Introduction and Dr. Lufkin's Background

Hi everyone. Welcome to the Reversing Type 2 Diabetes Summit. I'm your host, Dr. Beverly Yates, ND. Today on this session, I'm delighted to be able to interview Dr.

Robert Lufkin. He's a wonderful expert and a person who's very passionate about healthy aging, inflammation and all the things that we can do to take control of our health with a firm belief that we really are the ones in charge of our health results.

Dr. Robert Lufkin, MD, has been a full professor at both UCLA and USC School of Medicine. In addition to being a practicing doc, he's the author of over 200 peer reviewed scientific papers and 14 books that are available in six languages.

Dr. Lufkin clearly has been very busy. He's also been given and invited to do lectures in keynotes around the world and was named one of the 100 most creative people in Los Angeles by Buzz magazine.

And his latest book titled Lies I Taught in Medical School. What a provocative title. That's in preparation. He's currently a clinical professor of radiology at the USC School of Medicine with an academic focus on the applied science of longevity.

So, okay, what a lovely background that you have. I'm delighted that you're here. Rob, welcome to the summit. Oh, thanks, Beverly. I'm so thrilled to be to be a part of this summit and I'm a big fan of the great work you do.

So this is this is an honor. Well, thanks so much for being a part of our session. So I'm curious to know your point of view here, because some of the things that you're saying, I think absolutely not only need to be heard and amplified, I want to be sure people understand the the thought process and the experience, the clinical representation that's up underneath that.

So what is the problem in your point of view with the way that many health professionals, health care professionals, broadly defined, think of for type 2 diabetes?

What are we missing? I mean, I think the problem is and I know it's a problem because I used to think that way, that type 2 diabetes, it's it's it's it's something you either have or you don't have.

And, you know, if you don't have it, you're lucky. And if you have it, you're unlucky. And I've changed my thinking about that now. And there's there's grow there's a large amount of evidence to show that type 2 diabetes, which is really the same as insulin resistance, which you probably talked about with your other other guest.

Type 2 Diabetes as Insulin Resistance

But the body's decreased response to insulin, this insulin resistance, which manifests as elevated fasting insulin levels or elevated hemoglobin A1C tests and things like that.

This fasting insulin increases this insulin resistance increases with age and it's something that as we get older we all face increasing insulin resistance.

So the what I believe now is that type 2 diabetes is really something that we're all facing as we get older. It's sort of like like gray hair. If if we live long enough and don't die of something else.

First, we're going to be diagnosed with type 2 diabetes. And I think the path to type 2 diabetes is a long one. We can see the indicators of it years or even decades before our doctor will tell us that, yes, we have pre-diabetes or

actual type 2 diabetes.

And I think we need to pay attention to this this disease that we all potentially face. And even if we're not diagnosed with diabetes, we should potentially adjust our lifestyle as if we're at risk for diabetes because we are.

Absolutely. I totally agree with you. We are at risk. And sometimes people get a little smug thinking that this is something that's not necessarily on their event horizon.

They might be mistaken, right? Absolutely. Yeah. Okay. So then that leads our next question, which is what is the relationship between chronic diseases and type 2 diabetes?

Do these things have overlap? That's that's a great question. And and again, my thinking has changed. I've been I've been a medical professor for essentially my whole career, and I've been involved with teaching doctors and and other health professionals within the, you know, the medical system.

And when I started out diseases like diabetes and obesity and hypertension and cancer and Alzheimer's disease and cardiovascular disease, all were sort of considered they were considered to be separate diseases with separate treatments that had little or no relationship to each other.

What I've come to understand now and the evidence is really supporting it, is completely unexpected, is that these diseases share a common underlying root cause that drives all of them.

And that root cause is includes insulin resistance and diabetes and also things like inflammation and these factors. But we're already starting to see it.

Alzheimer's disease is referred to as type 3 diabetes because of the insulin inflammation and insulin resistance in a large number of patients with that is the number one cause of death for diabetics is type 2 diabetics is cardiovascular disease.

