

American Diabetes Association  
March 13, 2024

Susan Weiner:

Hello everyone, and thanks for joining us. Welcome to the 2024 American Diabetes Association's Living with Diabetes Ask the Expert series. Today's topic is Type 2 Diabetes and Kidney Health. What's the link? I'm your host Susan Weiner. I'm a certified diabetes care and education specialist and a registered dietician and nutritionist. Our Ask the Expert series is all about you and what you'd like to know today about type 2 diabetes and Kidney health. So think about any questions that you might have and what you'd like to ask today. And if you're joining today by phone, once you get your question ready, please press star three. That's three on your keypad, and an operator will pick up your question and put you in a queue so you will have the opportunity to ask your question live. And if you are someone who is participating online, remember to type in your name and question in the fields below the streaming player, press the submit question button, and the question will come directly to me, and I will be able to ask it live during today's event.

And remember to please stay with us throughout the entire hour-long event. We're going to have some great conversation, answer your questions, provide you with great tips and resources throughout the program. And at the very end of event, we'll have a short survey that we'd love you to participate in that will help us to better prepare for future programs and to address your needs. Joining our program today is taking care of your health. So that's a really great step because of the link between diabetes and heart health, the American Diabetes Association, in collaboration with the American Heart Association, has launched Know Diabetes by Heart, with support from our founding sponsor, Novo Nordisk, the Know Diabetes by Heart initiative provides tools and resources for people living with type two diabetes to learn how to reduce your risk of cardiovascular disease. And as part of the Know Diabetes by Heart Initiative, the ADA is holding this free educational question and answer once a month.

So we are going to cover a lot of information to help you on your journey with diabetes. When you live with diabetes, it may increase your risk of heart disease, your risk of stroke, and your risk of kidney disease. So make sure when you speak to your doctor, your healthcare provider, your certified diabetes care and education specialist, that you ask, "What can I do to reduce my risk of heart disease?" Please visit [knowdiabetesbyheart.org](https://www.knowdiabetesbyheart.org) for more information and for resources. I am excited and super delighted to introduce our guest expert for today, Dr. Silas Norman. Dr. Norman attended the University of Michigan in Ann Arbor. He graduated with a degree in psychology, and then attended Wayne State University School of Medicine. Dr. Norman has been on staff at the University of Michigan since 2002, working as a nephrologist in the transplant program. Dr. Norman has made a number of contributions to the transplant program, including the creation of a program to transplant HIV positive individuals and the development of outreach satellite clinics to allow patients greater access to transplant opportunities.

Dr. Norman currently serves as the medical director of the transplant multidisciplinary ambulatory care units, and he also serves as co-medical Director of Kidney and Pancreas Transplantation and a member of the University of Michigan Medical School Mission Executive Committee. Dr. Norman has served on the board of the American Kidney Fund for the last several years and is a member of the American Society of Transplantation Task Force. He has served for several years on scientific advisory boards of the National Kidney Foundation of Michigan and is currently a member of the NKFM Board of Directors. And in addition, Dr. Norman is also active with the Minority Organ Tissue Transplant Education Program Detroit Foundation Board.

We are so excited and so pleased for Dr. Norman to join us. Welcome.

Silas Norman:

Thank you. Thank you for that wonderful introduction. Excited to be here.

Susan Weiner:

Well deserved, and excited for you to join us. So Dr. Norman, with everyone joining today, and we know that March is National Kidney month, what is the link between type two diabetes and kidney health and what can we do to reduce our risk of kidney disease if we're living with diabetes?

Silas Norman:

Absolutely. So as some of the participants may know, type two diabetes is really the leading cause of kidney disease in this country. Every year, right around 130,000 individuals develop kidney disease advanced enough to require dialysis or a transplant, and far and away, about 45% of the time the cause is diabetes, mostly type two diabetes.

As I'm sure we'll talk about more over the hour, one of the ways I often talk to people about diabetes is to think about it ultimately as a blood vessel disease, as a disease that damages blood vessels. And what many people may not realize or appreciate is that your kidneys, which are really responsible for managing your fluid balance and getting rid of metabolic waste products, if you look microscopically at the kidneys, they're really just a bunch of little, tiny blood vessels. And so, in the same ways you can get blood vessel damage in other places from diabetes, you can also get kidney damage.

Susan Weiner:

So what are some of the ways that a person who is living with type two diabetes, what can they do every day to help to prevent kidney disease? And is there some kind of screening that a person who is living with type two diabetes can request from their physician? Anything that they can do in terms of when they go in for appointments, if they have a concern, that they can request from their healthcare professional or healthcare provider?

