PRESENTER: As I go, I'm going to interject some of the things in changes, because I know there's probably people been in dialysis for a long time. And the dialysis diet is changing, too. And I'm going to give you some tips to help patients transition from what they're doing now to what they will be doing.

Believe it or not, many people, you guys do such a terrific job in getting them compliant in the dialysis with the diet, they have a hard time getting rid of the phosphorus restriction and getting the fluids going. I'm going to be talking about eating right and regular exercise is the key to weight management. You guys look around your unit, you can see there's a lot of large people out there. I know in the clinic now it's really unusual to see people, BMIs of 30 look very thin.

My role is to maintain good nutritional status to optimize healing after the surgery. One of the things when I go in and see them, and I see the patients [INAUDIBLE], I want to know what their labs are. Sometimes they will be like, well, you can call the dialysis unit. I'm asking them so I can see how invested they are in their care and how well they're monitoring.

As well as being a renal dietitian in the Dallas unit, I know the dietitians go over labs monthly, so if somebody's been on dialysis for five years or so, they're saying I have no clue what my labs are. They don't seem very invested.

I'm looking at compliance, and I know some of the practices in the past. Because I know I was at meetings where they'd say, well, use scare tactics. Tell them that their phosphorus is out of control. They're not going to be a candidate for transplant. That's one of the worst things you can do.

It's not going to be a restriction after, however, it's looking at a trend if it's one thing of other things that they're not taking other medications. That could be a factor. If it's one or two, that comes into the picture, too. And sometimes then they're getting more scared afterwards.

Keeping a healthy weight-- the studies show as we'll go in future slides, if they're overweight at the time of transplant, the incidence of developing diabetes after the transplant is a lot greater. I'm going to touch on diabetes a little bit, as well, as we go through.

Having a healthy lifestyle and exercise, those of you that work in dialysis, all the literature i showing that if our patients are exercising, they're going to be healthier, less hospitalizations on dialysis. They're also going to do a lot better after the transplant. We want them to have good, functional status. And that's one of the keys to maintaining their weight as well.

Healthy weight for transplant-- decrease the complexity of surgery. And one of the things that we do is, how overweight they are, the BMI is not the factor all and end all. And I know a lot of you are working with different centers and things.

And sometimes, it seems like, we will have our surgeons, and we'll lay them on the table and it depends on how the belly spreads out. If it goes flat, it's kind of big and floppy, and it kind of goes there, there's not a lot of room in-- you know, all the fat isn't right in the middle their belly, it's going to be easier to do the surgery.

If they've got a lot-- their BMI might be 30, but they may have all their fat in a basketball shape in front of their belly, the surgery's going to be more complex. So they may come back, I need to lose weight. And I know in dialysis, sometimes it's hard, it's like, so and so had a BMI of 45 and they did him. You've got a BMI of 30, and they're telling you to lose weight, what's up with that?

Ultimately, we want to do what's best for the patients so they have the best outcome possible. But if you kind of think about one of the surgeons had said, it's like doing the surgery through a tunnel. If it's all in the middle region, they're going through a long narrow tunnel trying to get the surgery, it makes it more complicated.

Improved healing, decreased risk of infection, sometimes even when we do, the people's belly lays out. We're using wound vacs and things and you're having further problems afterwards. Decrease ICU and length of stay, improve graft function, decreased risk of developing diabetes post-transplant, better transplant survival rate, and less weight gain after transplant.

That's another big myth is that the steroids cause weight gain. The studies have shown whether you're on steroids or steroid-free, the weight gain's about the same. Most people after transplant are feeling a whole lot better, they're eating better.

So if you get them eating healthier prior to transplant, they're less apt to gain the weight. I mean, yes, some of the medications will increase your appetite, but if you're eating fruits and vegetables you're not going to gain 50 pounds. And I've seen people gain 100 pounds in the first year after transplant. But it's what you're eating as much as anything else.

