# ADA: Ask the Experts Access Live April 11<sup>th</sup>, 2023

## Carla Cox:

Hello and thanks for joining us. Welcome to the [inaudible 00:00:05] Diabetes Association's Living with Diabetes, Ask the Expert series. Today's topic is labs, scans and more. My name is Carla Cox, diabetes care and education specialist, registered dietician nutritionist, and your host for today's program. Our Ask the Expert series is all about answering questions from our listeners, so start getting your questions ready now.

For those of you on the phone, press \*3, that's \*3 on your keypad, and an operator will collect your question and place you in the queue so that you can have the opportunity to ask your question live. To participate online, type in your name and question in the fields below the streaming player, press [inaudible 00:00:49] submit button and your question will come directly to us. Stay with us through the hour and you will learn useful tips to help you live well on your journey with diabetes. In addition, we invite you to provide us with your feedback in the survey at the end of the event, so please stay with us.

Okay, now a little bit why we're here today. 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 founding sponsors, Novo Nordisk as well as national sponsor, Bayer, the No Diabetes by Heart initiative provides tools and resources for people living with type 2 diabetes to learn how to reduce their risks of cardiovascular disease. As part of the initiative, the ADA is holding this free educational Q&A. Once a month. We'll cover information and tips to help you take charge of your health. When you have diabetes, it increases your risk of heart disease, stroke, and kidney disease. Make sure when you see your doctor, you talk about your risk and work towards prevention.

I am delighted to introduce our guest speaker for today, Christie Schumacher. Dr. Schumacher is a professor of pharmacy practice and director of the Ambulatory Care Residency Program at Midwestern University College of Pharmacy, Downers Grove Campus, and a clinical pharmacist at Advocate Medical Group Southeast Center in Chicago, Illinois. She currently works in a primary care clinic to provide comprehensive medication management for a variety of internal medicine disease states, including diabetes. She currently serves as a chair on the board of Pharmacy Specialties Specialty Counsel on Ambulatory Care Pharmacy, is a past chair of the American College of Clinical Pharmacy Endocrine and Metabolism Practice Research Network and the ACCP ambulatory Care PRN.

So Christie, tell us a little bit more about yourself.

# Dr. Christie Schumacher:

All right, so nice to see everyone. Thanks for joining us today. So as mentioned, I'm Dr. Christie Schumacher, I'm a pharmacist here, a clinical pharmacist at Advocate Medical Group. So I do individual appointments here with people with diabetes. I'm really helping them with their entire cardiometabolic health, so improving their blood pressure, their cholesterol, helping them prevent a possible coronary or heart attack, stroke, different event, making sure they have all the preventative measures in place so that really they can stay as healthy as possible and not have any issues, and really just better manage all of their different comorbidities [inaudible 00:03:34] condition.

So looking forward to answering your questions today and so glad you joined and took some interest in asking us questions and learning about health with your heart and with diabetes management.

Carla Cox:

Thanks. As we're waiting for our callers and online listeners to chime in, I'm going to go ahead and kick off with the first question. How can a person with diabetes know what laboratory tests should be done and when they should be done?

## Dr. Christie Schumacher:

So that's a great question. Hopefully, your primary care provider or your endocrinologist should have handouts for you when you go into the clinic that should give you. We have comprehensive lists for each of our patients or people with diabetes, really letting them know these are the tests that we recommend and then this is when we recommend getting them done. For example, getting your eyes checked early, proper foot care, vaccination updates and different things. So definitely talk with your doctor to see if they have a standardized list that they follow, a patient education materials that you can take home.

If not, the ADA has a lot of great resources online and that's where we've taken some of our resources from. I'm not sure if the ADA here has a link that they want to share with you, but there should definitely be some tools online. Because I know for us we go to the ADA standards of care, but for patient pacing, I'd have to look up the exact website for where to find it, but maybe we can share that in the chat.

## Carla Cox:

Thank you. If you're just joining us, welcome to today's ask the experts Q&A, labs, scans and more. As a reminder, for those of you on the phone, press \*3, that's \*3 on your keypad, and an operator will collect your question and place you in the queue so that you may have the opportunity to ask your question live. To participate online, type in your name and question in the fields below the streaming player. Press the submit question button and your question will come directly to us. Remember, today's topic is labs, scans and more. Let's remember to focus on that topic for today's event when asking questions.

Now, let's take our first question, and it is from, let's see... there's a question that's not exactly on labs, but it's a good place to start, so I'm going to give this right away to you. And this question comes in from Eloise from Wisconsin. You are on the line.

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Yeah.

Carla Cox:

Can you give us your question?

## Eloise from Wisconsin:

Yeah, I said I want to know how to keep my blood sugars down because they keep getting high so much. [inaudible 00:06:16] about the blood sugars?

# Dr. Christie Schumacher:

I mean, there's a variety of ways to keep your blood sugar down, of course, exercise is a great way. So I'm not sure if you exercise yet, but we usually recommend starting with maybe like a five minute walk, working your way up to a 30 minute walk, five days of the week. Any sort of moderate intensity exercise is a great way to manage your blood sugar without medications. And then of course, watching what you eat, limiting sugary foods and desserts, eating more vegetables. We usually recommend for people with

diabetes having more protein in their diet, so lean meats such as chicken, turkey, seafood, and then avoiding breaded foods as well, or foods with carbohydrates in them. So you can make some mild dietary changes.

