Introduction and Speaker Background

Hey, everyone. Welcome to this episode of the Reversing Type 2 Diabetes Summit 2.0. I am your host, Dr. Beverly Yates, ND, and it is my distinct honor and privilege to have Kevin Ellis known as the Bone Coach, being the person who talks to us about the overlap between osteoporosis and diabetes.

Some of these connections are not obvious, but they are so mean, is pervasive, and a lot of the people that I worked with who have diabetes or pre-diabetes, sometimes they have osteopenia because they have osteoporosis, other kinds of concerns like that.

So Kevin, welcome to the episode. Dr. Beverly Thank you so much for the introduction and I'm glad to be here and I'm looking forward to this. Yes, absolutely. Absolutely.

Would you please give our audience a thumbnail background overview of yourself in your own expertise because you have such a personal relationship to all of this?

Yeah, of course. So my background with osteoporosis all started with my own issues, with my health and bone loss at a much younger age. So I had high stress, poor sleep, chronic digestive issues diagnosed with celiac disease, mal absorbing nutrients for many, many years, and that the malabsorption nutrients eventually led to bone loss.

And that bone loss led to osteoporosis and a diagnosis right around 30 years old. And I was scared. I was worried. I had no idea what I needed to do. And I just I had lost my father at a young age, and I didn't want to put my kids in that same position.

So I did a lot of research and reading, you know, got the right plan in place, was building stronger bones, improving my health. And then I decided I wanted to help a lot of other people with their health.

Like a lot of us in the health space, we see a need and we decide we want to help other people. And that's the path I went down. And at this point today, we have, you know, a couple hundred thousand people in our community, thousands of people that have come through our Stronger Bones Programs.

We've got credentialed team members on our team that help people build stronger bones. And it's just been an amazing journey. And I love helping people and spreading the message about the importance of bone health.

And there is a connection between bone health and type 2 diabetes. So absolutely. All right. Thank you so much for sharing your background with us in that personal part of your journey.

You know, it's so interesting about what attracts us to health and why we care about it. And we have it as our career in service of others. Right. And what they need. So let's dive in here.

How does Type 2 diabetes issues with prediabetes, blood sugar control, how do they impact bone health and potentially contribute to osteoporosis and osteopenia?

Well, there are a few ways. So if we're talking about type 2 diabetes, that itself can have a direct impact on bone metabolism. But then also it could be certain medications that people are taking to help address type 2 diabetes.

And then it could just be other complications maybe from falls or things like that. So let's start with some of the the specific impacts of having high levels of blood glucose on an ongoing basis and what that does and can do to your bones.

One of the most important things is that it can actually damage the kidneys. And when it damages the kidneys, you

can have a much harder time. RE Absorbing calcium.

Calcium is the primary mineral constituent of your bones. So that's one of the important ones. High blood sugar is also increasing inflammation. And that's not going to be good for our bones either, especially long term.

That can lead to bone loss. It can actually stimulate the activity level of those cells that break down and reduce our bones.

How Diabetes Affects Bone Health

One of the biggest issues with blood sugar is that the sugars can eventually bind to proteins and form what are called AGE advanced glycation end products.

And these are deformed proteins are not working like normal proteins. And I think one of the most important things to understand is that your bones most people don't know this.

Your bones are 50% protein by volume. So we have to have good quality protein and these deformed age proteins can be replacing that healthy collagen protein in our bone development.

And that just over time, even if you have what would look like good bone density, you could actually have really poor bone quality, which is the structural integrity of that bone.

And that's why there's not a surprise that we see. We've got meta analysis showing type 2 diabetes increases the risk of hip fracture by up to 210% and other fractures by up to 120%. Wow.

And what I was saying there is that it can be misleading because people with type 2 diabetes can see an increase in their bone density on that DEXA scan, the bone density scan.

But the DEXA is not showing that bone quality which could be compromised for what I just talked about above. So those are some those are some of the main connections right there between the two.

Okay, great. So thank you for leading off with that. So let's unpack that some because I think that there's areas where there will be some confusion or people will be like, Wait, what?

I thought the DEXA scan like the gold standard for this, right? So it's almost like it's a quality versus quantity issue. You know, think of some other topics like sleep, etc..