So once you have diabetes, you have blood vessel disease, of course, and that's why the number one cause of amputation is diabetes. The number one cause of blindness is blood vessel disease from diabetes.

You know, the number one cause of renal failure is diabetes. And these are all related to blood vessel problems and other problems with sugar related to the diabetes.

But what we're finding is this this insulin resistance that is type 2 diabetes also drives things like cancer. There's increased cancer rates with type 2 diabetes and increased essentially all the diseases, even to the point where we're seeing diseases like mental illness that are responding to things like a ketogenic diet.

Shared Roots of Chronic Disease

Chris Palmer, who is just written a great book on brain energy, does some great work on reversing mental disease, mental illness, including, you know, heavy pharmacological medications when some of his patients, not all of the patients, but some patients by just going on a ketogenic diet, which is, of course, an antidote of his diet, it's the same thing.

Yeah, it's interesting, right, how powerful it is, all these words, these points of view from different cultures. You know, the old saying that your food be your medicine, let your medicine be your food.

And in a world where our food so corrupted. I hear you, Rob, this is a big deal. And we see younger people showing up with these things that we always thought of were only for people aging.

It's been kind of shocking to watch that transition. Okay. So what's the relationship then between type 2 diabetes and then aging? Well, sugar, which is elevated in diabetes, is damaging to our ourselves and our and our our bodies, our proteins and other chemicals on our bodies.

Now, a certain amount of sugar or glucose is necessary to be alive. But of course there's no dietary requirement for sugar or any carbohydrate. In fact, our bodies have learned to make a small amount of sugar that we need or glucose we need inside.

So when we eat a lot of sugar in our diet or we eat carbohydrates that are rapidly converted to sugar like bread and and grains and starches, this sugar undergoes a reaction with proteins and nucleic acids in our body.

It's it's interesting. It's a it's a rapid reaction where it bonds to an essentially and damages them. And it's called glycation and the HA1C test the hemoglobin A1C test is a measure of this glucose damage to red blood cells and and the hemoglobin in the red blood cells.

And because red blood cells only last about live about 90 days, the HA1C test is a good marker for your insulin levels or your amount of insulin damage done to the hemoglobin over the last 90 days.

But this this glucose damage isn't just to the hemoglobin or the red blood cells. It's damaging throughout the entire body. And and you may have spoken about advanced glycation end products which have the appropriate acronym of age, which is an indicator of some of the damage that this does really?

Absolutely. So it's so interesting. I think that's one of the best acronyms ever. The AGE right? The advanced Glycation end products. And we are at our summit. We are indeed talking about that.

So thank you about for being specific about calling this out, because we know it's summits. We have both the general public, along with other health and medical professionals here.

So we're trying to speak to both audiences. Right. Okay. So then let's uncover another topic. And I know that you have very great information to share with us about this.

What's the problem with giving insulin to type 2 diabetes? Okay. And insulin, as everyone knows, is a is a hormone that's that is produced in our bodies.

And it's actually designed to protect our bodies from the from the damage that the high glucose levels do. And it removes glucose rapidly from our bodies and causes it to go into the cells and be stored as fat.

In fact, glucose is the single factor that I mean insulin, rather this hormone is the single factor that causes obesity.

How Sugar Damages the Body and Aging

In other words, you can take a person and feed them all the calories they want, but if they don't have insulin, they won't gain weight. And you could see this in type 1 diabetics who who have low insulin levels.

Similarly, and I've seen this in the clinic, you can take a normal weight person and eating a normal diet, but when you give them insulin, they will gain weight and become obese.

So insulin is really the driver for for obesity. But the relationship that the insulin is given and both in type 1 diabetes is because the pancreas in that particular form of diabetes doesn't produce enough insulin.

And that's that's a rare form of diabetes. That's less than 10%. The the big form that that is over 90% is type 2 diabetes. And this type this is called diabetes.

Even though it has a completely different mechanism. It's called diabetes because there are elevated sugar levels, both type 1 and type 2 have elevated sugar levels.

