How To Prevent And Reverse Osteoporosis Transcript

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Introduction to Bone Health and Inflammation

Welcome to the conquering Chronic Inflammation Summit. I'm your host, Dr. David Jockers. And today, I've got the honor of interviewing the bone coach himself, Kevin Ellis.

We're talking about inflammation, the silent bone loss threat, plus how to prevent reverse osteoporosis. And we're going to go through advanced nutrition strategies for strong bones in a healthy body.

Kevin Ellis is known as the bone coach. He's a Forbes featured integrative health coach, podcaster, YouTuber and the founder of Bonecoach.com Through a unique three step process and a world class coaching program called Stronger Bone Solution.

He and his team have helped people with osteopenia and osteoporosis in over 1500 plus cities around the world get confident in their stronger bones, plan.

His mission is to help millions of people with osteoporosis, build stronger bones, and help our children and grandchildren create a strong and healthy foundation so they can lead long, active lives.

Guys are in for a treat here. Of course, you can check out Kevin the Bone coach at Bonecoach.com. Pretty easy there. So without further ado, let's go into the interview.

Well, Kevin Ellis, the bone coach, always enjoy our conversations. And so we've got to start by obviously this topic of osteopenia osteopenia and osteoporosis really common conditions.

Most people think they're associated with like a calcium deficiency. That's kind of what we're told. or you know, you know, and really, we're told medications are the only solution.

But let's jump into that. What, you know, how common is osteoporosis and osteopenia? And how does somebody know if they actually have it. Well, it's it's pretty common.

Low bone density is is pretty common. But most people don't know they have it. especially if you're you're younger, you're in your 30s or 40s or 50s, you're not getting what's called a bone density scan until a little bit later in life.

Bone density scan would also be called dual energy X-ray absorption geometry. Painless tests, kind of like an x ray, very low levels of radiation. But you lay down on a machine, it does a scan, it tells you your bone mineral density, and then it generates this score.

And the score helps you understand where you fall in this classification system of whether you have normal and healthy bones. We'll talk about that in a minute.

And you've got a score of plus 1 or -1, or someone in there. If you've got a score of -1 to -2.5, that would be considered osteopenia. I prefer to call that low bone mass.

and then if you got a score of -2.5 or lower, that's considered osteoporosis. And the greater the negative number becomes, the more severe the osteoporosis.

How Osteopenia and Osteoporosis Are Diagnosed

Now osteoporosis is. It literally means porous bone. And that's just where you have either not enough bone formation, excessive bone loss, or a combination of the two of those things.

And in osteoporosis, both that bone density and that bone quality are reduced. And that's what's going to increase the risk of fractures. So, this is why bone health is such an important topic.

Because if you think to where you want the end of your life to be and how active you want to be living and how you want to be enjoying your friends, your family, your loved ones, all that and doing all those bucket list adventures that you want to experience.

Your skeleton, your bone structure, is the thing that's going to help you do all those things. So we have to preserve and strengthen it now. And you're right.

You know, it's not just about calcium. There are a lot of other factors that play into this. And one of those factors is inflammation to. Yeah. And I want to go into that.

What are the major causes for bone loss. Obviously you mentioned inflammation. How does that play a role with this. Well there are a couple different ways. So let's talk about some of the major causes of bone loss.

One of them would be, something that causes primary osteoporosis, which is typically the decrease in estrogen in postmenopausal women. Estrogen has this protective effect on bone.

When estrogen levels decrease, as they do during menopause, that causes an increase in the activity level of cells that break down bone. Okay, but there are other causes of bone loss.

We would call these secondary causes of osteoporosis. So this would be behaviors conditions diseases disorders medications and some of those you know are driven by inflammation as well.

So some of those contributing factors could be if you have chronic digestive distress for long periods of time, or you have issues with your gut health, or you have some kind of GI disease.

So celiac disease or Crohn's disease or ulcerative colitis, when we have that gut inflammation and this disrupted gut immune response, we're going to have this altered immune cell activity and elevated inflammatory cytokines in that bone marrow microenvironment okay.