So we're talking about bone health. How does someone assess bone quality? And then the next thing I will ask you, how do they advocate for themselves to be sure they are assessed correctly?

Yeah, of course. This is a really important thing because when most people are told they have issues with their bones or they have osteoporosis, the only piece of information they have at that time is their bone density scan.

Now, this is a painless test. It's very low levels of radiation, but you lay down on a machine, it scans your body and it tells you your bone mineral density, the actual mineral content of your bone.

So quantity, right? What it doesn't usually tell you is the quality, the structural integrity, the microarchitecture, how that bone is organized. Those two things combine to create your bone strength.

So oftentimes you only have part of the picture. Now, the way you find out if you have good bone quality or what your bone quality is, is you can actually ask for a test called TBS Trabecular Bone Score.

Call the facility ahead of time. Ask them if their bone density scan has this TBS capability and trabecular bone score. It's an add on software to DEXA, and it can give you that quality part of the picture.

So that way you get the quantity and the quality at the same time. Another tool that is more prevalent in Europe right now, which is not surprising, but it's having a lot harder time here in the U. S.

getting a foothold is called REMS Technology Radio frequency echo, graphic multi spectrometry technology. And this is found in a tool called Echo Life.

And the reason they're having a challenge getting this in the U. S. is they can't get a code for it, which means if you don't have a code, the reimbursements are challenge rates or the doctors aren't going to be using them in their offices.

And that's the biggest challenge right now. The code will probably come and we may see in a couple of years that this technology is more out there, out there, more in the U. S.

But the reason I like this is that it gives you it's an ultrasound that tells you your bone density, your bone quality, and gives you a fragility score that predicts fracture out about five years.

So it can be a really, really helpful tool that's noninvasive. So keep your eye out in the next couple of years because that could be another one that comes out that we see more of.

That's so important. Thank you for sharing that. So, you know, here at the Summit, we're giving people look ahead. We're also looking at the present moment like, what can we do right now, wherever you might be around the world?

And since this is an international audience, in some places, people will already have access to this REMS technology and other places might be looking for it.

And I think if we advocate for it, maybe that will speed up getting the ICD-10 or ICD-9 billing codes for insurance, at least here in the U. S., because without the codes, like you said, if doctors can't bill for it, they're not going to do it.

That's just the reality of it. So good to know as we look ahead. So while we're here and we're trying to assess this, these things, what is it in particular that patients can do that might help advocate for getting access to this technology if it's available?

Like if they go to a place locally for them, maybe it's a medical school or research center, Is that a possibility? Would that make sense? I think in the U. S.

right now, there are only maybe five or six, maybe a hand full of places that actually have this technology. But I actually just met with some of the people on their team recently.

And I you know, I was listening to the challenges they're having and yeah, the patients need to be going in to their doctors requesting asking about this.

And that's one way that we can get to see more of it here in the U. S. But if you can't get access to it, you can still get a bone density scan. It still gives you part of the picture.

You can still ask for TBS technology. Not all facilities have it, but you can still get that part of the picture if possible. And then the other part of the picture that I think would be really good.

And this is a diagnostic test that just about anybody should be able to get from their doctor is today is called the CTX test, the serum CTX.

Assessing Bone Quality Beyond DEXA

That's a bone turnover marker test that looks at the activity level of cells that are breaking down bone. So if you have type 2 diabetes or and you're trying to figure out, okay, what's going on with my bones to you can ask your doctor for this test and you can see is the activity level of your cells that are breaking down bone really high or

elevated.

If it is, that can be an indicator of active bone loss. And we need to go about addressing the underlying issues, which is obviously why you're here on this Summit with Dr. Beverly. All right, great. Thank you for that.

You know, it's just always helpful for people to understand that they really have more options and that the one thing they've been told that DEXA scan maybe isn't enough, whether they have a family history of it or they are already experiencing the signs and symptoms, or they just want to be proactive because, you know, one of the things I really enjoy about your messaging and the work that you do is you consistently talk about having an active future.

And I think a lot of times if people are worried about fracture of the bone and things like that, that they get less and less active, which is absolutely the opposite of what you actually want in order to keep your bones healthy.

Absolutely agree. A lot of times when people are told they have osteoporosis, the the same message they get from their doctor is at the same time is just do some walking or you should eliminate all the weights that you're doing or only do the really light things or don't even put a backpack over your shoulder.

