Introduction to Strength Training and Healthspan

to begin with. So strength training just gives us so many gifts. And ladies, you don't have to be worried about becoming, you know, someone who maybe becomes overly muscled or muscle bound.

If you're worried about how you appear, for some of us we're more vain, it won't happen for you. You don't have the same kind of hormonal profile as a guy.

There's no risk here. The risk is if you don't do it. You need to invest in strength training. Have you made it past menopause, or are you going through it now?

I'm Dr. Pat McShane, and on the Women's HealthSpan Voices podcast, I'll guide you through the health challenges of the menopausal years and beyond, guiding the way to thriving in this powerful era of your womanhood.

Hello and welcome. I'm Dr. Pat McShane and this is Women's Health Span Voices and I have a wonderful voice to share with you today.

Meet Dr. Beverly Yates and Her Diabetes Background

That voice is Dr. Beverly Yates and I'll let her tell you a little bit more about herself. She has an unusual background to bring to this subject. We're going to be talking about diabetes, which is a major health problem for menopausal women.

premenopausal women and men as well, but of course our audience is mostly women in their menopause. So anyway, Dr. Beverly, please tell us a little bit about your background and how you got to be an expert in diabetes.

All right, I'm delighted to share that. Thank you, Dr. McShane, for having me on your podcast. For me, you know, it's been an interesting journey. I made the transition from being an MIT-trained electrical engineer working in Silicon Valley to becoming a licensed doctor of naturopathic medicine, 30-plus years of clinical experience, because the problem solver in me wanted to shift what I was focused on.

So I went from problem solving with things to problem solving with people. And in that journey, the focus became on more of the chronic illnesses, particularly the ones that are very serious, whether it's heart disease, whether it's diabetes, whether it's sleep apnea, the things that can just make you feel really miserable and or threaten your life.

And in that journey, part of what drove my interest specifically in diabetes was twofold. One, in my clinical practice, I could see in the 2000s to the 2010s, more and more people coming into the clinic who had issues with their blood sugar, whether it was a diagnosis of type 2 diabetes, pre-diabetes, type 1 diabetes, maybe polycystic ovarian syndrome, PCOS, which of course affects women, specifically insulin resistance, things like that.

So that was one track with clinical concern. And then in my personal life, I reached out to and reconnected with my biological father. My parents divorced when I was about a year old.

And of course, babies don't get votes in these things. Things happen with adults. And he stopped visiting and made a part of my life when I was around three and a half years old.

So I, as an adult, went to reach out and reclaim that relationship. It was a scary time, but it worked out. I'm blessed, very fortunate that it was a happy story because sometimes when people gather their courage and go to do things like that, it does not work out.

This time it did, right? And I discovered he was one of 13 siblings, all of whom had some kind of diabetes, including

type 1, which requires dependence on insulin for the rest of that person's life, right?

And I thought to myself, who has 100% prevalence of any chronic disease? That's crazy. So that gave me a heads up. I was very early in my naturopathic medicine career that I was going to have to pay really strict attention to my own health, my blood sugar health, my metabolic health, or I would be in trouble too.

So that's the story there. Okay, great. And you've touched upon one of the issues that is the foundation of this podcast, which is healthspan. And the incidence, as you mentioned, of diabetes seems to be rising in the population, even though our life expectancy has kind of leveled out.

Healthspan vs. Lifespan

It hasn't gone down, went down a little bit during COVID. But what that means is that there's often a disconnect between how long we live and how well our last decade or two of life is for us.

So maybe you could tell us a little bit more of your perspective on the difference between lifespan and health span, and especially as it regards diabetes.

Sure. I'm happy to share that. And thank you for asking this question. I think it's time that we all partner up, you and myself as colleagues, other colleagues, and educate the public.

We have got to think about the broader issues. So when we talk about health span, the reality is my point of view, We're talking about how you can be active and live your life the way you want to, as long as possible throughout the entire lifespan you have.