Reach and maintain a healthy weight contributes to one's overall health and well-being. Losing even a few pounds or preventing further weight gain has health benefits. People in the pre-diabetes, if they lose 7% of their weight, they're less chance of developing diabetes than somebody who maintains that heavier weight.

Improve blood pressure, cholesterol, triglycerides decreases chronic disease, including diabetes, helps control blood sugar. Keeping a healthy weight, how do your patients die? They die from cardiovascular disease. When you're eating more fruits and vegetables and exercising, your risk factors go down.

Encourage a balanced plate with a variety of foods. And the one thing I will see, and my eyes have been opened since I've been on the transplant side. Because we're talking about potassium, and if you think back even before they hit your dialysis unit, they've been given potassium, fruits, and vegetables.

By the time I get to them, especially post-transplant, a lot of them have quit eating fruits and vegetables all together. And more and more the newer size-- I was at NKF this spring, and they were showing five servings of fruits and vegetables can decrease your need for bicarb, which can help with your fluid gains in between treatments.

It helps make the blood less acidic, so there's a lot of benefits. It's changing the way we taught for years. How many nurses are in the room or social workers? So some of you are looking at the old things. I know the dietitians are pretty much more on the up-to-date that the grains and the fruits and vegetables have a lot about it both for weight loss, healthy weight, as well as decreased cardiovascular.

It also helps with the diabetes management. A lot of times you guys do an awesome job, too, with the protein. When I get them after transplant, we want to get them back to a more moderate healthy protein diet. I've talked to people that I'm seeing for something else 10 years out. They're still trying to eat that pound of meat that they ate on dialysis.

So finding the right balance-- a lot of times with the exercise, it can be 10 minutes here and there. A lot of times when I'm at eval, and I'm talking, one of the first things I'm big on fruits, and vegetables, and exercise. Getting the bike pedals, using it at home, it doesn't have to be where you're out stressing or having to sweat and to benefit.

Especially, a lot of the guys, the younger guys, are thinking they remember when they were in high school and they ran track or they played basketball, and they had to sweat to benefit. So they're like, OK, if I can't do that, why do anything? Every little bit of movement counts.

Goal is 150 minutes weekly and can be broken into 10 minute sessions throughout the day. It doesn't all have to be at once. And if people get on a schedule, it's going to help them. This is things that you can help prepare your patients. And I know when I first started three and a half years ago, well, they've got a dialysis dietitian.

I'm telling her I know they've got a dialysis dietitian. The dialysis dietitians are very busy with a wide variety of things. Plus, a lot of the patients, it's like kind of if you have kids, after a while your kids don't listen to everything you say. They're kind of, but it's kind of like they're tuning you out.

And those of you that have been the dialysis unit whether social worker, nurse, dietitian, our patients kind of tend to tune us out because we're telling them the same thing. Sometimes it's the new thing. It's not that I'm telling them anything different or they're hearing something from their nephrologist different than what you guys in your unit have been telling them all along. It's just that it's somebody different.

And the other thing, like, when our nephrologists go, when I go in, it's like 13-30 minutes in a private room one-on-one. And I know I spent almost 16 years in dialysis, a lot of it was at chairside, because once that patient finished their treatment, they didn't want to stay any longer.

And there are certain things that they might share in a private, closed door room that they're not going to share on the patient floor. But they don't want to do it any other way either. So 60 minutes daily will help facilitate weight loss regular physical activity is important for your overall health and fitness.

Weight management-- setting goals, working with people. I think a lot of times one of the biggest mistakes I find when people are working on weight loss is maybe it's 50 pounds the transplant centers told them.

And we have various things when they come for the evaluation. It might be recommended weight loss of 50 pounds or 20 pounds. It might be you're transplantable where you're at, but definitely no more weight gain. And it may be this is fine.

And sometimes, I know when I worked in dialysis, too, it's kind of hard, because you had people coming back with all different things. And sometimes we're looking at each individual person. It might be a different position that someone's looking at, what's best for that patient.