So your bones when people think about their bones they think about them is just these static tissues that hold them up right. And carry them through life.

And they do that and they do a really good job of it. But your bones are actually living tissue. They're endocrine organs. They serve as a reservoir for nutrients.

They give us life. Right. So within your bones you have bone marrow. It's a soft, spongy material produces 95% of the blood cells in your body. And if you need help with preventing bleeding or clotting, platelets are going to help with that.

If you need help with carrying oxygen to the body's tissues, carrying carbon dioxide away from the tissues back to the lungs, red blood cells are going to help with that.

If you need help with fighting infections, healing wounds, anything related to the immune system, that's where white blood cells are going to come in.

Well, the cells that break down bone are a form of white blood cells. So anything that stimulating that immune system is speaking in the same language as the cells that break down bone.

So if you have, you know, 70% of your immune system is in your gut. So if you have those chronic digestive issues that can contribute to and fuel any, any of that bone loss taking place, one of the other conditions or things that can contribute to, inflammation would be if you've got the obesity, high blood sugar, high blood pressure, abnormal levels of cholesterol, all those kinds of things that make up metabolic syndrome, all of that can have a negative

impact on your bone health, can contribute to bone loss as well.

And part of that is because we have these inflammatory messengers like interleukin one, like interleukin six, like tumor necrosis factor alpha, C-reactive protein, all of that contribute to that low grade inflammation and increase the production and activity level of those cells, called osteoblasts, that break down that bone.

Yeah. That's good. So when somebody has something like osteopenia or osteoporosis, they should be thinking not necessarily I'm calcium deficient, but they should be thinking something along the lines of there's some chronic inflammation that's affecting my body, that's chewing up my bones, and I've got to address that root cause now, when it comes to osteoporosis, typically you don't feel it until it's late stage.

Right. So it's not something you just notice or feel. It's kind of like heart disease, a silent killer. But what are some potential signs that somebody starting to develop that, that perhaps somebody could observe from the outside or somebody could observe looking at themselves in a mirror or, or on labs?

Yeah. Some of the things that people. Because you're right, it's silent. You're not going to feel bone loss.

Inflammation, Gut Health, and Major Causes of Bone Loss

Now, you may feel a fracture sometimes that's impetus for people going in to get a bone density scan. Getting checked is they start to have pain in their vertebral bodies, in their spine, or they maybe they have a hip fracture or something like that.

They go get it checked and then they find out they have a fracture. So there could be some kind of pain that you already have that could be an indicator of fracture, but otherwise you're not going to tell that that bone loss is taking place.

but you could have other conditions that are indicators that bone loss is happening. So if you've got, you know, pain in your joints, consistent, like if you have, like I said, chronic digestive distress, if you have been taking certain medications for long periods of time.

So glucocorticoid it's known contributor to balance. This would be like prednisone. So when a person has an autoimmune condition they're trying to put into remission.

Sometimes a doctor may recommend prednisone for them. And I can tell you if you start that medication or if you've taken in the past, it will contribute to bone loss.

You just have to be aware of that. if you take anti-depressants, right, some people go in there like they tell their doctor, I'm not feeling well, and they get an antidepressant, SSRI selective serotonin reuptake inhibitors.

Those are known contributors to bone loss. So you got to be aware of that. if people go into their doctors and they're saying, gosh, I have this warmth in my chest and a lot of pressure and I've got heartburn, that doctor might prescribe a PPI, a proton pump, and her proton pump inhibitors or an H2 receptor antagonist drug.

And these drugs, they're designed to increase the suppression of, or reduce the production of your stomach acid. And you need stomach acid to properly break down and extract nutrients from your food.

like amino acids, like calcium, magnesium, iron, B12. You have to have good, healthy stomach acid levels for that. A lot of times people that are experiencing heartburn, they're going into their doctors when they actually have too little stomach acid.