Ideally, in my opinion, your health span equals your lifespan. And one day, you just, you don't wake up. It's no drama, no whole lot of need to be in the ICU or anything like that.

You know, no shade on that. But I'm just saying, you know, it would be lovely that when it's time to leave this earth in physical form, You just die. It's no drama, no big deal, you know?

I think that a lot of people are outliving their own expectancy. I do hear commonly from people, especially those with diabetes, ingestive heart failure, mitral valve prolapse, things like that, that if they'd ever known they were going to live this long, they would have taken better care of themselves.

Well, listen, none of us knows the expiration date. Unlike a loaf of bread or a can of coffee, there's no stamp on there that says, you know, best buy, right, or used before.

Wouldn't that be great? We don't know. Will we, you know, go away from this world in our 40s, our 50s, our 60s, our 70s, our 80s, our 90s, or 100 plus?

We don't know, right? So with that kind of, I would like to think positive uncertainty, we want to do whatever we can to have a health span equal the lifespan.

So we don't spend all of our later years, especially retirement, spending all of our time in doctor's offices and this, that, and the other appointment and, you know, surgeries and a bazillion kinds of medications and the interaction of these medications and side effects.

I just feel strongly that we have to invest upfront in our middle years to make sure that our later years are our best years and not our worst years. That's the whole focus of this podcast, so I'm delighted to have you with us.

What has been your experience with how diabetes does impact on health span versus lifespan? You mentioned medications and doctor visits, and I imagine there's a lot more to it than that as well.

Yeah, there sure is. This is a great question.

How Diabetes Erodes Energy and Daily Function

So my experience has been with people that I serve who have whatever kind of diabetes, and since type 2 is way more prevalent, way more common than type 1, are the issues with uneven energy, with feeling hangry and irritable, with not feeling good, and it's the kind of good that is this slow, steady creep of health right out the door.

I think for type two diabetes and pre-diabetes, if people could turn polka dot or plaid and have a symbol so they could see and everyone else could see how crummy they actually feel, they'd notice, but their earlier signs and symptoms are so subtle.

So unless you're testing or really pay good attention to how you feel, you don't even know that your life force is ebbing away. So one of the things that I've observed is that people's energy tends to drop off and it can show up in some really basic ways.

Different than how it presents with thyroid issues or adrenal, what happens on the insulin side of the hormone system is that people will notice often too late that they are not feeling like themselves.

And how this shows up is that they literally cannot get up off the couch. They want to get to the gym. They want to take that hike. They want to get on their bike.

They want to go swim. They want to spend time with family. Play with the grandchildren. Yeah, play with the grandchildren. They want to spend time with family and friends.

If they're younger and in their working years, they're finding that they're not getting the promotions they thought they were because they're not understanding their performance at work is compromised and everybody else can see it.

They don't have that zest anymore because their energy is not in the right places. The disruption of their glucose, their blood sugar with insulin and how they interact.

It doesn't serve them. And some of the people that I've worked with, you know, I'll share some specific stories, are great points to share that make the difference with this because it's one of those things, it's just not obvious at all.

And then there's the signs and symptoms, you know, whether it is the appearance of skin tags, often around the neck. almost like a necklace, if you will, of skin tags that can appear.

The changes in skin color, especially on the back of the neck, the armpits, and in the groin, where your skin color will become darkened there relative to whatever your base skin color is.

Maybe that skin also will feel a little velvety. That's great signs of insulin resistance, usually what precedes, say, pre-diabetes or diabetes. There's things that people can observe at home.

And since a lot of people these days aren't getting thorough physical exams, They aren't being told about these things. And the screening that goes on in this country, as you know, is woeful.

People often are not tested for something as basic as their hemoglobin A1c, simply called A1c, or their fasting morning blood sugar numbers. These are cheap tests.

They should be run on everyone. Tell us a little more about hemoglobin A1C. I think most of us are familiar with the idea of a fasting glucose, but maybe not so much about the A1C.