And then of course talking to your doctor or endocrinologist, pharmacist about possibly starting a new medication or just making sure you're taking the medications that you're prescribed correctly. Those can all help you better manage your blood sugar.

## Carla Cox:

Thank you. I have a great question coming from Jim, and this is online, so I will ask the question. Ranked by management importance, blood pressure, glucose level, cholesterol, triglycerides, and depression? Boy, that's a tough one.

# Dr. Christie Schumacher:

That is a tough one. You know what, I might go with actually depression number one, because I teach our residents and our students as well, and I feel like if you really have behavioral health underlying issues, it's really difficult to want to get up in the morning to exercise, to take your medications, to eat right. And so sometimes I guess if you have depression and you're not really up for taking care of yourself, that could be the biggest barrier. So I would actually put probably depression at number one.

And then number two, maybe blood pressure because it depends how high it is, because if your blood pressure is 250/100, you're at an increased risk of stroke basically right now. Where with diabetes, if your blood sugar was 400, you should go to the hospital, but we can lower it safely over time where I feel like there's not an instantaneous danger to having a blood sugar of 400 like there is potentially a stroke with a really high blood pressure. So I might go depression, blood pressure, blood sugars, and then I think triglycerides might be last, because if you manage the blood sugar, the triglyceride should go down.

What was the other one that was in there? There was five, I'm missing one. But I would focus on behavioral health first, because once you feel good about yourself, then you're more apt to taking care of everything. So very important.

# Carla Cox:

Great response. Hey, we have a question coming in from Cynthia, it has to do with A1C. So Cynthia from Maine, you're on the line.

# Cynthia from Maine:

Yes, hi. I just was told by my doctor that my A1C was 6.9 and she put me into the diabetic realm, and that's the only information I've received so far. I have another follow up doctor's appointment coming in another few weeks. In the meantime, I wasn't given any information on anything to do. I've been to the grocery store, tried to buy things that don't have sugar or a limited amount of sugar. And then I find online when they give you information, so many of the websites give you information that seems like it contradicts each other, and I'm not quite sure what I should be doing in these next few weeks until I see the doctor the next time.

# Dr. Christie Schumacher:

So basically a diagnosis of diabetes is made if the A1C is greater than 6.5. And historically, for basically A1C goal, the A1C goal is for most people less than 7, unless you're older, have more comorbidities, at

which point we might say your A1C goal is less than 8. So overall, it's good that you were basically following up with your doctor, got your lab's done, identified early that your A1C was 6.9. So great work on actually going to the doctor, being proactive in your health.

And I love that you're already at the grocery store starting to make smart choices about how much sugar is in the food that you eat and making those kind of decisions. I think right now, A1C of 6.9, it's more just a warning. It's like, okay, you have that diagnosis of diabetes because your A1C is greater than 6.5, but now you can start to make those lifestyle modifications such as exercising a little bit more, starting to watch what you're eating, which is what you're already doing. And then once you see your doctor, she can go over blood sugar testing with you. She wants you to check your blood sugar, there's a variety of different things. I mean, with an A1C of 6.9, I'd be happy to see you in our clinic. You'd be one of the best managed people with diabetes.

But I think overall, I wouldn't worry too much right now. I think just starting to make those lifestyle modifications is a great start. And then when you talk to your doctor, she can talk to you about monitoring your blood sugar, because your goal will be 80 to 130 before you eat and then less than 180 after you eat per the ADA recommendation. So she'll go over all those different goals with you when you start to check your blood sugar. But overall, I think right now, even though you do have the diabetes diagnosis, I wouldn't panic. I think what you're doing is great, just starting to watch how much sugar is in the food that you're eating and then starting to get out and exercise a little bit more is a great start.

## Carla Cox:

Thank you. I have another online question, and this comes from Christine, because I have diabetes and I'm overweight, my doctors expressed concern over heart health, but they've only recommended weight loss as a solution. Would it also be wise for me to have cardiac labs such as my cardiac calcium score? Maybe you could also speak to just having lipids done in general.

## Dr. Christie Schumacher:

Yeah, great question. So a lot of the patients that I manage actually are obese as well as, they have type 2 diabetes, and have different degrees of heart disease. So one of the things that actually the American Diabetes Association and the American College of Cardiology recommends if you are thinking about your heart, you could have just a screen done to make sure you're not developing any early signs of heart failure. And then in general, we actually recommend having a lipid panel done every year, because all people with diabetes should be on at least a moderate intensity statin if they're over the age of 40. So we really do recommend statin therapy, whether it be atorvastatin or rosuvastatin for all of our people with diabetes that are over the age of 40. And that really just prevents them from having a heart attack, having a stroke, peripheral vascular disease, really any of these cardiac complications that we're worried about that diabetes can unfortunately precipitate.

So I think one of the things I would talk to your doctor about is having a lipid panel done at least yearly. If you want you could have, they do recommend now screening for heart failure in people with diabetes, because really the heart failure guidelines now actually say the stage A heart failure from the American Heart Association is people that are obese or have diabetes. So they do recommend screening a NT-proBNP as a baseline just to make sure they're not showing any early signs of heart failure is something. But I think in general, if you haven't had a lipid panel done in a while, just starting with a lipid panel, making sure you're taking that cholesterol lowering drug, the statin, because we use it more to prevent heart attack and stroke even more so than even lowering cholesterol. But I like that you're already starting to think about it, and then of course making sure that your blood pressure is at goal, which would be less than 130/80.