And so and they may end up on these drugs for these pieces for I've seen people on them for decades, not just weeks. Yeah. It's so medications can be contributors to autoimmune conditions.

Right. That immune component can be contributing factors. And but we also have to understand that it may not just

be the things that are happening right now.

It could also be things that affected our bones when we were much younger. So if you've got kids and you got grandkids, listen up, because this next part is really important.

is your your bones are being formed. About 90% of your bones are formed. But by the time you're 0 to 18 years of age. Okay, so these are prime years to build good, healthy microarchitecture.

Good foundation for those bones. Just think if you if you develop those healthy habits, if you help your kids and grandkids build a strong, healthy foundation during this time, it could add another ten, 20, 30 years of good quality to the end of their life.

So that's why it's so important. That's why all of us, when we're talking about, improving our health and doing these things, it's to set you up for a really good, active future.

So you want those kids to be getting good diet, nutrition, getting enough calcium. Yes. It's important for your bones with the primary mineral constituent, get enough vitamin D, K2, and magnesium.

Those are all great to be incorporated into your kids diets and try to steer away from. We all know this, but trying to steer away from the sugary sweet drinks, the pop, excessive candy.

Make your own organic berry bowls or something like that. Get the kids involved. But that's a good a good swap there. get them active, get them outside.

Not just sitting on the tablets and kind of watching themselves. Get them out and be active. Why do we need people to be active when they're younger? Because when you're younger and you're out moving your body and short, sharp, dynamic movements, you're playing soccer.

You're you're doing gymnastics, you're building that strong, healthy microarchitecture, good quality bone. That's really, really important. So those are just some things to be aware of.

you know, if you got kids and grandkids too. Yeah. Now also as as people start to age, sometimes they notice that they start to shrink, right? They start to, you know, they may have been 510 and then all of a sudden they're five eight could be a potential sign that they're having bone loss.

Absolutely. Could be. Yeah. Absolutely could be. And that could be an indicator of you know, you're starting to get some some compression in the vertebral bodies.

There might be some fractures that are taking place that need to be addressed to. Yeah. So that's a big factor. Also like a slouched posture. You know you might go out and just watch people at an airport.

You'll see a whole bunch of people that are just kind of bent over. Right. And it's like, yeah, that that dowager's hump and it's forward head posture that, could be contributing to that as well, or could be a symptom of it.

Yeah. Yes. And it's so many people. Gosh. You know, and you know, I'm not perfect about it either. Sometimes I'm looking down at my phone. I'm not always holding it up, you know, up there.

But having the awareness around those things and understand in your body and when changes are taking place, having that awareness is so, so important.

Yeah. Super key. Now what kind of labs are you looking at as well when it comes to bone health overall inflammatory load gut health. Great question. So now most people when they're when they're getting told they have osteoporosis, the only test they had or one of the primary tests they have is just this bone density scan.

Well the the errors in that are number one, they're not always 100% accurate. Number two, it's only telling you the

actual mineral content of your bone.

What it's not telling you oftentimes is the quality of your bone. So bone density and bone quality combined to create bone strength. So you may only have part of the picture.

It's an important part, but it's only part of the picture. So you can look at bone quality by if your Dexa scan facility has the add on software called TBS.

Pardon me, trabecular bone score, you can ask the facility ahead of time. Hey, do you have TBS capability on your bone density scan? If they say yes, you can actually get the density in the quality part of the picture at the same time.

So that's one way to understand a little bit more about the quality of your bone. There's also another technology that's more prevalent in Europe. It's making its way in the US right now, but it's called Rems and it's radio frequency echo graphic multi spectrometry technology.

It's an ultrasound that can give you a measure of bone density, bone quality and this fragility score. So that's another way that you can understand your bone quality.

Now those tests only give you especially if you only have one. They can only give you a snapshot in time. What we want to look at is are you still actively losing bone right now too?

So we'll look at what are called bone turnover markers. And this is where we're looking in the blood in the urine. And these bone turnover markers are looking at the activity level of cells that are building up and breaking down your bone.