Okay, so the A1C number is a measure basically of your average blood sugar over the course of three months. And why three months and not six months or one month or even a week?

Here's the story. Your bone marrow puts out brand new red bud cells for you each and every day, and it takes

about three months for those cells to turn over to a fresh new set.

That's why an A1C can be checked every 90 days, rather, every three months, rather than more frequently. And to wait longer may not make sense, especially if that person's making lifestyle changes.

So you can really keep an eye on that A1C number. It's letting you know what's the average exposure of glucose, of blood sugar, throughout your entire body, including for your organs.

And some organs, especially your kidneys and your eyes and your heart, really do not like an excess amount of blood sugar.

A1C, Insulin Resistance, and Menopause Risk

Very special complications can happen because of the smaller blood vessels, particularly in the kidneys and in the eyes. It's my understanding that women's risk for diabetes type 2, the insulin resistance type, goes up dramatically with the menopause transition.

So even if you've had a family history, let's say of type 2 diabetes, and you've been pretty good in your 30s and 40s, you shouldn't feel like you're out of the woods.

Has that been your experience as well? Yes, and people are showing up now quite routinely with diabetes who don't have any family history. I feel like a lot of things have changed in their environment in the last 40 to 50 years and in how stressful our lives are.

I think a lot of people, especially women as they are in their middle years and approach their retirement years, are in what I call cortisol nation. And if you're a member of cortisol nation, you might be chronically stressed.

Why do I mention that? The excess presence of cortisol, that stress hormone that lets you be a superwoman in that moment, like lift the car off of a loved one.

Like you hear this 90 pound woman who's amazing in an emergency and can do those things, right? Cortisol can be life-saving, but too much of it all the time, it causes your body to be flooded with extra glucose, extra blood sugar.

And this means then your average, your A1C is just going up and up and up in the background. And you're not going to know that unless you test. Good, good.

Let's shift gears a little bit and talk about dementia, what some people have called type 3 diabetes, and the relationship to blood sugar and the risk of our brain health.

Sure. So for type 3 diabetes, also known as Alzheimer's, the predisposition we see with women are a few things. One, as we enter menopause and in post-menopausal years, our insulin resistance tends to go up.

That can be just a byproduct of our own hormonal balance or imbalance, depending on how that's going, as well as stresses that might be present in our life and or course sleep.

Heaven forbid you've got both a whole lot of stress and poor sleep, because this will accelerate that. And the brain, just like the eyes and the kidney, can be super sensitive to excess glucose, excess blood sugar.

As a result, people can be more vulnerable for Alzheimer's, whether or not it is something that runs in your family. Again, just like type 2 diabetes, we're seeing that Alzheimer's type 3 diabetes is also on the upswing.

And I think some of that has to do with often just too many demands. Many women feel very book-ended, where they might be in the rock in their family, in a member of the community, and everybody expects them to do everything.

And I always coach people that the word no is a complete sense. Yes, I love that word. It's helpful, right? Yes, at times. Yes, many of us are the sandwich generation also between our aging parents and our children with specific needs.

So that is going on for decades in many of our lives.

Diabetes and Brain Health Risks

So what are we to do as women going through our menopausal transition or already in our menopause to keep? Besides try to reduce our stress and use the word no quite often, how do we prevent ourselves from getting the type 2 and type 3 diabetes?

A key strategy are to know the specific things that make that difference and have the impact on your health span. In particular, build your muscle. I am talking about real strength training.

Not two-pound weights, not five-pound weights. You spend the first two to three weeks getting your form down so you're not injured, work with a personal trainer, and then from there, you want to go to heavier weights.

Why do I say that? Because your muscles are blood sugar sponges. Active working muscles love glucose. They love blood sugar. When you're active and working and doing your exercise, your blood sugar levels will rise because they have to meet the demand that the muscles are putting on.