## Carla Cox:

Thank you. So kind of piggybacking on this, Rich who does not want to go live so I will ask his question, is from Buffalo, New York, and the question is for someone with diabetes but no history of heart disease, would a CT calcium score and/or a stress test be a good preventative measure?

#### Dr. Christie Schumacher:

That's a hard question to answer, because it's really not recommended in the guidelines. So if you don't have any history of heart disease, if you don't have high blood pressure, any risk factors, for heart disease really you don't need the coronary artery calcium CT score. Really they recommend that people with diabetes just automatically get started on the statin therapy, which is what I talked about answering the last person's questions. So really instead of doing all these screens like a stress test, they recommend something less basically expensive, such as an NT-proBNP or BNP lab test just to make sure you're not showing any early signs of heart failure. So some clinicians will recommend that. If you would feel more comfortable with the stress test and you have that conversation with your physician, by all means go for it. But usually I would say we would recommend a stress test maybe for a person with a significant family history, someone that has high blood pressure or history of heart disease themselves.

So I think in general, if you're just starting to think about it, you don't need to do all of those tests yet. I think I would focus most on making sure your blood pressure's under 130/80, making sure you're on atorvastatin or rosuvastatin to prevent heart attack and stroke. And those are probably the best things you can do in the preliminary stages to prevent heart disease as well as managing your blood sugar. But I'm not sure you need all those tests just yet.

## Carla Cox:

Thank you. So this question, because you're pharmacist, I think it'll be a good question for you even though it's not specifically about labs. This one comes from Penny, and Penny is from Ohio. Penny, you are on the line.

# Penny from Ohio:

Hi, thanks for taking my call. I just recently on Thursday, last Thursday, had a statin, or not statin, an injection in my knee. And I asked if there were any complications because about 21 months ago, I had a three heart bypass. And I'm heavy on statins which I'm allergic to, and I'm on Crestor, which I'm allergic to, but I have to take anyway. So I asked if there was going to be any complications and they said no, there shouldn't be, it goes right into the bone. And when the next morning my blood sugar was up at 300, I called the doctor right away and they said, oh yeah, they usually tell their diabetic patients that the blood sugar will go up. I said, well, nobody told me.

And so now I'm what, five, six days out, and I'm having trouble getting it back under control because my beta blockers say it's hard to keep your glucose under control anyway. And so it's like, what can I do? I'm on a low sodium diet because I have Meniere's disease so I'm not eating processed foods or anything. I do most of my own cooking and most of it's just fresh, other than low sodium canned. So what can I do to get it under control or is it just going to be a process of waiting? My muscles get weak and that kind of thing but I've been trying to walk.

# Dr. Christie Schumacher:

Okay. Yeah, so good question. I'm sorry that they didn't warn you, but if you do get a cortisone injection in your knee, which is what a lot of people get to help with pain, knee pain, osteoarthritis pain, sometimes they'll get I think on the scheduled term is like a steroid injection in their knee, and

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unfortunately that does raise your blood sugar and it can as well raise your blood pressure. So that is something that can happen. Usually, when our patients here in our clinic are going to get a cortisone injection into their knee, we do end up increasing their basal insulin if they're on it just for a few days, just to counter the blood sugar increases that happen.

I don't know what medications you're on, so I obviously can't tell you what to increase or decrease. That would be a conversation to have with your doctor. But I would call and let the office know, you had a steroid injection, it raised your blood sugar and you're having a hard time getting it back down. Things that you can do in the meantime to try to get it down yourself are just to exercise. So the more you can exercise, then the more your body will utilize the extra glucose. And then just trying to limit the amount of sugar that you consume, that should help a little bit in the meantime. But unfortunately, some patients do need medication to bring it back down after the steroid injection, so that can happen.

And then it sounds like you're trying to manage your blood pressure, so sometimes steroid injections can also increase your blood pressure if you get a pain injection in your knee. And then as you mentioned, the low sodium diet can help if you limit salt, reducing your blood pressure. And then of course, exercise is always great if you can do it.

# Carla Cox:

Thank you. I have an online question coming in from Janet Hauser, how often should your lipids be checked if you have diabetes and are on a statin?

# Dr. Christie Schumacher:

That's a good question. So the recommendations now for lipid monitoring is really just yearly, so we check a lipid panel yearly in our patients or our population. And a lot of times we're just looking for adherence, looking to make sure the statin is working, making sure there's nothing we need to worry about, so we usually just do it yearly. If your doctor's adjusting your dose, you might see them do it every six to eight weeks, but we usually here just do it yearly.

## Carla Cox:

Speaking of doing it in six to eight weeks, what is the turnaround time? So if someone starts taking a statin, how soon should they expect to see a reduction in their lipids?