This is what people tell me just about every day. And I feel like that is that is just not the best advice to be giving in these situations. Your muscles and your bones.

They need a stimulus to become stronger. And, you know, unless you're at a really high risk for fracture, eliminating those weightlifting activities or resistance training, that's not what you want to do.

So your your muscles and your bones need different types of stimuli to become stronger. Your bones specifically need muscle to pull on bone so that you've got this mechanical signal that sends a chemical signal to tell the bones to become stronger.

And then you need impact also. So how do you get these forms of exercise where you would do weight bearing exercise and that is where your body and your bones work against gravity to keep you upright? There are things you do on your feet.

So should you be walking every day? Yes. Should you be walking after your meals? Yes. That's a great thing to be doing, especially to lower that impact of blood sugar after the meal.

But then also, you're also need that for your bones, too. So this would be hiking, jogging, running, walking, could be planting with the kids or the grandkids out in the yard.

Could be gardening. You know, it doesn't necessarily have to be formal exercise, but it could also be yoga, Pilates, tai chi, qigong, something like that.

Another form of exercise is called non weight bearing exercise. And this is where you're not providing that stimulus that your bones need to become stronger.

So this would be like swimming and cycling, you know, maybe cycling, swimming more so than than cycling. But it's not to say swimming is bad and you should never do it if you enjoy it, if it makes you happy, keep doing it.

But don't count that as your only form of exercise because you're you're not working against gravity. You're not providing any stimulus there. So you need to incorporate this last form of exercise, which is called resistance training and muscle strengthening exercise.

And that's where we bring in maybe it's barbells or dumbbells or I really like variable resistance bands, right? So you their variable resistance bands and then or it could be the machines that you use in the gym.

Maybe that's for your comfort level. Is that so? Using those tools, getting to where you're doing proper form in like a 5 to 10 repetition range can be really great.

And then some of the exercises that I really like for muscle and for bone are squats are great one, deadlifts are another one. Those sound terrifying.

I know, but they don't have to be. If you go to a personal trainer, you get your body mechanics right. Those can be a great addition. And then overhead presses can be another fantastic one as well.

All right. That's so, so great to know. Thank you for detailing that out. You know, when I think about this conversation and what will best serve our audience, let's continue to go down this path. Right.

So when we think about these management strategies, really for both the intersection of osteoporosis and type 2 diabetes in particular, things that could be positively or negatively affect osteoporosis or maybe have a neutral effect, right?

When you talk about things like squats and lifting and all, we know that they're going to help your blood sugar because active working muscles are blood sugar sponges.

This makes sense. It's also building your bone. This is powerful combination. You're getting two beautiful things done at once. Right.

Exercise for Bones and Blood Sugar

And also, I think the third thing you could add in there would be the mental health aspects of things that uplift our mood and make it more likely that we will care for ourselves.

I'm wondering if there are other management strategies that also can either positively or negatively affect osteoporosis and diabetes concerns. There are there are two big ones from a lifestyle perspective, and I know you and I are very aligned on both of these sleep and stress, Right.

You're you're an expert in helping people improve their sleep and their stress. And we both know this plays such an important role. And your blood sugar and your bones, too.

So sleep is important because that's the time when your body, your your bones, your cells, your tissues, they're repairing, Right. So you have to be getting good quality sleep.

There is there's good documentation that shows if you don't have good quality sleep, that will reduce your bone quality. So that's that's a great starting point is how can you create an evening routine where within an hour or two before bed you're not looking at screens, you're slowly winding down the day.

Maybe you didn't have a big, big meal. You know, within a couple of hours of going to bed. Those kinds of things can all help to make sure that you get good quality rest and sleep throughout the night.

Another thing is that and I'll give you a personal one that I do every night, I actually use something called intake or some people use no strips or breathing strips out, breathe through their nose.

At night I use something called intake, which no affiliation, just I really like this thing. And you put these tiny little magnets on the side of your nose and it actually opens your nostrils up a little more to help you breathe through your nose better at night.

So that's another great one. And then from a stress perspective to stress has a negative impact on our bones as well. We already know that it impacts your blood sugar in a not so favorable way.

It does the same thing for your bones as well. So we need to manage our stress, make sure we we are either cultivating a healthy gratitude practice, meditation practice, maybe doing some breath work or something like that.