We've had patients-- I had a patient that was double transplant the second time. The first time he was at a certain weight, transplant no problem. The next time after his transplant failed 10 years later, he was actually 10 pounds lighter than he was the first time. And he was told he needed to lose a certain amount of weight.

Don't think of it as inconsistent as more as what is best for this patient, what is going to really help him. Maybe there's also other things that happened. Maybe they have diabetes now and they didn't before, or they have cardiovascular complications. Limiting the fat to a third of the calories is kind of-- you see them in the unit.

How many of you allow food in your units or eating in the unit? When they're bringing in their fast food and things, kind of seeing how often is this? A lot of times I'll tell people what they eat 75% of the time is going to have more impact than the 25%. So if it's that fast food on dialysis days, that's OK. But if it's fast food three times a week in addition to what they're doing on dialysis, that can add up pretty quickly.

And I know right now with the fluid restrictions and things-- we've always had fluid restrictions, but looking at the inner dialytic weight gain more closely, you are looking more at sodium. And I know when I worked in dialysis 10 years ago, we didn't really look at salt content or people go on really educated with the salt.

And I find the message to avoid salt is out there. But when I'm doing diet recalls, I'll have the patient tell them I had cream of mushroom soup or my pork chop, and I'm having a dog at lunch, but I'm not eating any salt.

Reading labels-- so I'm kind of educating them to take care of themselves. This is really good for them as well. The BMI chart's a guide. It doesn't tell all. If you have somebody that's very physically active, they're going to have better functional CS than maybe somebody who's a lower BMI, but doesn't really do much than walk into the bathroom.

One of the biggest things I find is I'm using record keeping. Get them to write it down. A lot of times we look at it as more as a punishment whereas look at it as a positive. This is to see what you're doing that's working. The biggest barrier I find with working with patients is getting them to believe that they can actually succeed.

Most people by the time they're 50, if they've struggled with their weight their whole life, they've lost weight and regained it, human nature is we don't put our heart and soul into something that we don't truly believe that we can succeed.

So a lot of times I get them to start setting exercise goals. Walk 10 minutes every day. Get into a schedule. Get into a routine. It happens. Then maybe you're adding the fruits and vegetables. Take it one step at a time. Once they start seeing those successes, they can believe in themselves.

Maybe they've been told to lose 25 pounds that's really daunting if you've lost and regained. So maybe you break it into five pounds, so they can feel successful. You guys are with them all the time, and you can be their cheerleaders, too. And it doesn't have to be a whole lot of time or anything like that.

And I know it's really hard and really frustrating, because a lot of times we're trying to get people to do things that they really don't want to do, is getting them to invest in their own health. There's internet resources in their book that they get at the transplant. I've got a variety of internet resources.

One of mine is the Weight Information Network Resource, which is one of my favorites. It's also got tips and charts, and help them get more activity in. So there are some options in the book. I go over the book with them when they come in to clinic, because a lot of times I always find that people had no clue what was in the book.

And this is just kind of put up there just kind of for your own information. Just kind of helping in calculating the 11 and 12 calories per pound is easy for a lot of people. Although, dialysis units know their weight in kilograms very well. There's 3,500 calories in a pound, so every 500 less calories they eat or 500 calories of exercise they do, they're going to lose a pound a week. That just gives you an example.

How can one reach and maintain a healthy weight? Balance the food and the exercise. Diets do not work, lifestyle changes do. And I keep saying that over and over. And it's great dialysis all the high protein diets and things, but the Nutribullets and things are just driving me insane.

I had a couple that bought his and her for weight loss. It's like, you're losing a lot and you're getting a lot of volume. You know, help the patient set realistic goals. I mean, if you've struggled with your weight, you know how difficult it is and everybody has various things.