## Dr. Christie Schumacher:

Well, that's kind of an interesting question. So if you're on a high intensity statin, if your doctor started atorvastatin 40 for example, or rosuvastatin, which is Crestor, 20 or 40, what you are supposed to see or should expect to see is about a 50% decrease in your LDL. Now, usually we'll do our LDL panels, our lipid panels, you might do a three month follow up and get labs in again. Some providers won't even check labs again for a year, because really what we're looking for now is we're not really targeting specific numbers so much anymore, we're looking more at how much does the LDL decrease. So usually here within the three months follow up when we check the lipid panel again, you'll start to see that. But I would say you're going to start to see results right away within the month, it's just usually providers aren't going to check a repeat lipid panel within the month. You'll usually see it within two to three months, is when they'll ask you to do a repeat lipid panel if they're looking to see what percent change there was.

Carla Cox:

Thank you. This comes in from Julie online. Can you give advice about diabetic neuropathy please, how to avoid it from getting worse or how to treat it? But because we're really on labs today and scans, could you suggest maybe how it helps to diagnose it and how they may make decisions to include more medications or PT or whatever they recommend?

# Dr. Christie Schumacher:

So diabetic neuropathy is kind of interesting. Actually the best way to manage diabetic neuropathy in my opinion, or diabetes related neuropathy, is really just to manage your blood sugars. So we've had people come into our, clinic blood sugars of 400, complaining of tingling in their hands or feet, once we get their blood sugars down to goal between 80 to 130 in the morning, less than 180 after meals, a lot of people feel that sometimes the nerve pain does improve. Now, if your blood sugars are at goal and your nerve pain's still not improving, I would recommend having a conversation with your doctor, endocrinologist, pharmacist, about maybe starting a medication to help manage that pain. If it's bothering you so much throughout the day that you can't exercise or go through your activities of daily living or if you're having any issues sleeping, they could start a medication at bedtime. So those are options, but I would say the first thing you want to do is make sure your blood sugar are, is really well managed. Make sure you're hitting all your goals and then you could start to talk to your doctor about adding a medication.

So the things that we recommend for our patients is we do a foot exam at each visit. Your doctor might do a monofilament exam where they actually take this little pointy thing and they poke different areas of your foot and they're just checking to see if you still have all the feeling, all the nerve endings in your foot and making sure that you still can feel those, basically the pokes to make sure that all the feeling is there. So that's one thing your doctor might do to screen for diabetes related nerve pain. We also recommend our patients, if they're having any issues, go to see a podiatrist and get evaluated as well. So those are two things that we do here in our clinic. Your primary care provider hopefully is checking your feet every visit and checking your sensations to make sure they're all intact.

And then something that you can do as a person with diabetes is really every day, checking your feet, if you put lotion on to prevent dry skin on your feet, making sure you're not putting it between your toes, and just inspecting your feet daily, making sure there's no cuts that you weren't aware of, because sometimes if you do have nerve pain you might get a cut and then not know that you have that cut and it can get worse. So really just making sure you're inspecting your feet daily on your own as well.

So kind of a long-winded answer, but a variety of different things depending on which stage of diabetes related nerve pain you're at. But for the most part, I think the most important thing in the early stages is making sure your blood sugar is well managed at all times, and then inspecting your feet daily just to make sure you don't have any cuts or sores that you've overlooked potentially because you've lost a little bit of feeling in your feet from having high blood sugar.

# Carla Cox:

Thank you. We have a question coming in from Martha, and Martha is from Alabama. Martha, you are live.

# Martha from Alabama:

Hey, I'm totally confused. I was diagnosed, well, I had gestational diabetes many years ago, 25, 30 years ago, 11 years ago, diagnosed type 2 diabetic. And in November, I just inquired about what is a pump? And my endocrinologist said, oh, let's just run some tests. So my GAD65 came back 2342.0 and my C-peptide was 0.5, my A1C was 7.2 fasting. And I was on 1,000 metformin in the morning, 1,000 in the

evening, and Soliqua. And that's a fasting number. So he calls and said, you're type 1, you've always been type 1, you're not type 2, and I was like, what? So he took me off of the metformin and Soliqua and [inaudible 00:25:59] and put me onto [inaudible 00:26:00] NovoLog. So in March 22nd, I requested another C-peptide, it was not fasting, I just a sandwich, and it was 2.9. Fasting in November was 0.5. And then fasting, my A1C was 7.8 in March of '22.

So my question is, does that GAD65 and C-peptide done in November, does that qualify me for being type 1? Did I flip over or [inaudible 00:26:40]? I don't know, I'm just curious. Number one, am I type 1 diabetic? The second question is, could that GAD65 be wrong? And third question, I have gained 14 pounds onto [inaudible 00:26:57] and NovoLog. So number one, am I type 1 diabetic?

## Dr. Christie Schumacher:

Did you say your GAD was 2,000? What number was 2,000 in the beginning there?

# Carla Cox:

Sorry, she's not on the line.

# Dr. Christie Schumacher:

Oh, okay. Yeah, sorry. She broke up a little bit, her connection broke a little on the labs. I mean, in terms of type 1 versus type 2, I think what probably happened there was in terms of weight gain, your doctor stopped your Soliqua which had actually a GLP1 receptor agonist, which we know basically causes weight loss, so there was something counterbalancing the weight gain from insulin.

In terms of are you type 1 or type 2, you actually could have latent autoimmune diabetes of the adult. I'd have to look at the lab panel again, but your C-peptide should be done fasting, so it was good that they did it when you were fasting. I think the results that you had done, if you had a C-peptide done when you weren't fasting, you should have that one repeated.