But then, after you're done with your exercise, and within about an hour or so, a little bit later, your blood sugar levels should come down. And if you keep this up, literally, you're helping to toggle between that insulin resistance and insulin sensitivity so that the insulin receptor is working better on all of yourselves.

making it so that your average A1c can start to come back to that healthy range if you were in any kind of trouble. If you're not in blood sugar danger, great.

The other benefit for muscle to know, building muscle and strength training, is that it really helps to prevent falls. So many of us know people in their 60s, 70s, and 80s.

They have a bad fall or two, and sometimes they are deceased within three months to a year after that happened. Why? Well, it's a downward spiral. And part of it is they didn't have enough strength to begin with.

So strength training just gives us so many gifts. And ladies, you don't have to be worried about becoming, you know, someone who maybe becomes overly muscled or muscle bound.

If you're worried about how you appear, for some of us we're more vain, it won't happen for you. You don't have the same kind of hormonal profile as a guy.

There's no risk here. The risk is if you don't do it. You need to invest in strength training. That's my answer. That's your main prevention strategy.

How about reversal? Let's say someone's hemoglobin A1c has been rising and they're in either a pre-diabetic or even a frankly diabetic condition when they see their doc.

How do you advise these people? That's a great question. So, one of the things I insist on is that people use CGMs, continuous glucose monitors.

Strength Training as Prevention

Because without that data, and this isn't just me speaking as an engineer, this is me speaking as a doctor, you need to know what your numbers are. What is your blood sugar doing and when?

Is your blood sugar in a healthy range at all when you're asleep? Because for some people, the chaos is overnight. Is your blood sugar in a good place during the day?

How about when you eat? Sometimes people are eating healthy foods that they've been given a generic list for that their body is not having a healthy blood sugar response to.

And with a CGM, you can see in real time on your smartphone, on your app, what your blood sugar response is to what you ate or drank. And that is always eye-opening for people.

That's a key strategy you have to know. So we can start with a generic template of what to eat, but then we course correct. Because what if you're someone who has big blood sugar reaction, a wrong reaction, a big spike with something like quinoa or cauliflower or blueberries?

Like you need to know that. Grapes. Grapes. I wore a CGM twice in the last couple of years. I don't have diabetes, just full disclosure, but I was curious and it was quite a learning experience about what particular foods and activities for that matter, make things go in the correct direction or a bad direction.

It informs how I behave now. You know, if I eat that extra piece of pizza, I'm going to make sure that I'm up walking around using those muscles in the hour or two after the pizza, instead of just sitting there, you know, or if I share somebody's French fries, you know.

So what you just said speaks to the issues of, is it portions? Because sometimes a small amount of a food is tolerated, but not more than that, right?

So maybe that one slice works, but three slices is too many. With the CGM, it makes that easy to figure out. And then getting active after you have a meal.

I mean, we have whole cultures, you know, Italy, China, other parts of the world where people routinely go for walks after they eat. It's so smart. You could just do squats.

Like five or six squats every hour, you know, put your back against the wall and squat or have a chair under you if you're worried about your balance so you stay safe, but engage your thigh muscles because those are the biggest, most powerful muscles.

It's the simplest thing you can do. It can take you two minutes to save your own life this way, you know? Yeah, thanks. That's good to hear. You've probably seen people who have brought their issues of their glucoses or whatever to their practitioner and have been kind of like, oh, you're all right.

Don't worry about it. You know, have you found that to be happening quite a lot and what would you advise these folks? This is a sore point with me. I've even worked with people who, when they brought their information to their doctor, the doctor's tested them, and they're sitting there and going over the results, and then they have an A1C of 6.1, and then the A1C jumps to 6.8, 6.9, 7.3, right?

Using CGMs to Reverse Blood Sugar Problems

Clearly type 2 diabetes range. So it's gone from pre-diabetes, which is an A1C of 5.7 to 6.4, to an A1C of 6.5 or higher. That's type 2 diabetes range.

And that doctor will say to them, oh, welcome to the club. as if this is normal. This is not something to be played with. It can ruin people's lives. And some people are more sensitive to those higher levels of blood sugar than others.