A lot of times, I find the heavier people are, generally, the biggest problem is they eat twice a day. More and more of the new research shows if you eat three times a day you're more apt to balance out your weight. But a lot of times, and I think back to when I was in dialysis, they would eat twice a day.

And in their heads they're thinking I know I need to lose weight. I want to get transplanted. This is going to be beneficial. Why should I eat if I'm not hungry? But then their weight slows down, then they store it as fat, and that makes it more difficult. So just getting smaller more often meals can really benefit.

We used to do the six small meals. Most of the research with weight loss, it doesn't really work with people who struggle with their weight, because what they consider to be small is not always a good thing. Sometimes they're having a little bigger, and if you're having more of the vegetables than half the plate, it takes time to chew. We take about 15 minutes to register we're full.

Helping patients deal with the setbacks, and that's where I find a lot of times they've had the setbacks and helping them let go. And a lot of times the biggest thing that drives me crazy is I ate really good today or I'm eating healthier. I've made this change or I had a bad eating day.

And I'll usually go, now what do you mean by that? And they'll tell me it's like cause that sets them up. Because one bad-- if they're thinking there's bad foods and good foods, when they eat the bad foods, how do they feel? Terrible. So how do we deal with it? We eat more. And then we just get in a vicious cycle.

So one bad day-- I'm using the word bad, but one unhealthy choices leads in two, three weeks and they let go of everything they've been doing all along. Keeping a positive attitude, helping them to encourage them to keep positive. Look at the changes.

Sometimes even I've had people, and I used to work in weight loss with liquid programs and things early in my career, so a lot of those things I use with working with patients, too. But helping them take credit for the changes they're making.

And this just kind of looks at the prevalence of the obesity. Some of the newer studies are really showing we're doing a lot more obese transplants and maybe that's the numbers. But prior to 1987, very few centers did a BMI over 30. And you can kind of look at the chart down there.

Effects of a pre-transplant obesity on patient graft survival remains controversial with several conflicting studies. Studies with short-term data unanimously demonstrate negative effect of pre-transplant obesity. There's greater graft failure within the first year, decreased wound healing, and post-surgical complications, delayed graft function associated with decreased long term survival.

But those studies are showing, even at a BMI of 50, when we're looking at we want to see what benefit are you going to get? The benefit of a transplant outweighs the benefit of that obese person staying on dialysis.

On the obesity paradox, and a lot of times those in the unit all the studies earlier on have looked at obese-- not obese-- but people with a higher BMI lived longer on dialysis. So it's kind of the paradox. Their survival is better on dialysis if they're overweight. Then they want to get transplanted, and we are trying to get them to lose weight. So it's getting kind of that balance.

And BMI is not the perfect indicator. It doesn't take fluid status into consideration And a lot of times, it's amazing, I know you guys have all done that. People really don't understand the inner dialytic weight gains. And I'll kind of go over that, because a lot of them will hold the fluid in their belly.

And we're looking at waist circumference and the fat distribution. People with a pear shape where they're kind of like this, and they carry their fat around their hips have less health risks than people who carry it around their abdominal region.

You know, BMI, it's an individual assessment. Our goal is we try to keep everybody under 34. We're looking at the waist circumference and there's the studies. 60% of kidney transplants are overweight at the time of transplant, which is 116% increase since 1987. And this study was from a few years ago. I think it's even worse now.

BMI is probably the third leading reason for excluding kidney patients from transplant Bariatric surgery, and that is becoming more and more common, especially as the guidelines have loosened a little bit, and it has some benefits. It's beneficial for patients with BMI greater than 42, especially if there's diabetes and other things going.

And we are seeing dialysis patients come through the surgery really well. We usually like to see them maintain their weight for six months after to kind of see how things are going, so they have really good health going into it.

Bariatric isn't the end all answer, and some of you have probably known people who've had bariatric surgery and regained it. If they're making lifestyle changes, it can be very good giving them that positive OK, I can make it, and I can survive. Or I can really make these changes because I'm thinner.