And for many years that was the only way that you could diagnose diabetes. You know, initially it was flies went to the the urine of diabetics because the high sugar level and then eventually doctors tasted the urine and they knew it was sweet.

So when it was young diabetics and and these 2 types of diabetes were were considered to be the same. But today we know that they're actually very different in type 1 diabetes, as we said, is due to the pancreas not being able to produce insulin.

So in order to treat that, you need to give insulin. Now, type 2 diabetes is different and it's not caused by insulin deficiency, it's caused by insulin resistance.

And the insulin resistance is driven by carbohydrate toxicity or high levels of of glucose and carbohydrates in the diet, in my opinion. Therefore, if you have a disease that is caused by carbohydrate toxicity, giving more insulin will treat the high levels of glucose in the acute problem, but it just makes the long term symptoms worse.

In fact, there are studies where type 2 diabetics have been given insulin versus other treatments to lower their blood sugar and giving insulin actually doesn't reverse most of the long term chronic changes.

It actually makes them worse. The you know, the cancer risk, the cardiovascular risk of Alzheimer's, all the diseases that we just mentioned. So insulin is actually not a good thing to do as a long term treatment for type 2 diabetes.

But there are there many better ways to to reverse type 2 diabetes. Okay. All right. That's great. So please share with us what are what's the best way, in fact, to reverse type 2 diabetes.

Well, if if you understanding like like what I talked about, the type 2 diabetes is is a carbohydrate toxicity. If that's true. Remember carbohydrates are one of the three macronutrients fat protein and carbohydrates.

And interestingly, you know, we talk about my mom was a dietitian, so she always told us to get a balanced have a balanced diet.

Why Insulin Is Not the Answer for Type 2

But in fact, you really don't need a balanced diet. In fact, there's no dietary requirements for carbohydrates at all. And there are some human populations that have very, very low carbohydrate intake.

The Inuits in Alaska or the the Maasai in Kenya. And it's interesting. And there and there's some people who just choose to eat a carnivore diet, as you know, at the other end of the spectrum, from the vegan diet, which I believe you can do, vegan or carnivore healthy, as long, you know, as long as you watch how you're doing it.

But the idea is if if type 2 diabetes is a carbohydrate toxicity, then these people who don't have carbohydrates in their diet should not have type 2 diabetes.

And that's pretty much the experience that most people can reverse their type 2 diabetes by just eliminating carbohydrate from their diet. And, you know, Sarah Hallberg at Verde Health then and many other people have published on this and shown controlled prospective studies where they actually reverse type 2 diabetes.

With with these dietary restrictions. Though, I think that that's really an interesting and rich area of exploration. And I'm really glad that people are looking at the results because you and I both know from a clinical point of view that there is no such thing as a one size fits all nutrition plan.

People really do need to dial in what's going to work for them and their blood sugar numbers, their cholesterol profile, controlling inflammation, all these other factors right in today's world is so often busy and stressed.

And that's another, I think, complicating factor as we age. So if I'm hearing you right, you and I had a chance to chat about this just before we recorded the session.

What you're saying is if your thumb is sore and you've been hammering your thumb, it's time to put down the hammer and stop having your thumb. So your thumb is not in vain, right?

Yeah, It's a beautiful analogy. Absolutely. You know, that's that hits the nail right on the thumb or the hammer or something. Yeah. Exactly. Exactly. Okay.

So I think that makes sense. I think people can understand it. And, you know, for our colleagues and for the general public who's, you know, watching the session, please, just consider, you know, what, what's viable, what works for you.

One of the things that's so interesting, I think, is that in today's world, when people do have carbs, often the volume of what's available and the fact that it's typically, unfortunately, simple carbs, not complex carbs that have lots of fiber and protein that come with them like, you know, your beans, your legumes, chickpeas, lentils, that that kind of goodness.

It tends to be a really refined flour stuff. And that's just like a problem. Like I always tell people, if you go and blow it up into a powder, that's how it hits your blood sugar like a bomb.

It's a mistake. So I often wonder in today's world if some of this is it just because of the kinds of carbs we have access to? They are cheaper. It's just it's a problem. It really is.