Warning Signs, Posture Changes, and Bone Health Labs

And if that activity level is off or not where it needs to be, it can be an indicator of bone loss. So my favorite one, at least from a bone resorption or breakdown perspective is called serum CTCs.

So it's a blood test and it's the CT low peptide test. And this test looks at the activity level of cells that are breaking down bone. And that activity level is elevated even really high.

That can be an indicator of active bone loss and a root cause issue that needs to be addressed. And if we're looking at the resorption side of the picture, you want to look at the formation side of the picture.

So the most sensitive marker for bone formation is called p one and P Pro collagen type one and terminal Pro peptide. That's the most sensitive marker for bone formation.

You look at those and you want to see the the those are like leading indicators that you're moving in the right direction. So instead of looking at a lagging indicator like a bone density scan or your bone quality every one year, one and a half year or two years down the road like your doctor would tell you, you would.

You can look at these bone turnover markers every 3 to 6 months and see improvements. And is resorption still really high? Okay. What's causing it? Am I seeing that resorption come down and that and that ratio improving.

So those are like near term indicators that you can look at. and then we would also look at 24 hour urine. Even though it's not looking at the activity level of cells.

The primary mineral constituent of your bones is calcium. Right. So if you're being a lot on a lot of calcium, that can also be an indicator of active bone loss that needs to be addressed.

and some of the other foundational tests I like, I talked about how if you have gut health issues that could be a contributor to bone loss, partially because of the absorption of nutrients that could be a factor, but also because of

the gut inflammation that we talked about can cause issues.

So if you have not ruled out celiac disease yet, you want to get the go ask for a complete celiac panel or get the, you know, all the tests that you want for the the celiac disease.

So Tcga, the total serum IGA, the IGA antibodies, you get all those that can help you understand where you're at from a celiac perspective. And then you would just get a confirmation of that with what's called an upper endoscopy.

Right. And what that test looks at is it looks for it looks for blunting of the villi. Now, the villi are these tiny little nutrient absorption centers in your small intestine.

I like to call them like roots in your soil. And if you have celiac disease and you're consuming gluten, then those villi can become blunted and damaged to where they can't do their job, they can't absorb the nutrients.

So your your roots are effectively damaged and you're not going to get that calcium. Your body still needs it to execute its daily functions. It's going to go to the bones and pull from there.

and then one, a couple other major tests that I would, I would check because I see this actually quite a bit with people. is parathyroid hormone. You want to get, in tact is what that test is called.

And the reason you want to look at that is, sometimes people can have your thyroid gland. So these tiny little rice sized glands are responsible for regulating, the calcium levels in your in your blood.

And sometimes there can be an adenoma in there, a little benign tumor that causes those that, that calcium to be not where it's supposed to be. Right.

And the only way to address that is to get that removed, right. To actually, get them removed so those blood calcium levels can come back down to where they need to be.

So if you have been going to your doctor and you've gotten your calcium levels checked every time you go, go back and look at your results. If it is persistently over ten, you know, for multiple years, that could be an indicator.

You need to go get your done at the same time you do calcium, vitamin D, do it all at the same time. That can be an indicator that there might be something there you want to investigate okay. Yeah.

So so. It could be hyper hypoparathyroidism. Or that primary hypoparathyroidism would be that condition. Yeah. So that's another important one that I see that is often overlooked.

Yeah. It's a good list, of labs to look at. Gives you a lot of information, a lot of data there. Now, what is the conventional approach? When somebody comes in, they do the Dexa.

They find out this person's got low and low. bone density. What what is the medical I guess you can say solution, or approach to dealing with osteoporosis.

Take calcium, take vitamin D, go for a walk. Don't lift anything heavy. And here's your bone drug. And we'll see you in two years for your next bone density scan.

So even just based on what I just shared, you know, in the past 5 to 10 minutes, we all now know that's woefully inadequate. Yeah. So, and the other thing about the medications, too, is you have to understand when you go into the conventional system and, you know, we have a lot of friends that are great MDS that do a lot of great work.