Other people just look at it, OK, this is the band-aid. They don't make any lifestyle changes and the weight comes right back on. After bariatric surgery, usually the grains are limited. We don't want a lot of bread, especially with the sleeves. And sleeves are more commonly done now and that's a much safer procedure than the old Roux-en-Y and some of the other things.

Dialysis patients often think the diabetes is cured, because once they start dialysis, their blood sugar or A1C was really good. The A1C and the CKD population is about two points lower than what it actually is.

If you think about it, the A1C measures the sugar attached to the red blood cells. With the anemia and the more frequent turnover of the red blood cells in dialysis, it's not as accurate as what it was prior to that. Also that comes into consideration, their kidneys aren't working. They're not cleaning out the insulin so the insulins hanging around longer, and it's working more effectively.

I can't tell you how many times I've had people on my eval, my diabetes is cured, I'm not taking any meds. I'm great. And then I'll go on to explain, well, after transplant you're going to have a working kidney. Your insulin is going to be excreted again. And then we're going to give you medications that are going to tend to raise the blood sugars as well. And even your anti-rejection as well as steroids will raise the blood sugars.

Generally, if their A1C's over 8 within the last year, we've been really-- and you may see some of those on some of the letters your patients do is you need to get some education classes. What I find after 20 some years working as a dietitian, we're referred to diabetes education when we're diagnosed.

Most people are still too overwhelmed to grasp that, OK, this is long term. This is something I need to be concerned about. And all this information is taken in. It's just like when they come in to start dialysis, we're giving them all the information. Then two weeks later, we're like, OK, what was that? And they're like, I don't know.

So sometimes it's good to repeat it even though they may have done it before. There's a lot of local ones that for those in southeast Michigan and on the west side, say, in Grand Rapids, I know we have sessions in Flint, as well. The Michigan Kidney Foundation has both their Kidney Path which is an awesome program to refer your patients for education while dealing with chronic disease.

They have the Diabetes Path that's free of charge. It's done in different locations. Sometimes it's churches, sometimes it's a senior center. It's where the Kidney Foundation has identified a need based on what people have requested in a certain area, and where they can get an inexpensive place.

And it's a six-week session where they're dealing with how to deal and manage the diabetes. And there's a lot that goes into that. The type 1 diabetics we want to make sure they have an endocrinologist. It's amazing how many people are managed by their PCP or their nephrologist.

Health problems associated with uncontrolled diabetes-- Gastroparesis, it's related to dialysis. It's also related to blood sugar control. You get the blood sugars better. And the A1C might be great and your patient still has gastroparesis, but they're not telling you they're not eating. So sometimes their sugars 60. There's other times it's 300-400. That's affecting their gastroparesis.

And if they're not eating because the gastroparesis makes them sick, that's going to make their sugars more wacky. Benefits of improved blood sugar controls-- decrease mortality, decrease hospitalizations, decrease graft loss. And I will often tell them when I'm sitting down, especially if I have somebody-- and I think the highest A1C I had was 20.

It's like, you are going to lose your new kidney just like you did your existing kidney if you don't make some changes. You know diabetes doesn't really change what a person eats, but when and how much you eat. Keeping it simple, and I think some of you may remember how you learned diabetes and things have changed a lot.

We're doing more carb counting. I'm going to show you the plate map which I find is very beneficial for a lot of people. You want to get some 25 to 35 grams of fiber, and that's where it's good that the dialysis diets are kind of changing and incorporating more fiber as we've learned phosphorous in the fiber containing foods isn't as readily absorbed as the phosphorus additives.

Want to teach people how to read the food labels for diabetes and focus on the carbs not the sugar. If I could it just drives me crazy how times, well, I avoid sugar. I don't know why my blood sugar is so high. Or I'm eating sugar free ice cream and often the carbohydrate is exactly the same.