Silas Norman:

Yes, thank you. Those are great questions. And one reason I'm really happy to be here is because I think in terms of managing type two diabetes and minimizing the risk of kidney disease, it's really all about how we empower our patients to take control and manage their health. And there's so much one can do. We know that having good control of people's diabetes can minimize the chances that people in the future develop kidney disease. We know that one of the challenges with kidney disease and with a lot of diabetes complications, as you know, is that the appearance of the complications often happen several years, sometimes a decade after people develop diabetes. And so, I think one of the challenges is helping and encouraging and supporting people in aggressively managing their diabetes as best as possible right from the beginning because we often don't appreciate the damage that's going to lead to kidney disease until five, 10, 15, 20 years later when it's not a lot to do.

And I'm sure we'll talk some more. There's a lot of ways that people can manage their blood sugars to have better outcomes. As it relates to looking at the kidneys and kidney function, there are two main measurements that people would want to be familiar with and that they can request from their doctor, and really should be part of their at least annual screening. That is the serum creatinine, and this is just the blood test where we measure creatinine, which comes from your muscle. The only way you get rid of creatinine is in the urine, and knowing that allows us to back calculate people's level of kidney function.

And then perhaps as important or more important is something called microalbumin. This is protein leaking in the urine. And protein leaking in the urine is a very early sign that there might be some injury or some damage with people's kidneys, usually before the creatinine or anything else has gotten abnormal. Because the microalbumin is very sensitive, that allows patients, that allows your provider to

recognize that there might be some kidney injury going on very early and to be able to jump in and intervene early and hopefully minimize progression. So getting a creatinine and getting a microalbumin, or we often order something called a microalbumin creatinine ratio, are really important in the management of diabetes.

Susan Weiner:

Oh, thank you so much for that. That's such helpful information. And if you're just joining us now, this is the Ask the Experts Q&A. Our topic today is Type 2 diabetes and Kidney health. What's the link? So if you're listening on the phone and if you have questions, please press star three. That's star three on your keypad, and we will collect your questions, place you in a queue so you'll have the opportunities to ask your questions live.

And if you are listening online or you're participating online, please put your name and the question in the field below the streaming player, and please remember to hit 'submit question'. So I think at this point I can go and take a question. We have a lot of questions coming in. Let me take this question from, let me see, Lori, who's calling from Florida. And Lori, if you'd like, please go ahead and ask your question.

Lori:

Hi Lori. I am a diabetic. I have gestational, but eventually I couldn't tell you how many years it took to become a diabetic. It was on Metformin, had a stool sample that came back severe pancreatic insufficiency. I had a gastrologist that denied that diagnose, and actually I'm waiting to do another stool sample. My cholesterol is up, my A1C has never been really low sevens maybe. I am a nine three months ago, and now I'm 8.9. My cholesterol is up this time. I had no cholesterol showing. Is this the beginning? Please help me because I've gained 50 pounds. I'm on insulin for the last couple years since that pancreatic thing happened. And I mean, I'm getting worse and worse. Is it the insulin? Is it... I don't know. It's really confusing.

Silas Norman:

Great. Lori, thank you for that question. Let me see if I can address a couple of those issues. So one of the things I think you mentioned is that you develop gestational diabetes and then subsequently had type two diabetes. And that's not at all uncommon. One of the challenges I think you mentioned, as we think about good control of diabetes, is that you gained a fair amount of weight over time. A lot of our patients who will come to us, particularly on insulin, saying, 'Well, when I take my insulin, my blood sugar is better controlled but I gain weight.'

Now, if you think about it, all that glucose that's circulating in our system, it's insulin's job to move that glucose out of our bloodstream into our tissues where it can be used for energy. That doesn't happen normally in folks who have diabetes, but one of the things that does happen is with insulin therapy, we can potentially move that glucose, lower the blood sugars, trying to get that hemoglobin A1C less than 7%. But if we move a lot of blood sugar into the tissues and we don't use it up, it can get converted to fat, just like if we ate excess calories. And so, one of the things, and I know there's a lot of great resources on the ADA website is about working towards healthy eating, good amounts of aerobic exercise.

Lori:

I have fibromyalgia and chronic fatigue on top of it, which makes it a little hard.

Silas Norman:

Yeah, no, there could be a lot of challenges there, but that healthy eating and activity, as simple as it is, and even though it applies to every medical condition, can help bring down the blood sugars, and naturally with lower blood sugars, less insulin therapy. The other thing is that in an exciting way, there's a lot of new medications out there for diabetes-

Lori:

I'm on [inaudible 00:13:46].

Silas Norman:

Yeah. And also be helpful. And then just making sure that you're pulling up those resources you have in terms of your primary care physician, the nutritionist, the diabetes specialist who can really help design a good regimen for you.

Lori:

Yeah, I think it's time [inaudible 00:14:09]

Susan Weiner:

Thank you so much, Lori, for your call.

Lori:

Thank you. Thank you.