All those things can help with with your stress response. So those are some things that can have a negative impact

on bone if we're not doing them correctly.

But if we move them in a positive, positive direction, we can actually have a good impact there. And then from a downside perspective, I think we can also talk about medications too, if you want to go that route.

Yeah, that was my next question for you, because there's some commonalities and I know that some of the osteoporosis and osteopenia drugs terrify people and they hesitate to use them because of the side effects.

And when it comes to type two diabetes, there's just a whole host, but there's usually broad categories of prescription pharmaceuticals that can help with blood sugar.

But the bottom line is people still need to do lifestyle stuff. This is the part where usually they don't get the support of the clarity. They'll take it away.

Talk to us about the medication side of this. You know what's so interesting about what you just said, though, I see this all the time to is that a lot of times people see the shiny thing or the complementary technology or the single pill or the superfood, and they think that that that's the thing.

But really the thing is the plan. A lot of times we just need to start with some of the basic lifestyle stuff or, you know, the foundational stuff that you, you and I talk about all the time.

That's the stuff we need to start with. And then we can add in these complementary technologies and extra fancy things later on. So that's just a note, a little note there that I always like to mention.

Medications. So there are medications for bone health specifically, and there are different categories of these medications. There are anti resource actives.

There are anabolic. And to resort to medications are designed to slow down the activity level of cells that break down bone. Can they do that? Yes, of course they can.

But there are risks and side effects and short and long term implications of use of using these medications. Earlier, we were talking about bone quality.

Well, within anti resort divs, there are these medications called bisphosphonates Fosamax free class act and Elbaneh about the safety and efficacy of these drugs is not really well known beyond five years.

And as we're all going about our daily lives doing activities around the house or doing that great muscle strengthening exercise that we just talked about, we're starting to get these tiny little micro cracks and micro fractures, arm bones.

That's a normal process, happens all the time for all of us. And then what happens is we have cells within the bone that sense that damage and they send out a signal and these other cells come in and scoop out that damaged bone.

And we have cells right behind them called osteoblasts that come build in and stronger, healthier new bone. When you're taking these medications, especially multiple years, you can slow down that process too much to where you accumulate that old, worn, damaged, weakened bone.

So as we talked about quality earlier, even if your bone density scan shows as being higher or stable, the quality may not actually be the bone may not actually be stronger, maybe weaker bone.

Right. So that's an important note that a lot of people just don't realize. And then from a the other perspective would be anabolic medications, which are medications that build bone, build better quality bone, build it faster.

A lot of times these medicines are recommended to people that have already had a fracture. They have really poor

quality bone and they've already fracture maybe multiple times.

This would be for teo, tim, loss of entity and those medications you can only use for a certain period of time. And then you have to follow it with an anti resorption medication just to not lose the bone. You just gained.

The reason I'm giving you this overview of these medications is when you're in a 15 minute conversation, you get told you have osteoporosis with your bones.

You're not getting what I'm teaching you right now. You're getting take some calcium, take some vitamin D, go for a walk. Here's your bone medication.

We'll see in two years for a bone density scan. And that's not enough. There's more that you can do. And you have to know that once you commit to one medication, it may not just be one medication, it may be multiple medications for many years or even a lifetime.

So just keep that in mind as you're making your decisions there. That's on the bone health side. Those are the typical medications that are recommended, the bone health side.

Now, if we're talking about for type two diabetes, some of the medications, how do they impact bone? I'm sure your audience would be really interested in things like metformin and sulfur is they may actually slightly decrease fracture risk to CDs and gliders.

Owens may actually increase fracture risk and then some of the other drugs GLP one medications ozempic will go B, they can cause a decrease in muscle mass.

They can decrease bone density and that's going to lead to Sarcopenia right? And Sarcopenia is where we have that loss of muscle mass and strength and function as we age.

Sleep, Stress, and Medication Considerations

So we just have to be aware of the impact of some of these things that we're incorporating into our plan. All right. So Kevin, let's continue talking about these drugs.

You know, one of the things that's so interesting with type two diabetes and pre-diabetes is a lot of times people really resist the idea, at least initially, sometimes of taking a medicine and they want to do whatever they can on the lifestyle side, but they almost never get the full picture.