So this is not a bash on, all conventional all the time. But I will say, when you go into that system, the tool they have to help you is, is a pharmaceutical at the end of those conversations.

So just be aware of that when you're going in there. And when it comes to the bone drugs, this is not like taking an aspirin. These bones these drugs have a dramatic effect on bone physiology.

And I liken their use to that old economic adage, there's no such thing as a free lunch, right? There's risks and side effects and short and long term implications of using them.

And there are a couple different ones. And I'll just point out I'll point out one of the biggest ones, which is they're anti resort of medications that are designed to slow down the activity level of cells that break down bone.

And under anti resort divs there are bisphosphonates and rank ligand inhibitors. So bisphosphonates. That's what a lot of people hear about this class Fosamax.

That would be big one. So fast Max re class acts and elbow never okay so the safety and efficacy of bisphosphonates is not really well known beyond five years.

And as you and I are going about our daily lives, everybody listening, we're going about our daily lives. We're exercising, we're doing activities, we're doing chores around the house.

You're starting to get these tiny little micro cracks and micro damage in your bones. That's normal, happens for everybody. And then what happens is you have cells within the bone called osteocytes that sense that damage.

They're like orchestrators of this bone remodeling process. So they sense that damage and they send out a signal and say, hey, we need to become stronger.

And then these other cells, these osteoblasts, they pick up that signal and they say, okay, let's come in and scoop out that damaged bone. And then right behind it, it's a coupled process.

You have the osteoblasts blasts or building. They'll come and build and form stronger, healthier new bone. What can happen is if you take some of these medications, especially for longer periods of time, like multiple years, you can start this.

You can slow down the activity level too much to where you start to accumulate that old, worn, damaged, weakened bone over time. So you may go get a bone density scan a few years from now, you've been on bisphosphonates, and your bone density scan shows that you're stable, or that maybe you've had slight improvement.

But the quality, remember, the quality of the bone may not actually be there. Your bones may not actually be stronger. They may actually be weaker. There may be some, it may be compromised.

So you just have to be aware of that. And there are other there are other considerations with the medications. I won't go to too deep into those. But just be aware that oftentimes when you commit to one, you're committing to multiple medications for multiple years, if not a lifetime.

So just be aware of that. And the last note I'll say is I'm not 100% anti medication I am. It may sound like I am, but I'm pro do everything you possibly can naturally first before ever considering that as an option.

Yeah I agree I you know I think that probably 99% of medication should be used only for short term situations and not long term. While you get and really try to focus in on finding and addressing the root cause factors.

When it's done like that, you get less of the side effects. You get more of the benefit of the medication when it's just take this medication. How long do I take it, doctor?

the rest of your life. Right? Then you're going to end up with the side effects. You're really not going to get better. At best, you're going to kind of slow down the progression.

And ultimately, the longer you take these things, the higher risk of getting side effects of them. And I will I want to add one other note in here, because I would bet some people listening knows somebody who's on this other medication too.

So the other anti resource active is called it's a rank lag inhibitor. It's called prolia. And prolia is another drug that's designed to slow down the activity level cells that breakdown bone and give you a little bump in your bone quality to, well, when you go on this medication, if you attempt to come off of it, especially turkey, it can increase the risk of vertebral fractures.

So what has to happen, especially if you've been on this for a long time, is you cannot just stop. You can't just stop it because you'll have vertebral fractures.

So you have to then follow it with an anti resorption medication.

Conventional Treatments and Medication Risks

And if you've taken more than three rounds of this prolia, you can't just take any bisphosphonate. You have to take the stronger one which is called Re classes, an IV infusion that lasts a year or more.

It's running through you and can have some nasty side effects with it. And it's a strong it's a strong drug. Right. So you just again that's what that's the only thing that's going to be able to help shut down that potential rebound effect.