Susan Weiner:

We appreciate it. Thank you so much. Thank you. And I would have to agree, Dr. Norman, that not only on pulling on all of these resources and every day really good habits, but it's a call-out. It's not only National Kidney Month, but it's also National Nutrition Month, that working with a registered dietitian, a nutrition professional and medical nutrition therapy is something to discuss to get a referral from your physician or healthcare provider about, so you can help to get an individualized meal plan, which is covered under most medical insurances, including Medicare. So definitely look into that as well. It's a great idea.

We have another good question that came in online from Aliyah. And Aliyah asks, "Are BUN levels also factored into evaluating kidney dysfunction?"

Silas Norman:

They are. So there's a couple of naturally occurring waste products that you normally get rid of in the urine, that the kidneys normally get rid of. Creatinine is one of those BUN or blood urea nitrogen is another one of those. It also tends to become progressively elevated as your kidney function declines. It's a little more variable because it can be affected by things like dehydration and a few other things. And so it varies a little bit more than creatinine, but we do keep an eye on it as well in terms of looking at kidney function.

Susan Weiner:

Thank you so much for that. Let's go to another live question from Yasuko who is calling us from Ohio. Yasuko, please go ahead with your question.

Yasuko:

Yes, my doctor put me on Farxiga. I was having complications with that or problems, side effect problems, so he switched me to Jardiance. How does that affect my diabetes, and does that also affect my kidneys because I am on a diuretic for my heart?

Silas Norman:

So let's see. So they're both good medications, and I think we were talking about just a minute ago, I think for everybody, it's not unusual that you may have to change medicines or adjust medicines over time to find the regimen that works best for you, both in terms of effect and also in terms of side effects.

And so, two good medications, and I think it's great that when one wasn't working for you, that you and your provider got together and figured out a different regimen that could work for you. As long as you're getting good diabetes control when you're on the right track, particularly as it relates to kidney disease. We know with kidney disease, the better the diabetes control, the closer you are to goal, the less chances that you'll develop diabetes. Or if you already have diabetes, having that good control can help slow down progression of kidney disease. So I think that it sounds like you're on the right track doing the right thing and with good control. I'd expect decrease in your risk for kidney disease.

Yasuko:

Thank you.

Susan Weiner:

Thank you so much for your call, we appreciate it.

Dr. Norman, we have a question online from Marvin who asked, and this is a really great question. I'm sure a lot of people are thinking about this. "Can kidney damage be reversed or reduced?"

Silas Norman:

Yeah, that's a terrific question, and it really gets to why we have events like this to really encourage people to, as early as possible, take control of their health. Early on, the damage that diabetes causes to the kidneys can be reversed. It's not permanent. There are some early changes that certainly can get better. And then you can imagine like any other chronic disease, that left unmanaged long enough, you get fixed scarring to the kidneys that really can't be reversed.

But at almost every step along the pathway of kidney disease, we can, if not reverse it, at the very least slow down progression of kidney disease with better control. But absolutely, these early changes, and that's why if people are getting their urine specimens done and see new microalbumin in the urine and are able to jump right on that and get that managed, there's every reason to think that we can see some reversibility or improvement in kidney function.

Susan Weiner:

Yeah, it's a great question. Absolutely. And thank you for that response. I know as a dietitian, a lot of people ask me about some of the dietary suggestions for a person who is living with high blood pressure and kidney disease. And one of the common questions is, why do I have to reduce the amount of

sodium in my diet? So do you have any comments about those kinds of questions about what to change when somebody is eating? And I know that sodium is something that I address quite often, so let's talk a little bit about that.

Silas Norman:

No, absolutely. And I hesitate to talk about diet too much for the registered dietitian, but one of the things I'll say is we know that sodium is one of the things that can drive high blood pressure. And modification or reduction of sodium intake can help improve blood pressure. And that's particularly relevant as we think about kidney disease, because really if we go back thinking about at the end of the day, diabetes is causing blood vessel damage, high blood pressure causes blood vessel damage. And so, if you think about the kidney filters, your kidney filters are really driven by the blood pressure that goes across them. This is how they filter waste products out of the body, is basically blood pressure pushes across the kidney filters. They have really small little holes in the filters that filter small things like sodium and potassium. But you can imagine that having high blood pressure for a long time can just cause physical damage, can cause those kidney filters to tear up and get damaged and get scarred down.

And so, for folks who have diabetes and then develop high blood pressure, managing that blood pressure can be sometimes almost as important as managing the diabetes in terms of preventing complications like kidney disease. And I think Susan, you mentioned at the top of the hour this partnership with The American Heart Association, which I think just emphasizes this link between diabetes and heart disease. And so, many of our patients who have kidney disease, they may not have kidney disease in isolation. They may also have heart disease because the heart also has a number of really critical blood vessels as well. And so, as we think about taking control of our health, what we can do to minimize complications, cutting down the sodium that we put in our diets is a nice non-medication way to lower blood pressure and improve our health.