By that, I mean some people get into damage quickly and more easily than others. So some people can hang out at these higher ranges and still function.

They're actually quite sick on the inside, but they're able to still kind of sort of live their life or lives with the compromises I shared earlier about their energy and ability to just do life.

And for other people, their vision starts to get blurry. They start to get problems with their nervous system and to have neuropathy, particularly in their feet.

They might find that wounds heal really slowly. All sorts of compromises start to show up. They might start to have problems with their heart. Heaven forbid you have both heart disease and diabetes.

That's not a good combination. Talk about a perfect storm in terms of just the inflammation profile of both illnesses combining, you know, to make the problem of each.

more dramatic. And so, you know, if your doctor shines you on or pooh-poos the fact that you have type two diabetes, you need someone else on your health team who will take it seriously and actually work with you rather than against you.

No one should be, I feel dismissed because in today's world, that's actually dangerous. Your body is asking for help and it deserves to get the help. How about the approach of just taking the medications without paying much attention to the fluctuations in your blood sugar, as you just mentioned.

I'm sure that happens a lot because people are so busy. They don't have, the docs are so busy. They don't have time to go through, you know, the teaching that's really required to help somebody get out from under the, the condition rather than just take the drugs.

So it's great that you asked this question because literally today I heard that there's yet another study out that says if you take these medications, whether it's the injectables or the GLP-1 drugs, GLP-3s, other kinds of prescription medications for diabetes or weight loss, when you stop taking the meds, you go back into trouble.

Why is that? Well, because those medications are buying your time and they're not the whole answer. At the very end of those pharmaceutical ads, they say it really fast like this, right?

You need to do the lifestyle things, you know, and that's in part for the book that I wrote, The Yates Protocol, 5 Simple Steps to Fix Your Blood Sugar and Reverse Type 2 Diabetes.

You know, those five lifestyle steps are the things they say super fast. And let's be fair to our colleagues, to doctors, to physicians, et cetera. It's really not a part of their training around the lifestyle support that is very much needed.

You're gonna need nutrition, meal timing, stress control, good sleep and strength training, you know, as a focus within the realm of exercise, including aerobic exercise.

They don't have the time in these seven to 10 minute encounters, 15 minute encounters to train people. So it's a big disservice.

Why Doctors Often Miss the Lifestyle Side

Doctors are being asked to do something that they haven't been taught to do, they aren't paid for, and it winds up being really frustrating for the patient because the patient isn't getting their needs met.

And for the doctors who are aware of this, they're frustrated too because they know they're not really serving people as deeply as they might like to.

The current system doesn't really allow for that. That's good to know. Tell me about folks in their 70s and 80s when this might be happening. Do you just throw up your hands and say, oh, whatever, don't worry, you're not going to last that long anyway?

Or do you have, do you pull out your book and say, here, these are the five things to do? What's been your experience? My experience has been that it's never too late.

Some of the people that I've worked with have indeed been elderly. They've been in their 70s, they've been type 2 diabetics for years, sometimes 25 years or more, and they've still been able to have success with lowering their A1c and some have been so successful that they've truly reversed.

So to be clear, if you've been diagnosed with diabetes, type 2 diabetes, A1C is 6.5 or higher, and you get to the pre-diabetes range, so an A1C of 5.7 to 6.4, that's called diabetes remission.

And if you get from the type 2 diabetes diagnosis of an A1C, 6.5 or higher, and you go all the way to an A1C of 5.6 or lower, that's considered diabetes reversal.

And now we need to talk about the four letter C word, cure. That is not the same thing. I'm not claiming that's cure. Because whatever your vulnerabilities were that got you into a type 2 diabetes diagnosis to begin with, you still have to address those.

I don't want people to have magical thinking. So if you get diabetes reversal, and let's say you were super stressed, didn't exercise, and ate poorly, and you go back to any prior habits that perhaps were a part of this, the problem will come back.