And the the risk of vertebral fractures that you have. So most people don't get that education in a ten minute conversation with their doctor before starting that medication.

Yeah for sure. I mean, it's just an important consideration. You mentioned a number of different medications that can be main contributors to developing osteoporosis, osteopenia earlier on, if you were to take a acid blocking medication for a week, that that alone is not going to cause osteoporosis.

Osteo Malaysia. But we're osteopenia. But if you take it for ten years that could. Right. And so that's that's the same thing. It's this idea that it should be short term as short term as possible.

I get get an address. The root cause. Now let's talk about nutrition factors right. Obviously we've mentioned gut health and how big a role that plays.

What what are some of the best nutrition strategy guys and best foods people should be focusing on when it comes to building strong bones? Well, your bones are 50% protein by volume, so they need amino acids.

Amino acids are the building blocks of protein. So I know that if if some people were to go search Google, you might find that, oh, high protein diets are going to cause bone loss.

Well you need protein for your bones, right. That's so you need to be getting I always tell people if you aren't going to sit there and just measure how much protein you're eating every day, aim for 30g of meal is a good minimum or a good solid starting point, and then go from there, right?

Make adjustments from there. So getting good healthy protein, what do those proteins look like? Well, the things that, doctor doctors I talk about all the time.

Right. Good. Good quality organic grass fed meats if you can. Wild caught fish. you can bring in chicken. You can bring all, all these other things in what makes sense for you, what makes sense for your family and your budget.

of course you take into consideration. But good, lean, healthy proteins, healthy fats too. You have these fat soluble nutrients that you want to be able to take in and absorb and be a part of your body.

Use them vitamins A, D, E, and K. They're all fat soluble nutrients, so we want to get good, healthy fats to go with them. So, avocados, avocado oil, butter, grass fed ghee.

coconut oil is a great one too. So a lot of good, a lot of good healthy fats that you can be incorporating as well. I love berries also. So one of the reasons I love berries is that they're a great source of vitamin C and vitamin C.

I kind of mentioned that your your bones are this collagen protein matrix with minerals kind of laced into it. Well, vitamin C stimulates pro collagen, enhances collagen synthesis.

And for people that have higher intakes of vitamin C, they're going to have less fractures and stuff long term. So that we all know that vitamin C is great for all kinds of other benefits for your health.

It's also good for your bones, too. So you don't have to go find, the rare camu camu berry or, you know, whatever vitamin C berry, Amazonian berry there is out there.

If all you have access to is what's local in your store, and you get some organic blueberries and maybe a couple other types of organic first. That's great, right?

That's great. And it's realistic for you. Go ahead and take that. Or you're incorporating citrus fruits, lemons and limes. those can be good additions as well.

And then one of my favorites, I you've probably heard me talk about this arugula. I love a good one. Yeah. So it is same cruciferous family of vegetables is broccoli.

And kale. It's rich in vitamin C. potassium. It's a great source of bioavailable calcium for plants. And it's low oxalate to low oxalate grain. so for those people who have issues with kidney stones or they have chronic digestive distress, or you got issues with joint pain, that could be an indicator that you've got some oxalate issues, or you're going to have a hard time breaking down and degrading that oxalate.

So probably swap the spinach for that arugula. It's going to be good. Good. Yeah. And the other thing about arugula is a bitter green. So a lot of times when you have oxalate issues or gut issues you have poor bile flow, a poor stomach acid production, and both those submitters like arugula, like parsley, some some of these types of things, ginger can help stimulate that.

So you get a lot of a lot of good benefits there. Yeah, I love that. I mean bile is so important right. Produce liver restore in the gallbladder. When you eat a fatty meal it's going to be pushed in that small intestine.

Help you break down and emulsify those good fatty fatty acids that we talked about to help you absorb those fat soluble nutrients, vitamins, aid and k.

So, yeah, that's incorporating better foods is very important. Yeah, yeah, yeah. Any other foods? Are you a fan? oh, I know you. I know you love sardines. Right in the can of.