Susan Weiner:

And really well said, learning to look at labels and label reading, also important. Looking for foods that are made with less sodium and learning what these different terms mean. And there's a lot of information on the ADA of the American diabetes website about that. Also looking at what definitions are like. Unsalted means that there's no sodium added to the food, but there may be some sodium in the food naturally. Sodium free means that a serving of the food, one serving of the food has less than five milligrams of sodium. Very low sodium means a serving has less than 35 milligrams of sodium. And these types of issues that you can see and pieces that you can find on a food label can be extremely helpful when you're planning what you're eating, learning what is reduced sodium, what foods don't have sodium in it.

So make sure again, to check out that information on the website and also to again, speak with a nutrition professional if you want more information about it. But we can really learn a lot from the information that we get from Know Diabetes by Heart, The American Heart Association, and the American Diabetes Association. So there's a lot of information, resources and tips out there.

Let's go to another one of these live questions. We're having a lot of great ones coming in. We have a good question coming in from Gail who's in New York. Gail, please go ahead with your question.

Gail:

Yes, thank you very much. I would like to know if there's an association between kidney disease, I have type two kidney disease and low magnesium. I have to keep going for infusions, because the magnesium goes so low.

Silas Norman:

So there's not. So in general, no. And I say in general because there are some specific genetic causes of kidney disease where you can lose magnesium, but there may be some impacts that you're seeing in terms of how well you're absorbing magnesium that may be related to some of your medical conditions.

Gail:

Okay. I was worried about with the kidney disease specifically. So as long as there's no association, I'll just treat it separate.

Susan Weiner:

Thank you, Gail.

Gail:

Thank you.

Susan Weiner:

So we have another good question that came in online from Lisa, and Lisa asks, "What resources are available for eating well if you have kidney disease?"

So Dr. Norman, you can go for that first. I think we spoke a little bit about that, but we can address that further.

Silas Norman:

Yeah, absolutely. So, let's see. So in terms of in-person, again, I would think your primary care physician or endocrinologist or diabetes doctor if you have one, dietitians as we were just talking about a few minutes ago, are great sources of information and can really help talk to you in a culturally sensitive way about what you like to eat, what foods you tend to eat and help you better design a diet, can't call it a diet, a eating plan that's both helpful for your diabetes, but good for you. There's a number of online resources including on the ADA website that can help give you some tips and suggestions of how to have healthier eating that can help improve your diabetes and kidney health as well.

Susan Weiner:

And there's so many different factors that need to be considered, depending on where you might be with your journey with type 2 diabetes and with kidney disease, and in terms of these stages and how that might be treated. So it's not only looking at your sodium and potassium and phosphorus, but perhaps your protein and your fluid intake as well. How do your patients bring that up to you often and how do you address that?

Silas Norman:

Yeah, that's a terrific question. So I think interestingly, there's a divide. So we have patients who don't bring it up at all, which doesn't mean it's that important. And so, as providers, we have to be sensitive to bringing this information to our patients in talking about potential lifestyle changes we can make, not just medications. But then also, we have a number of patients who are very interested in "What can I do to improve my health?" And I think when our patients do bring that up, as you mentioned Susan, it's really important to individualize where that patient is in their diabetes journey, in their kidneys journey, in their kidney staging to make appropriate recommendations.

As kidney disease advances, many people will need, in addition to good diabetes nutrition recommendations, they'll also have some recommendations related to the stage of kidney disease. I do think, again, this is where really the dieticians can be just a tremendous resource because it can seem overwhelming. I think particularly at first to try to navigate what seem like a lot of restrictions on what you can and can't eat. I think one of the big challenges where it's worth getting a little bit of professional insights, one of the common questions our patients will come to us asking about is how much protein they should eat, how much protein is safe and reasonable for them to eat. And I assure you that in medicine, if our patients ask five people, they get seven different answers.

And so, being able to talk to those health professionals, those nutrition professionals to really understand where you are in your journey to make sure that things aren't just well controlled, but you're really getting adequate and good nutrition, that we're not restricting things we don't need to restrict. And then I think thinking about, most of us don't just eat alone. Many of us have spouses and partners and families, and often the nutrition changes we're trying to make, any idea what we're probably going to cascade to our families. And so trying to figure out how do I manage my disease, but also, I've got two little kids I need to feed. I've got a spouse, how do I design meals and meal plans that really work for the entire family that are really going to be sustainable over time, both in terms of what my family will eat, what's affordable and what's working for my medical conditions.