They don't know that nutrition, that stress, that sleep meal timing, along with exercise and strength training, those five steps right of the protocol, it's essential in order to have blood sugar control.

And all of those things are going to help their bones. Right. Are there any other things they need to look out for in terms of medications, things that both can help with osteoporosis and blood sugar issues or maybe could be a confounding factor?

I mean, I would say those the ones we just talk about, those are probably the biggest ones that we would that we would touch on. Another one I would say is and this is definitely an individual situation, but it would be bioidentical hormone replacement therapy and its potential to be incorporated into somebody's plans. So as we when we talk about bone loss, there's primary osteoporosis that's typically related to a decrease in estrogen.

In postmenopausal women, estrogen has a protective effect on bone. When that decreases, we can see an increase in the activity level of cells that break down bone.

Then there is secondary osteoporosis. That is where the bone loss has occurred because of the medications, diseases, disorders, conditions, all those kinds of things, even lifestyle factors, all of those things are those secondary causes of bone loss and contributor.

So we already know that type two diabetes can be one of those secondary factors, but we also know that hormones play an important role in this picture too.

So if there are hormone imbalances or you're right at the point of menopause or post menopause, you just have to be aware that that decrease in estrogen is going to, you know, in sometimes rapidly accelerate bone loss.

I've seen it. I think it depends on the individual, too. Some people have a slow taper off where they have like tapered bone loss. Other people have very precipitous bone loss.

That happens within the couple of years after menopause. So talk to your your physicians about bioidentical hormone replacement therapy. Estrogen can help prevent bone loss, testosterone, progesterone, DHEA can help with bone building early. Makes sense, right?

When we're in our youth, we have an abundance of these things and we're building things up. And since a lot of us are living longer, you know, one of my taglines has been live long and live well, I think this is a way to invite people to have that health span meet their prolonged lifespan that many people are having.

People are routinely living through their seventies, eighties and nineties. And if we're going to make it so that people are happy to be alive and joyful and able to really reap the rewards of all the things they did in their younger years, we're going to have to start changing the conversation right about how all this works.

They have to be better informed. I want to talk about if I could, about people in their younger years, too, because a lot of people listening, they are mothers or grandmothers or they have kids or grandkids.

And I think this is so important because, you know, a real passion of mine. I have young kids, too. A real passion of mine is how do we help them create good health, good, healthy habits from a young age.

So that they don't have these conditions or issues as they grow older. Let's help them build a solid foundation. I'm always about let's take care of ourselves first, but once you take care of yourself, you can then become the shepherd for other people in your life.

So our kids and our grandkids, specifically when we're talking about our bone health, they're putting on 90% of the bone mass that they have by the time they turn age 18 in those years.

We need good, solid nutrition. We need to be making good choices. We don't want to be getting sugary soft drinks. We don't want to be getting a bunch of candy and stuff like that for the kids.

How do we swap those things out for better alternatives? Good clean water, maybe some kind of electrolyte mix that doesn't have a bunch of sugars in it.

If we're talking about desserts and stuff for kids instead of giving them popsicles and candy, how about we swap that out for some nice organic berry bowls that they get to build and add a tiny little bit of honey or something like that in there for just a little bit of sweet.

You don't have to do a lot of that stuff to really help them. And that's just a starting point, right? That's the easy stuff to start to start working on.

And then how do we get them active from a young age we're talking about right now how exercise and and can help with your blood sugar can help with your bone health.

That's that applies to our kids too and has an even greater impact on them in their younger years. So how do we get them active doing gymnastics, playing sports and just support them in those activities, Be the model for them to.

Absolutely, you know, take care of yourself, do yourself care, and then bring the other generations along with you.

I'm totally on board, you know, certainly for how we have raised our children.

Our kids are older than yours, and I'm just really familiar. So I hear you as a fellow parent. You know what a difference this makes because you set those habits for a lifetime.

It'll just be a lot easier if they're in place. And the good news is that it's never too late to start. So anyone's listening. If this is not necessarily what's going on in your household or your family, I invite you to find a way to level up what you're doing for nutrition because it is so central to so many aspects of health, and I just can't say enough about that in today's world where, you know, honestly, Kevin had really gotten a little crazy.