I love sardines. And but now see? Now see, for me, I my background being in the Marines and food was more, it is more it was more sustenance for me. Right.

It was just the thing you did to get to the next thing. So I know I can go eat a couple cans of sardines right out of it and be just fine. I know a lot of people can't do that.

So, yeah, they or they need something else with it. So you can you can make like a if you're trying to incorporate sardines to get the protein, to get the good omega threes that are like dampeners of inflammation, and to get all the minerals in the right ratios that nature put them in.

So especially for people who have an autoimmune condition, they're trying to put it into remission and they can't incorporate like a good grasp fed for.

Or they they're trying to incorporate other bioavailable sources of calcium that aren't dairy, these sardines and mackerel that have the small bones in them that are really soft, those can be good bioavailable forms of calcium.

So that's that's one of the reasons why I think you and I both really like these, these, smaller fish is because you get three great things in one. So if you're having trouble figuring out, well, how am I going to how am I going to incorporate these things?

You could drizzle a little more kitchen dressing on top of them if you want.

Nutrition Strategies for Stronger Bones

That's got good, healthy avocado oil and that soybean oil and all that junk. You don't want that. Or you could take an avocado and cut up some pickle and maybe a couple other things and make a little make a little salad out of it, like a sardine salad that can actually be sprinkled with a little bit of, sea salt.

Here I am, too, Chef Kevin. Yeah, laying out some good rest. You can even do, like, a stuffed avocado. Yeah. Mercado. Yeah. Dice up. Maybe some tomato or something like that.

Yeah, kind of stuff the sardines in it. Yeah. You can do a little sardine paté where you blend it with some garlic and some other to help. Help, freshen it up.

But just understand, when we're talking about foods, you don't have to look at it as just the food, right? It could be what the food becomes, what the food's a part of.

And that's how you can start to incorporate these into your plan. So you still get all the benefits, but maybe you add in some creativity. And one thing I'll just say, and this is just a general note that I share with people about when they're trying new foods or they're trying new supplements.

I know, especially when people are on on a health journey and they're struggling and they put a lot of hope and faith into the things that they're doing.

And sometimes those things don't work out. and sometimes a lot of times they do, but sometimes they don't. I always tell people to approach things with curiosity instead of expectation.

And when you do that, your disappointment will disappear. So approach things with curiosity instead of expectation that disappointment disappear, and it just makes the journey a little bit easier and more enjoyable to.

Yeah. So as you're incorporating these foods, try to be curious how your body's responding to those. Because even you know, we can we might mention ten great foods and there might be 1 or 2 that you don't respond well to right.

And so you have to personalize this for yourself. just because these are foods that 80 to 90% might do well with, you may not. you, you nailed it. I mean, right, so people go on Facebook groups and they'll hear about the superfood, right?

The, goji berries or, you know, whatever it is, and they'll hear about these superfoods and they'll, they'll say, oh, this is this is it. This is the thing.

And they start taking it. Well, if it creates inflammation in your body, it's not a super computer. Health food. So such a great point to be aware of.

Yeah. Super key. Now a couple other foods when I think about bones, a couple others that jump in my head, I want to see what your thoughts are would be sea vegetables right?

Seafood in general, right, tends to be very mineral rich. What are your thoughts on that? Yep, totally agree with you. Incorporating seafood is great and it doesn't just have to be, you know, the sardines or the mackerel.

It could be shrimp. It could be, other kinds of fish. Now, now, tuna is a tends to have more mercury and things like that. But there are some brands that I have found that are very low mercury and tested.

I think it's called safe catch. Maybe. So if you're going to incorporate those kinds of seafood, make sure that the testing actually shows it doesn't have heavy metals in it.

but yeah, and the. Albacore is the larger one that's going to have be higher on the food chain, more mercury than the chunk light. It's actually the cheaper one.