Yeah. I mean, so many things have changed just in the last 20 years with the introduction of high fructose corn sirup, which increases the amount of both fructose and glucose in our systems and just the increase in junk food and processed junk foods, unfortunately, is very high in the macronutrients that cause type 2 diabetes and it's around us everywhere.

It's being marketed everywhere. And and unfortunately, diabetes is very profitable for the health care system. It a lot of a lot of money is made from diabetes.

And the American Diabetic Association is, you know, sponsored by many companies that benefit from diabetes. And if you go to their website, I cringe when I see them recommending I sugar or meals and then they they're instructed it's okay to do this as long as you cover it with insulin, which you know, for the reasons we talked about in my opinion, type 2 diabetics should not be not be covering anything with insulin like this.

And it's actually harmful that you you can't make up for the diet with the insulin. Yeah I think that in fact I know I watched the family member do this.

Unfortunately, it just makes the problem worse. It's an abusive use. I feel like a prescription drug.

Reversing Diabetes Through Diet

To me, the drug is buying people time to correct the underlying lifestyle habits and from a clinical point of view, what would you suggest if someone is on that precipice?

They've had this conversation with their doctor. They're currently diagnosed, let's say with type 2 diabetes. Things aren't going well. That agency is just pin high and their doctor's like, Look, I'm going to put you on insulin thinking that that would be helpful clinically.

But the reality is, is that just as you said earlier, this is not a long term solution to anything. Are there any tips you can give people so they can have a helpful, productive conversation with their clinician around turning this ship around so they don't lined up on insulin if they are a type 2 diabetic?

Yeah, I mean, one one thing just to say about that whole challenge of turning this ship around, I think it's it's something that that I certainly underestimated in myself and in my patients I deal with.

I thought it was just a matter of explaining to people and educating them about how harmful the sugar and refined carbohydrates are. But then I realized that there were people who, you know, very intelligent people who understood it.

They, you know, they took notes, They knew the answers. They got it. But then they would go out and they would eat sugar and they would do things that would harm their body and make their diabetes worse.

And I've since come to appreciate the the addiction that plays a role in processed foods. I mean, I'm a recovering processed junk food addict myself. You know, I struggle with it all the time.

And it's almost it it the attention needs to pay to be paid to the addiction piece of it. Because, you know, sitting in a doctor's office for 10 minutes and they say, well, I'm going to put you on insulin, and unless you stop eating carbs, they'll go, you know, that's not enough.

There needs to be more more comprehensive addiction treatments for these things. And there are some programs that are, you know, starting to come out with Joan Heflin and some others that are looking at this.

But I think it's it's that's part of the secret piece to it to understand that it's it's the willpower alone sometimes just isn't enough. Yeah, I hear you about that, right?

I mean, the research, the studies I've seen and people like researcher over here at Stanford and others have talked about is that, you know, on any given day, most of us, we have about 15 minutes of willpower.

That's just not going to work. You can't muscle your way through this. I agree with you that there is this addictive element and that for many people they need behavioral therapy and supports and interventions in addition to just the information and counseling.

So when you are sitting there with a clinical patient, people who are doing telehealth, telemedicine, health coaching, I think we all need to fully appreciate that no matter how excellent information is we give people, it might not be enough.

There's another component for many people, and if we don't address that, we really haven't served them long term. Yeah, absolutely. I mean, it was it was like like a person with an alcohol problem.

I had to get rid of the junk food and not keep it in my house, even though I have, you know, teenage daughters who wasn't around. But yeah, it's it's it's really a challenge to be able to be able to address that.

And it goes beyond, I think, just education with these things. I had one patient who, you know, he was he was a type 2 diabetic and he was out celebrating and he's having a Coke or Coca-Cola.

Addiction, Behavior Change, and Support

And it doesn't matter whether it's sugar free or not, it's still still not good for you for all kinds of reasons, including your diabetes. But he said, it's okay, my doctor told me, just cover it with extra insulin, I'll be fine.