# Carla Cox:

Thank you. No, that was a complicated question.

# Dr. Christie Schumacher:

It's interesting, because the A1C was better managed on metformin and Soliqua. So it's like, yeah, we did all these lab results, but everything got worse anyway when we changed the management plan. And since you have gained weight, I'd almost think about going back on a GLP1 receptor agonist, and now we have the one weeklies, which are nice.

# Carla Cox:

The other thing we hesitate to recommend, but I think it's not a bad idea since you're really trying to determine, I mean if you truly have type 1 diabetes, you will need insulin. But if the other management was working well, it would indicate that maybe you don't have type 1 diabetes, so you might want a second opinion. I mean, you might want to go to different endocrinologists and show them all your labs and see what they think.

#### Dr. Christie Schumacher:

Yeah, I agree. There's a variety of different types of diabetes too. It's not just type 1 and type 2, there's a variety of different types of diabetes. So I would definitely get a second opinion, especially because you were well managed on metformin and Soliqua.

## Carla Cox:

Yeah. So here's another interesting question. There's talk about an increased risk of osteoporosis with diabetes. Should I have a DEXA or a bone mineral scan done?

# Dr. Christie Schumacher:

That's a good question. So all women over the age of 65 are recommended to have a DEXA. And then if you're under the age of 65, between 50 and 65, usually we only recommend a DEXA if you're on long-term steroid use, if you're a cigarette smoker or a smoker, rheumatoid arthritis, if you have a history of a fracture. So in terms of should you get a DEXA, we still even for people with diabetes, I guess for type 1 diabetes, we might recommend it a little bit younger, but definitely post menopausal for women, and then those with high risk factors, from 50 to 65. And then usually just for women over the age of 65 postmenopausal, we'll recommend getting one. And then again, as clinically indicated, every three to five years. Now, if they find osteopenia or osteoporosis, we would follow up faster.

## Carla Cox:

Great, thank you. We have a question coming in from Larita and Larita is from San Diego. Larita, you're on the line.

Larita from San Diego:

Hello?

Carla Cox:

Hello. You're on the line.

# Larita from San Diego:

Okay. I have been diagnosed with type 2 diabetes in 2000, and my A1C since then has been 5.2 for a long time. Now it creeps up off and on from 5.8 to 6.2. So my doctor took me off all medication and he said, I'm not a diabetic. He said, I have a benign something, the thing that makes the insulin, because I was going down to 83. So he said stop taking everything and that I'm not a diabetic. Can he be wrong or can the pharmacist be wrong? I mean, not the pharmacist, but the lab tech? Now, I've gone to several lab techs and I've always been a 5.2, rarely do I go up to 6. So am I or am I not a diabetic?

# Dr. Christie Schumacher:

Well, if your A1C is between 5.7 and 6.5, that's pre-diabetes. If you're worried because you stopped all of your medications, I would still recommend checking your blood sugar at home occasionally. And remember, you want it between 80 and 130 in the morning when you first wake up and less than 180 one to two hours after you eat a meal. So I think because he recently stopped all of your medications, what you can do is monitor your blood sugar at home. And then if you notice it's above 130 when you wake up in the morning or if it's above 180 after you eat, then I would go back to your doctor and tell them, I've been monitoring my blood sugars and I've noticed that they've been high at home. And then

that would be a conversation where maybe you could say, I do have diabetes and I really need to possibly go back on these medications.

It's hard for me to tell not knowing which medications you're on, because if you were on a lot and he stopped them all, then your blood sugar could go up if you did have diabetes. If you were on maybe just one medication and he stopped it, then maybe you'll be just fine, it's hard to say. But I would recommend monitoring at home and staying proactive.

#### Carla Cox:

That's a great idea. The other piece to that of monitoring at home is some people are choosing to get a continuous glucose monitor, and some of them are less expensive than others. If you don't have diagnosed diabetes, your insurance company will not pay for it, but it's not that expensive out of pocket either. So that's another way to really see the highs and the lows of glucose based on what you're eating, not just pinpoint measurements. So that's another thing you can consider.

# Dr. Christie Schumacher:

Yeah, that's a great idea.

#### Carla Cox:

So here's another question written in. When should a person with type 2 diabetes start blood tests for discovering any kidney changes that may be occurring? Does that change the recommendation of when to start with type 1 diabetes or other forms of diabetes?

# Dr. Christie Schumacher:

Yeah, great question. So people with type 1 diabetes, usually we recommend within five years of diagnosis starting to monitor their kidney function. And then for people with type 2 diabetes, we actually start to monitor their kidney function right away, and usually that's because people with diabetes have usually had some sort of elevated blood sugar for a while before they're actually even diagnosed. So for people with type 2 diabetes, we recommend checking kidney function at least yearly. And then if we notice that there is any protein in your urine, so the urine albumin creatinine ratio greater than 30, we might check it again just to see if we could make a clinical diagnosis and notice any kidney disease on your lab.

So usually when you first get diagnosed with type 2 diabetes, we check your kidney function yearly and then if we do notice that you're spilling any protein into your urine, we'll repeat those tests. And then once we have patients with chronic kidney disease, we will monitor their labs at least twice yearly.