Susan Weiner:

I mean, so well put. That's extremely an important conversation to have. We're not giving anybody a pre-planned list of exactly what to eat. It comes from a lot of different pieces, where somebody is and what they're currently eating, what their cultural background might be, what their food preferences are, financially, their schedule. There's so much that goes into this. Which leads me to a question that I often ask physicians that I work with. Sometimes people who are living with diabetes and other chronic comorbidities and conditions may have difficulty or almost a shyness in speaking with their physicians, their healthcare providers about some of these questions. Do you have any suggestions on an approach to bringing this up to your physician? And again, the physician may be extremely open to helping and directing and providing resources and information, but sometimes people are a little too careful in their approach to bring it up.

Silas Norman:

Absolutely, absolutely. So I've mentioned two things. I think the first thing is to remember that your physicians, your care providers are there for you. We are here to serve you in these clinic visits and these interactions. So this is a service you're paying for, so you should get the value for your service.

The second thing I'd say that I think is often helpful and that I do when I go to see my primary care physician, because often in that half an hour or so meeting whatever I wanted to talk to them about, I've forgotten when I'm there. I suggest that people make a list of the questions you have for your physician, depending on how your care is delivered. Sometimes what I do is send that list through my patient portal to my physician ahead of time. So I say, "Here's the eight questions I need answered today." So they have a chance to look at them and think about them. But I think bringing that list with you, and I think there's no problem coming in, pulling out that piece of paper, so that your physician knows we've got this stuff to go through today to really make sure that when you leave that appointment, you have the information you need, the understanding you need, and kind of the action items to move things forward.

Susan Weiner:



Absolutely. Being prepared is everything, and going through those points to make sure that your questions are answered is very important.

Let's go to another live question. This question is from Maureen in Illinois. Maureen, please go ahead with your questions.

Maureen:

Yes, doctor, I'm interested in knowing whether Ozempic is helpful with kidney disease. I have type two diabetes, had it for years, and only recently was told that I have stage four kidney disease. I am on Ozempic, and I have heard some things that Ozempic is helpful for kidney disease. Could you talk about that please?

Silas Norman:

Sure. So these medications, Ozempic, Wegovy, and so forth, are relatively new. So we don't have a lot of long-term information about these medications as it relates to kidneys yet. What we do know is that as people lose weight in a healthy way, as people lose weight, that can be helpful for your kidneys. The heavier people are, the more work the kidney has to do to clear waste products and manage fluid. And so, as people lose weight, that takes some of the work off of the kidneys, and particularly people who have compromised kidney function already, as you said, stage four kidney disease, helping the kidneys to not work quite as hard can be one way to slow down progression. And so, we're certainly cautiously optimistic that these medications will turn out to give a great benefit to our patients.

And then as you probably know, we're really focusing on kidney disease today, but we know as people are able to get rid of some of their excess weight, there's a lot of areas of the body that may benefit from that. So there may be benefits beyond slowing down kidney disease, which is certainly important.

Susan Weiner:

Thank you so much, Maureen. Several people had a similar question, so thank you so much for asking it. We appreciate it so much. If you're just joining us now, our topic is type two diabetes and kidney health, what's the link? So if you're calling in from a phone, please remember to press star three. That's star three on your keypad, and we will collect your question and place you in a queue so that you can ask your question live. And if you're participating online, please type your name and question into the field below the streaming player and remember to hit 'submit question' button, and we will get to you there as well.

So let's go to another question here. This is a great question from Emily in Maryland. Emily, please go ahead with your question.

Emily:

My question was, is kidney disease inevitable for diabetics? Are there any people who don't develop kidney disease?

Silas Norman:

Absolutely, no. That's a terrific question. The answer is no, it's not inevitable. Depending on how you look at it, somewhere around three out of 10 to four out of 10 people who have diabetes will eventually develop kidney disease. And so, it's critically important but not inevitable. And so, it's important for people living with diabetes to not just accept kidney disease or any of the other diabetic complications as just inevitable things that have to happen with the disease. As we are able to modify our diet so that

we're eating a little better, and that's a challenge as we're working and raising kids and all the rest. But at the end of the day, our health is probably the most important thing to us.

As we're able to, again, within our lifestyle, try to figure out where can we get some more exercise, activity, aerobic activity to be healthier, as we can make sure we're monitoring our blood sugars, as we're making sure that we're on the right medications for us to get those blood sugars well controlled. We can really prevent a number of these diabetic complications or at least reduce the severity of them. So I think nothing inevitable, and thinking about kidney disease, at almost every stage of kidney disease, we can slow down that progression. So just because someone is at stage two, doesn't mean they have to go to stage three kidney disease, for instance. We can really arrest that if we're diligent about what we're taking in, about exercise, about our medications, about our blood pressure and so forth.