I said, What are you celebrating? And he goes, Well, I just had my surgery, you know, they amputated my toes. They didn't have to take my whole foot. And I said, Great. Well, what's that from?

He goes, says, From my diabetes, you know, which the coke and the you know, it's all going to make it worse. So it's it's a very complex problem. We're like, oh, people.

Oh good Lord. There's just so much. Yeah, we just we got work to do. Absolutely. Just get people clear about this. You're absolutely right. That sugar free artificial sweetener stuff is absolutely not helpful to people.

It's a shame, too, because it does seem like it would be on the surface. And then when you understand what that's doing to the brain, you go, Oh, God, It's like they just need to learn how to come to grips and love water.

His plain water, you know? Yeah, absolutely. Just, yeah, don't drink your calories. That's a good start. That's a great thing. And we should have tee shirts.

The next time we do it here. You don't check your calories. I love that. Okay, great. Okay. Okay. So do you have any parting tips or words of wisdom or inspiration you want to share with people?

Well, I yeah, I mean, I think is that I thank you again for the work you're doing with with this program and type 2 diabetes. It's you know, it's it's great.

There's you know, you're changing people's lives. And I just want to emphasize that something that I didn't appreciate earlier in my career that I appreciate now that our health for, especially for things like type 2 diabetes and chronic disease, that health is in our hands and we can, through lifestyle choices, significantly influence it and even reverse it for essentially that most of the diseases that we talked about, certainly the risk for it and and diet is number one and other lifestyle things are an important role.

But the great thing is we get to choose every morning when we get up, we get to choose what sort of life we want to live that day. Beautifully said. Thank you so much for that.

I think the more people take the power in their own hands and take control of their health results and make sure that they hold themselves accountable along with their professional teammates, you know, the health team they have around them, the better off they're going to be.

Absolutely. Absolutely. And surrounding yourself with loving friends, loving family who can help hold hold us, hold us all accountable to the to the commitments we make, the lifestyle commitments we make.

That's that's a key piece as well. All right. Great. Great. Okay. So I'm sure people will be feeling encouraged and be clearer about what's going on with insulin.

If you are a Type 2 diabetic and if you're prescribed insulin. But perhaps that's not the path you want to be on you. I've even heard of people begging to not be on it because they feed them.

They see how often it winds up there.

Final Advice and Where to Find Dr. Lufkin

If someone has type 2 diabetes and is put on insulin, they just become really, really obese quickly and it becomes much harder to control weight. I think that that's something that needs to be respected.

Absolutely. And paid attention to. And then the idea of not overdoing it with carbs, because if you're having a toxic reaction and you're not able to process them, that's a problem. Okay.

Is there anything in particular you'd like to say to the health professionals who are watching these sessions? Just, you know, pay attention, keep an open mind.

Things are changing very rapidly and we need to keep we need to keep learning as best we can because things are really going off the rails with chronic disease with these patients as as we all know, obesity, diabetes, all of these chronic diseases are skyrocketing.

And we need to change. We need to do something about it. Right. We'll all be part of that team together. So, Rob, thank you. This has been a delightful interview.

Friends, anyone watching here? If you know others who could benefit from this information, please kindly share this site with them while it is live forwarded.

Share it on social media, email, text messages. You know how to meet your friends and family, the people you care about, people who care about their health.

We just need to hear another point of view. Sometimes you might have great info, but if it's coming from you, they

might discount it. So if it comes from people they don't know as well, it might land a little differently right?

Absolutely. Yeah. That's so cool. Okay, so Rob, where can people find you if they'd like to be in touch with you? Probably the easiest. It's just my website.

It's RobertLufkinMD.com All right, great. So please check out Dr. Robert Lufkin's website. He's got great info out there. You can keep tabs on what he's doing and the masterclasses, podcasts, summits, other things that he's involved with right now and stay up to date on all the wonderful things that he's sharing with the world as we both look to help contribute to a healthier planet.

All right, Rob, thank you so much for a wonderful session. Thanks, Beverly. This is this has been fun.