Like if you say the term grass fed beef, that phrase, doesn't that sound weird? Because, like, if you're telling your grandparents, your great grandparents, you know, they would look at you like, well, what do cows eat?

Know that? Yeah, that's just beef, that that was just the way that it was. But now we have to distinguish that right? It's good. I love now that we have and we also see a lot more companies that are, you know, being more intentional about helping the end consumers get better quality stuff. There is a need for it.

And I love seeing businesses like that thrive. So if you have the budget and the opportunity to do so, do it not only for your health but also to support some of these businesses that are really trying to help us thrive and get healthier.

Absolutely. Absolutely. You know, I think of people's desire to eat plant based, which is great. And even there that's not simple. It seems simple, but it's not necessarily you still have to be aware about the compromises about wheat and soy and how these plants are actually raised.

The herbicides, pesticide is all the toxins that go in there. Poor livers are trying to figure out what to do with all that stuff, our kidneys and intestines.

It's just gotten to be a more complex world. Honestly, I think that adds to people's stress because they're like read labels and they're like, Oh, no, there's no good choices in the store.

It's interesting. It's interesting. No, I know that. And I will say because we're talking about we've touched on stress. There is one other thing we haven't talked about that I think is really important to talk about is the connection between gut health and bone health, too.

Let's do it. Because there is a major connection there. And it's not just a matter of like we talked about earlier, how if we have damaged kidneys, we have a hard time with, you know, minerals like calcium and phosphorus.

And that can happen a lot when we have issues of blood sugar. Well, another issue that can be impacting our absorption of things like calcium and phosphorous is if we have chronic digestive issues.

Now, if you have bloating, belching, burping, gas, constipation, diarrhea, IBS, loose stools, those kinds of things, those can be indicators that there is some kind of digestive issue that needs to be addressed.

We can you know, I mentioned celiac disease. For me, that's actually an autoimmune condition where when you ingest gluten, the vilify these tiny little nutrient absorption centers inside your small intestine, they can become damaged and blunted to where they can't do their job.

So for me, I was trying to take in all these nutrients and my body wasn't actually absorbing them. So my my body still needed the nutrients to execute its daily function.

So where was it going to get the nutrients? It was going in my bones. The largest reserve of minerals that I have in my body that we all have in our bodies.

So that's why getting that gut health dialed in, number one, is so important.

Hormones, Youth Habits, and Gut Health

Number two is that your bones are actually living tissue and they're an endocrine organ. They're not just these static things that carry you through life and help you move and things like that.

They do that and they do a great job of it, but they're also living tissue and 95% of the blood cells that are made in your body are actually produced within the bone marrow that's inside the bones.

So if you need help with preventing bleeding or clotting, that's where platelets are going to come in. If you need help with carrying oxygen to the body's tissues, carrying carbon dioxide away from the tissues back to the lungs, that's for red blood cells are going to come in if you need help with fighting infections, healing wounds, anything related to the immune system.

Here is the connection. That's where white blood cells come in. The cells that break down bone are form of white blood cell. So anything that is stimulating the immune system is speaking in the same language as the cells that break down bone where it is 70% of your immune system reside in your gut.

So it's not just a matter of nutrient absorption. When you have digestive issues, it's a matter of are you stimulating the immune system which is going to speak in that same language.

The cells break down bone and start to decrease your bone mass. So, you know, get some gut health testing. Dr. Beverley, I'm sure talks about this and walks through, you know, get some good gut health testing and just figure out what's at the root of that and then start to address those things to get your gut better.

Absolutely. Gut health is central to so many things around our health, including our physical health, certainly our blood sugar levels, things to do with osteoporosis and osteopenia, making sure you're absorbing your nutrients in the right things are happening.

Our gut health affects our mental health, our moods, a lot of things, right? It's literally in the core of the body. It's the central thing. And in that I think it doesn't get enough appreciation, you know, for just how important it is.

And it requires that we get good sleep so that the gut can reset, just like we need our blood sugar to reset when we're asleep. These things are all related, so I hope anyone listening is not feeling overwhelmed, but feeling encouraged and inspired because making those choices will make the difference and you're going to get multiple levels of benefit.

It's not like you have to do just one thing and then you've got 87 more things to do. It's usually a few key, two or three things that are going to make the difference.