## Carla Cox:

Thank you. This is an online question, we're getting a lot of online questions today. So this comes from Liz, I am on all preventative medications, high blood pressure, high cholesterol, and was diagnosed with SPV and recently got a calcium scoring number of 60. Besides exercise and diet, are there any supplements that can help support the heart?

# Dr. Christie Schumacher:

Oh gosh, good question. I mean, I'm such a diet and exercise person, I usually don't recommend a ton of supplements to our patients. Yeah, I don't know. For us, usually I just recommend and for heart health

really, just diet, Mediterranean diet, exercise, limiting your salt. Yeah, I don't recommend any specific supplements here. I know diabetes in general can get expensive.

## Carla Cox:

And I think coming from a research perspective, I don't think there's been a research that supported any specific supplements at this point in time. There is quite a bit of anecdotal information of people calling in and saying, oh, this really worked for me, like the old take a lot of cinnamon and your blood sugar will go down, but that has never been shown to really work. So I don't think the research is there to support supplements at this point in time, that I'm aware of anyway.

# Dr. Christie Schumacher:

Yeah, I'm not really aware of anything.

## Carla Cox:

Yeah, I'm not either. So here's a question that I think is interesting. This comes from K, and K is from Michigan. K, you're on the line.

# K from Michigan:

My question is, if you eat sugar but you take the medication to keep your glucose level down, is it harmful to you to still eat the sugar?

## Dr. Christie Schumacher:

That's a good question. So if you're taking insulin, theoretically you're just supplementing back the insulin to process the sugar. The question is basically is the sugar harmful? I mean, you have to almost think about it almost if you didn't have diabetes. So if a person without diabetes just ate a ton of sugar all the time, it would still be bad, because even if their body's making insulin or a person with diabetes might be taking a medication to tell the pancreas to make insulin or giving endogenous insulin back into the body, it's still taking all that sugar and storing it. So you're still at risk for weight gain, which can cause heart disease and different problems as well.

So yes, you can eat sugar and take more medication to process the sugar, but your body's still going to store it and it's going to turn into fat, which is going to cause a variety of other complications. So in general, even though your blood sugar might not go up because your medications are basically processing the sugar that you eat so to speak, it's still not great for your body because your body's just storing it as fat, which could be detrimental in the long run.

## Carla Cox:

Great, thank you. And if you're just joining us, welcome to today's Ask the Experts Q&A, labs, scans and more. As a reminder, for those of you on the phone, press \*3, that's \*3 on your keypad, and an operator will collect your question and place you in the queue so that you may have the opportunity to ask your question live. To participate online, type in your name and question in the fields below the streaming player, press the submit question button and your question will come directly to us.

Okay, here's another question that comes about blood pressure, and it comes online. Is it true that salt will not cause blood pressure to be elevated? And I can actually answer that question as well and then we'll let Christie chime in. But about 30% of people who have high blood pressure are salt sensitive. So

what that would mean is that about 30% of them, if they reduce their sodium, will see an impact. The other two thirds will not see one so much so. Christie, what's your experience and knowledge?

# Dr. Christie Schumacher:

Yeah, I mean definitely I feel like it raises blood pressure. I mean, for example, we know Easter just happened, I had some patients come in today that had a lot of ham on Sunday and actually their blood pressure, which was normally 120/80 was actually 180/90 today because they had a ton of extra salt on Easter. So some patients as mentioned are salt sensitive and it can really drive up their blood pressure. So I do recommend to our patients, they definitely have to think about what they're eating when they go out, try to limit their salt. We recommend Mrs. Dash or other salt substitutes, because here in our clinic we've seen a lot of blood pressures impacted based on the amount of salt consumption.

So it does depend on the individual, it's person by person basis. But for the most part we've seen some significant increases for people with their blood pressure if they've eaten out the night before, because we know that sometimes when you eat out at restaurants, [inaudible 00:39:40] food contains a lot of sodium or salt. So again, depends on the patient, but we've definitely seen high salt diet drive up blood pressure. So we do still recommend a low salt diet to manage blood pressure as well.

#### Carla Cox:

Thank you. This is a question that's outside of our usual topic for today, but once again, since you're a pharmacist, we'll go ahead and let it go live. This comes from Millie, and Millie is from Texas. Millie, you're on the line, I hope. I'm having a hard time putting her on the line. The question is, I want to know if metformin is safe. I'm not sure I know what metformin is, maybe metformin.

# Dr. Christie Schumacher:

Metformin, yeah. Metformin is definitely safe. I feel like there's so many urban legends about metformin, but it's been around for a really long time and it's a great medication to manage diabetes. So I think it's really cost effective, it's something we use a lot here in our clinic. And I think just because once kidney function declines a lot, we have to stop it so it doesn't accumulate in the body just because it is cleared through the kidneys, but it's definitely safe for your kidneys and overall for your heart health. So metformin is definitely safe and I highly recommend it if you can take it.

# Carla Cox:

So while we're waiting for some more callers to call in, let's go through if you have been diagnosed with type 2 diabetes, even if it's been recent, what are the labs that generally are standards of care that should be done right at diagnosis?

## Dr. Christie Schumacher:

So if you just got diagnosed with type 2 diabetes, I would recommend first off, every time you go to your doctor's office, you should have your blood pressure checked and you want to make sure it's less than 130/80. You also want to make sure you're checking your feet daily as we already talked about.