In this case, the chunk light is actually lower in Mercury. Yeah. Yeah. But I love seafood I love incorporate seafood. So that's a good one. yeah. And then I would say collagen is another great addition to love incorporating collagen.

and then anything that's rich in vitamin K2 is also great for great. And some of those foods, if you were to try to incorporate beef liver is one of them.

grass fed ghee and butter, dark meat, chicken pastured egg yolks, emu oil of all sources. That's that's actually a source of K2 Mk4. And then K2 Mk7 would be fermented foods.

Sauerkraut. Kimchi. Natto is one bacterial fermentation in our guts is actually another source. But the reason why vitamin K2 is so important is because it activates ostia calcium and matrix GLA protein.

And what this does is it makes sure that that calcium that you're taking in, it's not going to the soft tissues like your kidneys and your arteries. It's going to your bones to help them become stronger.

And that's exactly what you want. Right. So yeah. And we don't we don't have an RDA or anything like that or you know, an amount of K2 at this point hasn't been hasn't been studied in now in that way.

Not that the RDA in general for any of these nutrients is enough, but, but there's really no recommended daily allowance for it. And if somebody is dealing with bone loss like it, would it be wise for them?

Obviously they want to check their vitamin D levels. But I know, you know, a lot of there's a lot of vitamin D, vitamin K2, supplements, magnesium. What are some of the top things that they should be looking to include as far as supplements go?

Yeah. Supplement. From a supplementation perspective, K2 is probably one that's that you're going to benefit from supplementing. So if you're supplementing with K2 Mk seven, get something that, can get you to the 90 plus micrograms, maybe 200 micrograms.

You know, some people may your needs your needs may be higher than that. If you're looking at the MK four side, from a from the research perspective, the Mk4 has actually been used as a treatment for osteoporosis in Japan was 45mg.

And it was, you know, 15mg three times a day. And that that is not saying that that's necessarily the recommendation for every single person. But, those are just you're probably going to want to supplement with MK four.

It's like it acts like a vacuum cleaner, almost like pulling calcium into the bones. Right? Just increasing that gradient, getting the calcium in. Yeah.

And then one of the other ones that you mentioned that is so, so important I mean, a lot of us talk about it for other health issues and for sleep and all kinds of stuff.

But magnesium is so important for your bones. So, we did talk about calcium. That is the primary mineral constituent of your bones. I always tell people, try to get as much from your food first as you possibly can, and close the gaps with supplementation if and when necessary.

Don't exceed 500mg a day and supplemental calcium. and you have to understand to as your calcium and vitamin D intake increases, so too does your need for magnesium as well.

So magnesium is important for your bones not just to help with the ratios, but also remember I said, when you're taking in food, you're breaking down that food specifically protein.

You're breaking down that protein into amino acids. Right? That's the building blocks of things in your body. In order to rebuild anything inside your body, you have to have magnesium to do that, among many other functions.

But that's one of the most important ones, too. So, I'm a big fan of magnesium and supplementing with that as well. Yeah. Super good. So a lot of a lot of really helpful suggestions here.

Helpful foods focus on labs gone through a lot. guys you can check them out. Bonecoach.com or he has got his let's see is stronger bones plan. Right. And you guys have helped people all over the world with the stronger bone solution.

So definitely check that out. Kevin, any last words of inspiration here for our audience? I would just say, you know, you don't have to know where every single step is.

Place day one. You just have to know where you want that path to lead. So follow the vision for that. What does that look like for you? Is it you playing with your kids and your grandkids when you're, you know, seven years old?

Is it you going on those bucket list adventures and doing the things with your family and being active and not being in pain? if you are, if that's what you're holding is your vision, keep moving toward that.

Right. So, you don't have to know where every step is. Place day one just follow the guidance. Keep making progress. Keep moving forward. You'll get there. Awesome. Great words.

Inspiration there. Kevin, thanks again so much for sharing your time and your expertise here with my audience. I know people are going to love this guys.

Definitely check them out. It's bonecoach.com and he has got his stronger bones solution. So be sure to check that out. Thanks again Kevin. Everybody be blessed.