So I think chronic disease like diabetes is a great opportunity for us to take control of our health, to both be our main advocates for our health, but also take an affirmative approach to being healthier in big ways and in little ways. And it's a long journey. And so, I think as we're doing this, as we're trying to avoid kidney disease and be healthier, no one should be dissuaded because after the talk today, you didn't go out and run five miles or you didn't get on some incredibly perfect diet. This is what they say, it's a marathon, not a sprint. And so I think just each and every day is another opportunity for us to make small changes that over the long term can really result in us being healthier and having better kidney health.

Emily:

Okay. What about kidney stones? I've had kidney stone removal four times. Does that weaken your kidneys?

Silas Norman:

Kidney stones can cause some damage to kidneys. Most notably, some people who have kidney stones will also end up with some kidney infections because of the blockage of the stones. There's a lot of different reasons for kidney stones. And so, depending on what kind of stones you have or someone has, there may be some different recommendations for what to do about those stones. And there's a number of kidney doctors whose focus is kidney stones and a number of urologists whose focus is kidney stones, and they can do some testing to get an idea of what kind of stones have, what's putting them at the risk for those stones and help make some modifications so that people don't have ongoing damage or potential damage from repeated stones, besides the fact that they can hurt.

Emily:

Wonderful. Thank you very much.

Silas Norman:

Very welcome.

Susan Weiner:

Thank you, Emily. Thank you so much for calling.

Let's take a question from Anita who is calling from Washington DC. Anita, please go ahead with your question.

Anita:

Hi, I was wondering, I am a type two diabetic and I do not have high blood pressure, but my endocrinologist advised me to take Valsartan to protect my kidneys. I guess I don't understand the relationship with me taking the high blood pressure medication. And I guess relating to the kidneys, I've always had perfect blood pressure, and I've I protested it, but she basically told me that I better do this. So I just want to know, Dr. Norman, what's the relationship, I guess?

Silas Norman:

Sure. No, that's actually a great question, and I'm actually excited that your doctor was thinking about this, despite the fact that your blood pressures were normal. So the Valsartan falls in a class of what we call RAS blockers or renin-aldosterone and angiotensin blockers. That name doesn't matter so much, but there's a couple of classes of medicine out there, which Valsartan is one, that we consider kidney protective medicines. So what do we mean by that? So if you think about your kidney filters, there's blood flow going into the filter, there's the filter, and then there's blood flow going out of the filter. And remember, the filter is just the blood vessel. I think about it like a balloon animal that's just all twisted up, but the ear of the giraffe and the foot of giraffe are the same balloon, same blood vessel.

When blood pressure goes across those blood vessels to filter waste products out, that's a good thing. But as we talked about earlier, having high blood pressure across those filters can eventually damage those filters. If you think about taking a sponge and you put the hose up to it, a sponge's job is to filter water, but if you put that hose up to it and you turn the water up enough, it's just going to tear up that sponge. Same thing happens to the [inaudible 00:41:24].

Now, what does Valsartan do? So you've got the blood flowing in and the blood flowing out of that kidney filter. What the Valsartan does is dilate that outflow. It makes the outflow blood vessel a little bigger, it makes it relax. What that does is it drops the pressure across your kidney filters. And in doing so, helps preserve your kidney filters, your kidneys for longer. And so, even though your overall blood pressure is okay, there's still benefit in dropping the blood pressure that goes across those kidney filters because we expect that those kidney filters, they'll just last longer that way.

Anita:

Makes sense. Thank you very much.

Silas Norman:

Thank you.

Susan Weiner:

Thank you, Anita. And Dr. Norman, that was a fantastic visual description. Thank you so much for that. That was really terrific. I think a lot of people appreciated that.

We have a question online from Lisa who asked what GFR means.

Silas Norman:

Oh, sure. So GFR stands for glomerular filtration rate, which, what does that mean? So glomerulus, I've been talking about the kidney filter, I'm talking about the kidney filter. That kidney filter is called the glomerulus. And so, when we're talking about kidney function, what we mean as kidney doctors, we mean how well does your kidney do in terms of filtering waste products? And we talk about how much waste product does your kidney filter every minute. So we talk about waste coming out of that glomerulus in milliliters per minute of waste clearance.

And so, we talk about the glomerular filtration rate as what we in lay terms mean as kidney function. But that's where you get the GFR from and that's what we're trying to measure or approximate. When we measure your creatinine and estimate your kidney function, we're really trying to estimate that glomerular filtration rate, which is how well do all of those filters together, how well are they clearing waste products.

And GFR, even not remembering glomerular filtration rate specifically, but knowing your creatinine, knowing if you have any albumin in your urine, and knowing your GFR, I think those are important things as a patient that each of us should know. We should be able to know that so that when we are at visits, when we're talking to our doctors, we know where we are in our journey with kidney disease.