In terms of labs, we usually start to monitor A1C every three months. So your hemoglobin A1C, which is a measure of basically how well your diabetes is managed over a three month period, we'll start to monitor that every three months. We'll also check what we call a complete metabolic panel or a basic metabolic panel. Usually, we'll do a complete metabolic panel because that tells us about your liver function test, it lets us know where we're at with kidney function, and then also it lets us know your

electrolytes such as sodium and potassium, calcium. So we always do a complete vet metabolic panel or CMP, we'll do the A1C upon diagnosis. And then we also check a lipid panel just to see where we're at in terms of where's your LDL, how high are your triglycerides, and look at basically your cholesterol profile.

And then also in our clinic, we'll check what we call a [inaudible 00:42:20] albumin to creatinine ratio, which is actually a urine test. And what you do is you urinate in the cup and then we check to make sure or to see if you're filling any protein so to speak, into your urine. So we'll check that on people with diabetes. And then we'll follow up really as clinically indicated, so usually A1C is every three months. However, if your A1C is less than 7, then we might just check it twice a year, every six months.

## Carla Cox:

Great. And then what about blood pressures and feet? You mentioned checking feet frequently, how often should the blood pressure and the feet be checked?

## Dr. Christie Schumacher:

So the American Diabetes Association and the American Heart Association really recommends that we check blood pressure at every visit. So every time you go to the doctor's visit, even here when you see the pharmacist, when you see us, we check blood pressures on all of our patients. So we really want to be monitoring our blood pressure pretty regularly, especially if we have a history of high blood pressure, what we call hypertension. For our patients with hypertension, then we even recommend checking it at home and just making sure it's well managed at home. But for the most part, you should be making sure that you're getting your blood pressure checked at every doctor's visit. And then also that it's being checked appropriately, so sitting down for a while, feet on the floor, not talking, and making sure you're having an appropriate blood pressure check.

Carla Cox:

Thank you.

# Dr. Christie Schumacher:

And then as far as monitoring your feet, really just making sure you're inspecting your feet daily. If you do apply lotion to your feet, as I mentioned, making sure you're not putting it in between your toes. And really what you're looking for is any cuts. So sometimes if you've lost any feeling in your feet, you might have a cut on it and not notice, so it's important to check your feet daily. And then if you do have any signs of peripheral vascular disease or other complications, then it might be recommended that you see a podiatrist at least yearly.

# Carla Cox:

Great, thank you. This question is coming in from Baltimore, Maryland. Looks like Felicia.

Felicia from Baltimore:

Yes ma'am, Felicia is fine. How are you ladies today?

Carla Cox:

Good, thanks.

Felicia from Baltimore:

That's good. So my question is, I've been a diabetic for 22, 23 years, it was gestational. I ended up keeping it, losing the child. But now I was diagnosed with fibromyalgia on top of the diabetes, and I also have the trait for sickle cell. I was on a insulin pump, I did good on that. They took me off because I kept bottoming out. So now I'm just trying to find a balance of what tests should they be running, because literally my A1C now is 7.8, and that's because of what I started doing on my own. But they have me on 25 units of NPH twice a day, and then I take five [inaudible 00:45:18] units three times a day with meals.

I'm just trying to figure out what things should I be asking for, because certain things said that a lot of the test results are going to be inaccurate because of the sickle cell trait. So I just don't know what I should be looking for, what I should be asking for. Everyone tells me something different, so I don't know.

# Dr. Christie Schumacher:

Yeah, so that's interesting. I think what the sickle cell trait, maybe what they're concerned about is that your A1C might not be correct. The red blood cell lifespan is 120 days, so the A1C is really just measuring the amount of glucose that's being carried around your body on your red blood cells. Depending on your level of sickle cell, your A1C may not be as accurate, so I would start with monitoring your blood sugar as we've talked about, and I would check it. Because you're on the basal and bolus insulin, you should qualify to get a continuous glucose monitor, which I think would be really helpful for you. And maybe you already have one because you were on a pump, but I would start to monitor your blood sugars and just really make sure you're staying in that target range 70% of the time. And if you don't have a continuous glucose monitor yet, then you want to make sure 80 to 130 in the morning and less than 180 after you eat.

I'm also curious because you said you were on a pump before, and now they have some of the newer technology actually suspends the pump to prevent you from going low. So you could consider a newer generation of an insulin pump too, if that's something you're interested in, to prevent you from going low. I think what the concern is though with the sickle cell is your A1C reading might not be as accurate because you have the sickle cell trait.

## Carla Cox:

I'm going to throw in something about the pump as well since that's where I spend most of my life is, educating people on pump therapy. The pump therapy should actually reduce your risk of having lows versus something like NPH and short-acting insulin. So my suggestion is if that was working for you from a handling your diabetes and you're more interested in that than getting injections, I would go to someone who specializes specifically in doing pump therapy, whether it be a diabetes educator or an endocrinologist, but that should actually help you a lot. And as Christie said, there are now pumps that are called automated insulin delivery systems that if you have a sensor, they'll monitor what is the sensor saying and should you have less or more insulin. So I would talk to somebody that specialize in that area of diabetes management.

Thank you all for all your wonderful questions, this wraps up our last question for today. A few items before we close. Christie, could you give us three takeaway points from today's discussion, maybe the three most important tests to have done to make sure that they're talking to their care provider about that?

