in your current body body steam and slowly progress up to where you're doing it safely and you're providing the stimulus, your body and your bones need to become stronger.

Love that. I love resistance training. I think especially as women age, Hashimoto's patients, bone density patients, we need to lift weights. It's so important to battle sarcopenia or muscle loss as we age.

So it's also good for our hormones, including the thyroid. So I love that you brought that up. And you have protein. Let's even just touch on this because we're talking about muscle, too, right?

You have to have protein in your diet. Be intentional here, right. Whether it's essential amino acids, you're bringing in some collagen peptides you're bringing in if you're on a high like Hashimoto's, right, you maybe you're doing like a barrier, a beef hydrolyzed or something like that.

Whey protein may not be the right fit in that situation. If you do okay with that, that may be an okay addition, but you would probably want to get tested to make sure you don't have a sensitivity to it.

But getting maybe a little more protein in that first meal of the day can be great if you're in the 30, got to be at least 30 grams. I would try to aim for and try to aim for that as a minimum target for your meals throughout the day.

Like that is great for muscle protein synthesis and it's just again, your body, your muscles, your bones, protein and amino acids are the building blocks of everything inside.

Yeah. Get obsessed with protein. I talk with my patients about that. A lot of like got to hit these protein goals, got to hit them first. So I love that you are also encouraging everyone to do that for their bone health too.

So it's really important. Yeah, so important. Yeah. So what does a strong, stronger bones plan look like? Could you give us a little bit more information about someone that's listening and maybe they're worried about osteoporosis or osteopenia?

What does plan look like? Yes, this is a great question because like when I talked about most people, when they're told they have osteopenia, they have osteoporosis, they get a 15 minute conversation that says to do these handful of things, that's not enough.

We know that's not enough. Right. There's more to it than that. It actually takes us a bit longer. It takes us about 12 weeks. Usually when people come through our programs, that's about how long it takes us to teach what we need to teach them.

So there's no way they could fit all that into a 15 minute conversation. So I don't want to fault anybody for the system that they're in and the way that system is designed to not help people achieve their best possible health outcomes. Right.

So but you as the educated, informed, empowered advocate for your health, you need to understand there's more to that picture. So here's the more to that picture.

First part is you have to understand the root cause. Issues and contributors to bone loss and osteoporosis. Do not make assumptions, make objective decisions.

Right. Get know how to have those conversations with your doctor. Know what lab tests are important when those tests and I will say for lab testing even if somebody has a workup done those workups are oftentimes incomplete or missing really important things.

So know the tests that you have to do. The next part is understand what your results mean when they come back. A lot of times things are within a normal range, normal at any of us that have ever been on a health journey know normal is not always normal, right?

You can see normal on a lab test and not feel normal at all. So there may be other things taking place that need to be picked up. You know, you need to know how to do that.

And then the other part of this is diet, digestion, absorption. You need to be taking in the right nutrients, in the right amounts. You need to actually absorb those nutrients.

So if you have overt digestive issues, absorption is almost always an issue. But even if you don't have overt digestive issues, you could still have problems with absorption.

And the third layer is, are those nutrients making it to the cell level? A lot of times, even if somebody is eating healthy, you know, they might not be hitting layer one.

And it's really hard for the rest of those things to line up. So that's the second step. And the third step in the process has to be to now build, right?

You have to build the strength, the body strength, the mind strength, the bone in a way that's going to prevent fracture and injury, not just now, but in the future also.

So you need to reduce your stress. And I'm not talking about just a sigh. I once a day or on the weekends, I'm talking about do you have a plan to reduce your stress?

It is critical for your health and your bones. So cultivate a healthy practice of meditation or prayer or something like that is going to be really important.

Sleep Improve your sleep, prioritize your sleep. If there's one lever that you can pull that's going to have a greater impact than just about anything else. It is your sleep.

Sometimes there are conditions that are not allowing you to sleep. That has to be resolved first. And then we circle back to step one, right? Figure out what are the contributing factors and address those things.

But sleep is a big one. It's pretty well documented.

Resources, Masterclass, and Closing Remarks

If you have poor sleep, it will reduce your bone quality and then optimizing your hormones, getting the right exercise plan in place. Provide the stimulus you need to build stronger bones in a way that is safe and effective, that those things are the most important things.

It's not what's the single supplement I'm taking or what's the device that I can get to fix this? In the world of bones, there are no quick fixes or magic cures.

I wish there were, but there are not. So you have to develop a strategy and a plan to accomplish these things. That's amazing. And it it is it's a lifestyle.

It's not just like you said, it's not a magic fix. And the pills are not magic fixes either. And we see that in the literature. So this is so great that you are out here doing this.

I would love for you to share some upcoming here. You've a master class that's coming up. How everyone could find you if you hang out on social media.

Where where do you hang out at and all of that? Absolutely. So you can always find me at bonecoach.com. You know we've got amazing resources there recipes helpful bone health tips building stronger bones, all that kind of stuff.

You find all that stuff there at Boancoach.com? You can find me on Instagram at Bone Coach Kevin. You find me

on YouTube at Bone Coach and you know, we've got the other social channels, Facebook and things too.

But Bonecoach.com is the best place. We do have a free Stronger Bones masterclass. You can always get access to that. And again, you can find that at our on our website, boancoach.com.

And then I would just say, you know, if you are lost or confused or overwhelmed or even if you know someone like if you're listening to this and you know somebody who needs this help share this with them.

Share this with them so they can get the plan in place because the help that they get now could be life extending, if not, say, life saving for them. So just help them get the plan in place.

And that's going to be the best thing for everybody. Yes, that is so true. And I know so many people out of loved ones that are struggling with this. Kevin, thank you so much for sharing your expertize, your story, and also thank you for your service in the military.

Thank you so much.