You have to stay on top of that lifestyle side, full stop, with medications, without medications. The medications are a helpful partner for some people, but they don't solve it all.

I've seen people be on these diabetes meds or these GLP-1s, maybe for a combo of diabetes and weight loss, and have their A1C plateau. Maybe at like 7.5, 6.8, you know, 8.2, and they can't get it lower.

The way out of that whole pickle is to deal with the lifestyle side. I just got to be really clear with people, the magic is within you. And the other piece of the damage that might have already occurred in your eyes or in your kidneys or in your heart, some of that is reversible, I imagine, but a lot is not.

So you can't just have the attitude, oh, whatever, I'll get around to that later. It's something that you really need to jump on when you find out. So well said.

Even in the pre-diabetes stage rather than waiting till you tip into the full diabetic stage of things.

Diabetes Remission, Reversal, and Long-Term Management

That's an interesting point that you make. Let's circle back on this one. I've seen it be with type 3 diabetes, specifically also known as Alzheimer's, right?

That particular subtype, the most common one for dementia, that often it's the people who have been hanging out in the pre-diabetes range who then become diagnosed with dementia and its subtype, the most common, Alzheimer's.

Not necessarily an A1C that's really high, like an 8 or a 9, you know, 7.2. It can be that pre-diabetes range of 5.7 to 6.4, which is just heartbreaking how much damage is going on.

Yep. And again, I imagine in a busy doctor's office, that person is not going to get the same level of scrutiny that she might get when her A1C goes up into the, frankly, diabetic range.

So that's good to hear. Thank you. And scary. Yep. Yeah, we live longer. Women, on average, outlive men by about 10 years. So we really have to be mindful and take care of ourselves, no matter how long we think we're going to live.

Because as we started with, you know, here on your episode, we don't know what our lifespan is, but we can take charge of our health span. Yeah. My data shows that the average woman has about 10 years difference between her health span and her lifespan.

And that's what, like you said, we want to just go to the end and then bang, be gone. Not be immobile, unable to walk, unable to carry our groceries or make our own dinner or lift up our grandchildren or whatever it is that we wish to do, in my case, ski.

Anything else that we didn't talk about that you think our audience would like to hear or should hear? besides buying your book, of course. Yeah, you know, I would say, like, all of the things we've shared, make sure you share this episode and share all of the channels that everything Dr.

McShane is talking about for HealthSpan, because this is information everyone needs and we're not hearing. We don't need to be afraid of living a long time.

My thing is like live long and live well and just take note of what are the key aspects that you can actually do something about and then do them. You can only control what you can control.

You can't worry about the stuff that's out of your hands, but the stuff that's in your hands, like literally like what you eat, you know, your sleep, do what you can with that, your stress levels.

Saying no is a full sentence. Your times of day you eat. to put the bulk of the food you eat towards the earlier part of the day when you naturally have more blood sugar control, right?

And be active.

Practical Healthspan Advice for Women

Get out there. Move your butt around. Exercise. Use those beautiful muscles. You don't have a lot of muscles? Build them. It's never too late. I love it.

That's perfect. Well, Dr. Beverly, this has been so much fun and so interesting on a quite serious topic, but you've made it as light and acceptable as you could, and I really, really appreciate that.

So, as I will echo your remarks to our audience, please share this information and subscribe to this channel. And Dr. Yates has a wonderful channel of her own.

with other experts talking about lots and lots of different things regarding diet and eye health and kidney health and so on and so forth. So check out her channel as well and also pick up her book.

Thank you so very much. It's been a real pleasure. The honor is all mine. I love that you reached out and invited me. Thank you for the work that you're doing.

This message about HealthSpan has got to get out to as broad an audience as possible. I do think we can turn around some of these chronic diseases, but we got to make sure people understand their part in it.

Well said. Thank you so much. Thanks for listening to the Women's Health Span Voices podcast. If today's episode spoke to you, follow the show and share it with a friend ready to take charge of her health and please leave a review.

It helps more women find us.