Dr. Christie Schumacher:

I think the three most important tests, well first off your blood pressure. I think making sure your blood pressure is less than 130/80 is really important. I think in terms of tests, we've talked about a variety of tests, making sure you're checking your [inaudible 00:48:50] yearly of course is important.

I think checking your kidneys is important, so making sure you're getting that complete metabolic panel, checking to make sure there's no protein in your urine, because now we have medications, SGLT2 inhibitors, so Jardiance and Forxiga, we have Kerendia, these different medications that have come out that really slow down the progression of chronic kidney disease. So I think it's important to get your kidneys checked at least yearly, if not twice yearly, depending on your level of kidney disease, because now we know we have medications that can slow down the progression of kidney disease. And just because that's been such an area for us where we haven't really had anything and now we do within the past few years, so that's been great. So I would say checking your blood pressure, having your kidneys checked.

And then in terms of cholesterol, it's important to have your cholesterol panel checked yearly, but I think it's also important to stay adherent to statin therapy because we know that it does prevent heart attack and stroke. And as I mentioned, people with diabetes, you don't really die of high blood sugar, you die of the complications associated with it, so making sure we're preventing anything bad from happening, so checking lipids and taking that statin.

## Carla Cox:

Great, thanks. To help you feel confident about your ability to manage your diabetes and heart health and kidney disease, we encourage you and your loved ones to talk to your doctor and dietician about your risk for heart disease, stroke and kidney disease. Go to knowdiabetesbyheart.org and learn more. Register for the next event in diabetes.org/experts. Sign up for diabetes education near you, and sign up for ADA's free living with type 2 diabetes program. Links to these resources can be found on our registration webpage diabetes.org/experts.

Thank you for all of the great questions you called in and wrote in with. If you have questions about this event, you are welcome to contact us at askada@diabetes.org or by calling 1-800-342-2383. Again, that's 1-800-342-2383. Now, please stay on the line for our survey to help us with future planning for our events. [inaudible 00:51:03] with diabetes takes a team and we're here to support you.

Special thanks to our expert, Dr. Christie Schumacher. I am Carla Cox, 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. Join us for more KDBH events. May 9, managing your blood pressure may help preserve your heart and kidneys. June 13, Just do it. Being active may be the most important contribution to your health. Please visit our website for more information at diabetes.org/experts and register today.

If you have any questions about this event, please email askada@diabetes.org and include, Ask the Experts Q&A in your subject line. Thank you for joining us and now to our survey.

Introduction. Thank you for participating in the American Diabetes Association, Ask the Experts event. We hope you stay online for the next five to seven minutes to share your honest and valuable feedback to help us improve upcoming events. All responses will remain confidential. Please let us know your level of agreement with these statements.

Question one, this event met my expectations today. For yes, press one, for no, press two, and for unsure, press three. Again, question number one, this event met my expectations today. For yes, press one, for no, press two, and for unsure, press three.

If you feel you could [inaudible 00:52:40] managing your diabetes, check out the Living with Diabetes program where you can receive information through email and e-booklets with tips on eating, physical fitness and emotional health. Check out our registration page at diabetes.org/experts.

Okay, now question two, I will attend another Ask the Experts event. For yes, press one, for no, press two, and for unsure, press three. Again. Question number two, I will attend another Ask the Experts event. For yes, press one, for no, press two, and for unsure, press three.

You can find delicious and healthy recipes and menus to enhance your eating, check out the website www.diabetesfoodhub.org.

On to question three, this event improved my knowledge of laboratory tests I should have. For yes, press one, for no, press two, and for unsure, press three. Again, question number three, this event improved my knowledge of laboratory tests I should have. For yes, press one, for no, press two, and for unsure, press three.

Did you know that there are approximately 37 million people with diabetes? You are certainly not alone.

Okay, question number four. I intend to use the knowledge I gained in my and my loved one's next appointment with a healthcare professional. For yes, press one, for no, press two, and for unsure, press three. Question number four, again, I intend to use the knowledge I gained in my and my loved one's next appointment with a healthcare professional. For yes, press one, for no, press two, and for unsure, press three.

Keeping your glucose within target range of 70 to 180 milligrams per deciliter 70% or more of the time is the international recommendation for diabetes management. Consider asking your provider about getting a continuous glucose monitor to help you manage your glucose.

Two more questions. Question number five. Before this event, I felt confident talking to a healthcare professional about my and my loved one's increased risk of heart disease and stroke. For yes, press one, for no, press two, and for unsure, press three. Question number five, again. Before this event, I felt confident talking to a healthcare professional about my loved one's, increased risk of heart disease and stroke. For yes, press one, for no, press two, and for unsure, press three.

Check out the heart disease risk calculator at http://www.cvriskcalculator.com, and discover if you are at risk for heart disease.

And our final question, question number six. After this event, I feel confident talking to a healthcare professional about my and my loved one's increased risk of heart disease and stroke. For yes, press one, for no, press two, and for unsure, press three. Question number six again, after this event, I feel confident talking to a healthcare professional about my and my loved one's increased risk of heart disease and stroke. For yes, press one, for no, press two, and for unsure, press three.

We sincerely appreciate your time and look forward to engaging with you on a future Ask the Experts event. Please visit diabetes.org/experts to learn about upcoming events. Thank you.