Susan Weiner:

That's a really great point, and I think so many people are asking the question on the phone and online, and I know I get this question all the time, should I be on, from managing or helping to manage my blood glucose and knowing more data, as you're bringing up a CGM or a continuous glucose monitor? Do the people who you collaborate with and your patients ask you about going on to a CGM, and what are your thoughts about that?

Silas Norman:

Yeah, no, that's a great question. So with the caveat that at the end of the day, each of our treatments should be individualized. You should have the right treatment for you. Having said that, what I will say is that I think the continuous glucose monitors, the CGMs are one of those pieces of technology that are really revolutionary in medicine. I think every now and then we get something that really, really changes the game, and I think the CGMs are one of those.

My patients who have gotten continuous glucose monitors love them. They love being able to have that real-time information. They love being able to say, I ate lunch, I saw what happened to my blood sugar, and able to realize what they ate and modify in real time. So I think the uptake has been good. I think at least my patients really, really like these continuous glucose monitors. In my patients at least, it seems to have been associated with better glucose control because people have more information about what they're doing, what they're eating is affecting their glucose. So we're really excited about the CGMs.

Susan Weiner:

I agree, the same in my practice as well. It's been revolutionary in helping people manage their diabetes on a day-to-day basis. And this month, during National Kidney Month, I know that every year there is a certain theme, and this year's theme for 2024, for World Kidney Day and for National Kidney Month, is Kidney Health for All - Advancing equitable access to care and optimal medication practice. Do you think that that's a good theme for this year, and how do you think that most practitioners are responding and running with that theme, because that's extremely important?

Silas Norman:

Absolutely, absolutely. So I think it's a terrific and timely theme. When we think about kidney health for all, we're all at risk, some more than others based on disease, but as we talked about microalbumin and creatinine as adults, all of us should be getting that check once a year because of the possibility of prevention. We do want to make sure that there's several people who don't have access to healthcare, and it's important for us to keep thinking about how do we work on making sure everybody who's at risk has the opportunity to be screened and for us to minimize disease.

One of the things we know when we talk about advanced kidney disease, and this goes back to why it's really important for each of us as people, as patients, to be on the case with management, is we know that for the folks that I see, the folks who start dialysis, we know that about 70% of the people who start dialysis have not seen a nephrologist, have not seen a kidney doctor for more than a year, which is to say that for a lot of people, when they first see a kidney doctor, it's when they already have really, really advanced disease. About seven out of 10 people, if they saw a kidney doctor at all, it was within that last 12 months before they started dialysis.

So we know that there's a lot to do in terms of getting people the care they need. That's not to say that everyone needs to rush out and see a kidney doctor, but it does mean that when we have stage one, when we have stage two, stage three kidney disease, that's when we really have opportunities with what we know with our primary care physicians, primarily with our diabetes doctors, to make sure we're measuring kidney function, taking the opportunity to make lifestyle changes early on, doing things like the woman who called in, getting placed on the kidney protective medications early when they can do us the most good.

So I think it's a great theme for the year. I think there's a lot we can do, that we can do together. I think for the folks watching and listening to us today, I hope what you've heard, among other things, is that none of us as practitioners are doing this alone, that to get you the best outcome, there's going to be collaboration between your primary care physician and the dietitian and the endocrinologist and the kidney doctor, and your cardiologist if you have one, et cetera, so that we can make sure that we're doing what we need to do to keep you healthy. And so, I think it's a great theme for the month.

Susan Weiner:

I think that that was a great wrap up with all those key takeaways for today's discussion. Thank you so much for saying that. And again, be prepared and speak to your physician, your provider, your diabetes, care and education specialist, your dietitian, your pharmacist, everybody on your team, ask your questions because it's so important to be screened and to take all these preventative measures in protecting your kidney health.

Remember to also go to [knowdiabetesbyheart.org](http://knowdiabetesbyheart.org) and sign up for the free newsletter. Register for our next events at [diabetes.org/experts](http://diabetes.org/experts). Remember also at the end of today's program to please stay on the line for a very short survey, which is coming up shortly. Sign up for diabetes self-management education support classes near you and online. To learn more, please go to, we have the website here, the [cdc.gov](http://cdc.gov) website, [diabetes.dsmes](http://diabetes.dsmes), Diabetes Self-Management Education and Support Toolkit, and always reach out to ADA. You can call 1-800-DIABETES and [AskADA@diabetes.org](mailto:AskADA@diabetes.org) to request a digital copy on How to Thrive Resource, which can help you on your diabetes journey as well. All very important pieces of information.

Thank you so much for all of these great questions that you called in with and wrote in with, and we're sorry if we weren't able to get to all your questions. There were a lot of great questions today and a lot of great discussion. If you have any questions about this event, you are welcome to contact us at [AskADA@diabetes.org](mailto:AskADA@diabetes.org) or calling. Please stay on the line with us for the survey, as I mentioned. And Dr. Norman, we cannot thank you enough for your incredible expertise today, just absolutely amazing.