Absolutely. Absolutely. Agree with that. Yeah. Just by just by reducing your stress and improving your sleep, too, you can see improvements in your digestive health, you know, and you can see improvements in a lot of areas, specifically with sleep too.

If you if you just focus on that one area, obviously there are multiple areas we want to focus on, but those can be some of the biggest levers you can pull and they're free to improve those things.

So that's cool. That's so cool. That's so cool. All right. So I have two more questions for you before we wrap our our session here. One is, is there a distinction that is of significance at all for the management of, let's say, type 2 diabetes or pre-diabetes for people who have osteoporosis?

Does that differ from what their recommendations would be if someone has doesn't have osteoporosis? Is there big distinction there? It's really not a big difference, right?

You know, the protocol that you walk through is is just right on point with what we need to be doing to help support our health in our bones. And I mean, maybe there are some dietary adjustments or things like that that you might

specifically make because, you know, you respond to certain what your blood sugar responds a certain way after you eat certain foods, right?

Then you're going to make adjustments based on those things. But overall, we got to be sleeping better. You got to reduce your stress, you got to get the exercise and you got to make good diet, nutrition choices.

And you if you have any other root cause issues that are taking place, we need to objectively figure out what those things are and address them. Don't make assumptions, make objective decisions.

And that's going to be the best thing for your health. Move forward. Absolutely. Having a clear plan and having the information to support it. You know, I still guess we're all about that.

All right. So our final question is here for you, just to give guidance to our audience, because, you know, we have a mixture of people here from the general public.

We have people who are fellow health professionals and colleagues and people who are probably advocates for other people's health, trying to get them involved greater get more information.

What role do health care professionals specifically play in coordinating care for patients who are dealing with both conditions, i.e. both type 2 diabetes, prediabetes, perhaps type one diabetes, type 1.5 diabetes is blood sugar dysregulation issues and how can they optimize this?

Because I really feel like we have to have a partnership for people to be well who have both of these conditions. Yeah, understood. So well. The first thing it obviously starts with understanding what's taking place with their bone picture.

Do they even have issues with their their bone health at this time? If they don't help guide them to whatever specific testing, whether that's bone density?

We talked about the bone quality piece that you can help them understand that. We also talked about the active bone loss piece, those bone turnover markers that we can look at.

That's going to help you start looking at the the where they are in terms of their bone health picture. And then you can help start making those modifiable patients from a diet lifestyle perspective from all the other things you're learning on the summit from the things we just talked about here, you can start helping move them in that right direction.

One thing I always encourage the people that I work with or our coaches is to help people understand that they should approach things with curiosity instead of expectation When you do that, the disappointment will disappear.

Right? Because a lot of us know that when you're on a health journey or you're trying new things out, it can be really frustrating when you put all this hope into this one thing or this thing that you put so much effort and time into and it just doesn't work.

But that happens sometimes. But if we approach it with that curious mindset versus an expectation mindset, the disappointment just disappears and it helps them move forward and move onward and upward quickly.

So that's one of them. And then the other thing I encourage people to do is help them focus on where they want to go. What is the why, what is the reason for why they're they're interested in even improving their health.

Use that as the Northstar and the Guiding Light. So if that's gosh, I want to be there. You know, for me it was I want to dance with my daughter on her wedding day.

That is my North Star, right? So I move toward that. Everything I do, I try to move toward that. Your don't need to they don't need to know where every step is placed.

Day one. They just need to know where they want that path to lead. And you need to hold that space for them. So Those are the big things that I would share with any health practitioners or even just people on their journey in general.

Great. Thank you so much so that I appreciate you two. I appreciate you for being here, for being a sponsor and for being such a strong spokesperson for people living long, living well and doing what they need to do so that that's possible to have that healthy, active future. Yes.

All right, Kevin, where can people find you if they wanted to get in touch. You can always find me at bonecoach.com. We've got lots of stronger bones resources, you know that that help people get on the path to improvement and stronger bones.

So bonecoach.com is the number one place to find me and our team. All right, great. Thank you for being here. Okay, friends. So be sure to share this Summit with anyone you know who cares about their health, anyone who has diabetes.

But you're really concerned and people who work with these folks because it's important that everyone is well informed about their options along the way.

We're here to dispel any myth and to give you the latest news about what's going on in today's world. All right, folks, have a great day.