My name is Susan Weiner, and on behalf of the ADA team, we want to thank you for joining us today, and we look forward to connecting with you at our next events on April 9th, your medication questions answered. And I know that everybody has a lot of medication questions that you want to be educated on. So please join us. And on May 14th, high blood pressure and type two diabetes. Please visit our website for more information at [diabetes.org/experts](http://diabetes.org/experts) and register today. And if you have any questions about this event, please email [askada@diabetes.org](mailto:askada@diabetes.org), include, 'ask the experts Q&A' in your subject line.

And thank you all for joining the Ask the Experts program today. We hope that you would join our next one and the one after that as well.

And now it's time to start taking our survey, so please stay with us, if you would. Okay, so we're going to go to the first polling question, which I will read, and you can participate in. Thank you for participating in today's event. So let us know the level of agreement with these statements. The first one, question one, this event met my expectations today. For yes, please press one, for no, please press two. And if you're unsure, please press three. Again, question one, this event met my expectations today. For yes, please press one, for no, please press two, and if you're unsure, please press three.

And if you feel like you can use some more support for managing your diabetes, check out the [diabetes.org](http://diabetes.org) website. There are so many links to information that can help you with your diabetes journey, and a tremendous amount of information. It's a really good idea to go on the site and just move around on it and see what other information might be there that you may have a question about or that we don't cover during one of these events. Let us know. Maybe we'll pick it up on another event and address it for you.

Okay. Let's move on to question two. I will attend another Ask the Expert event. For Yes, please press one, for no, please press two. And if you're unsure, please press three. Again, I will attend another Ask the Expert event. For yes, please press one, for no, please press two, and if you are unsure, please press three. We talked a little bit about nutrition today, but we can always talk about nutrition more. You can find some delicious and healthy recipes and menus. We're always looking for recipes. Check out [diabetesfoodhub.org](http://diabetesfoodhub.org). That's [www.diabetesfoodhub.org](http://www.diabetesfoodhub.org).

Okay, let's move on to question three. This event improved my knowledge of type two diabetes and kidney disease for. Yes, please press one, for no, press two, if you're unsure, press three. Again, question three. This event improved my knowledge of type two diabetes and kidney disease. For yes, please press one, for no, please press two, and if you're unsure, please press three. And did you know that there were approximately 37 million people with diabetes? So you are not alone. Sometimes we feel that way, but you're not alone. If you're looking for peer support, the ADA has peer support in state offices. There are diabetes camps, online forums, and much more. Check out [www.diabetes.org/community](http://www.diabetes.org/community), that's [diabetes.org/community](http://diabetes.org/community) for more information.

We have a couple of more questions to go, and we really appreciate you staying with us through the survey. Moving on to question number four. I intend to use the knowledge I gained for my or my loved one's next appointment with a healthcare professional. Question four, I intend to use the knowledge I gained for my or my loved one's next appointment with a healthcare professional. For yes, press one, for no, press two, and if you're unsure, press three. This year, World Kidney Day falls on March 14th, and it's a day marked with global events, health screenings, education campaigns. It's all focused on kidney health. And if you want more information about World Kidney Day on March 14th, please go to the ADA website or to the National Institutes of Health website. That's the [nih.gov](http://nih.gov) website for more information.

Okay. We have a couple more questions. Question five. Before the event, I felt confident talking to a healthcare professional about my or my loved one's increased risk of kidney disease, heart disease, and stroke. Before the event, I felt confident talking to a healthcare professional about my loved one's increased risk of heart disease, kidney disease, and stroke. For yes, press one, for no, press two, and if you're unsure, press three. Again, for yes, press one, for no, two, and if you're unsure, press three. And Dr. Norman spoke a lot today about a screening and the importance of screening for kidney disease, especially if you're living with diabetes. If you're interested in finding out more about your risk for kidney disease, the CDC, the Centers for Disease Control and Prevention has a chronic kidney disease risk calculator. So you can go to the CDC website and type in chronic kidney disease risk calculator in the search bar, and it'll bring up a lot of great information, and you can use that risk calculator.

And we are up to our final question. Thank you for staying with us. Question six. After this event, I feel confident talking to a healthcare professional about my or my loved one's increased risk of heart disease and stroke. For yes, press one, for no, press two, and if you're unsure, press three. After this event, I feel confident talking to a healthcare professional about my or my loved one's increased risk of heart disease and stroke. For yes, press one, for no, press two, and if you are unsure, please press three.

We sincerely appreciate your time and look forward to you joining us for a future Ask the Expert event. My name is Susan Weiner, and I'm so grateful that you spent your time with us today. Please visit [diabetes.org/experts](https://diabetes.org/experts) to learn more about upcoming events. Thank you so much for joining.