Getting people to limit the liquid carbohydrate sports drinks-- regular soda, fruit juice, sweetened ice tea. Especially now, so much has been with the aspartame that people are saying, well, the regular juice or the regular pop's going to be better because of all this stuff with artificial sweeteners.

And I will usually tell them we know what the blood sugar will do to your body. We don't know what the artificial sweetener would do. And everything in moderation. Water's the best beverage you can have.

Encouraging home glucose monitoring. I can't tell you how many times people don't check their blood sugars, even our Type 1s that have an A1C 9. That's some simple things. And you can use all 10 fingers on the fat pads. Usually, most people use two fingers. They get calluses. They don't want to check their blood sugars.

When I worked in dialysis and often even when I see patients coming into my clinic, it's like the diabetes diet and the kidney diet don't go hand in hand, why should I follow either of them? And a lot of times I'll get them to look at the similarities instead of the differences.

So I find this is what works for me a lot with the patients that worked in dialysis, too. Because even when people are starting dialysis, it's like, I wish somebody would have told me about the diabetes early on, I would have made some of these changes. And people probably had, but they weren't ready to hear it.

So this just kind of keeps it simple. It's like half a plate of the low potassium fruits and vegetables, a serving of fruit, a quarter of the plate. Sometimes if your patients are struggling a little bit with your protein, you might have a little less vegetables, a little more protein.

Also, by getting the blood sugar under control, that can do wonders with your intradialytic weight gains as well. Because if their sugars are high, they're thirsty.

Risk for NODAT, which is New Onset Diabetes After Transplant, two-thirds of all kidney transplant recipients are classify as overweight or obese at the time of transplant. Additional weight gain occurs in the first 12 months after transplant.

For every kilo increase in BMI, the chance of developing NODAT increases by 22%. And this just kind of goes over what all goes into the risk for after transplant. And after the transplant, usually acutely, the first four to six weeks, we're at a higher protein. This is something that you can even help with your patients.

A lot of people, believe it or not I know in dialysis you're like, OK, you've got to drink less, you've got to drink less. Those message said, I will tell people you got to drink a half gallon of fluid after the transplant. They're like, oh, no problem. I love the fluid. Dialysis always tell me I'm drinking too much. And then after six years on dialysis they get their transplant, they're really struggling to get two or three bottles of water in a day it's really a struggle.

Calorie goals, usually 30-35 calories. We don't want them having a lot of simple sugars all the time. Most people will not have problems with the potassium after. And a lot of times, I think especially with some of your genetic kidney diseases, they grow up not eating fruits and vegetables. And they really struggle with the weight gain, because that's just something they've never had.

Generally, we limit the potassium for the first four to six weeks. The transplant meds are going to raise the potassium little bit. Just keep it safe. A lot of people get hypophosphatemia. I mean, even I've seen some of the patients six, seven years post-transplant, it's what we call the hungry bone syndrome. Their bones are hungry.

They're grabbing the phosphorus out of the blood as soon as we're taking it in. And people are so used to it, it's not that they're really consciously avoiding it. They're just used to not having it because that's become habit. So we want to correct that.

Sodium restriction is one restriction that's here to stay. And a lot of times it's being aware of where people are at. After transplant, we don't want them taking a lot of herbal supplements. Grapefruit's not allowed, because it interferes with the interactions with some of the transplant meds, so mostly tropical fruits.

I recommend the DASH diet, which is dietary approach to stop hypertension, lots of fruits, vegetables, lean dairy products, lean meats, and vegetable protein. Obesity. Obesity that's a big concern. Questions are guaranteed in life. The answers aren't. Is there any questions, comments? Yes.

AUDIENCE: Does salt intake remain, uh--

PRESENTER: Restricted, because if you look--

AUDIENCE: Unless they're diabetic?

PRESENTER: No, no.

AUDIENCE: Oh, OK.

PRESENTER: No. Oh, that's the only restriction. If they're diabetic, they'll still have their diabetes restrictions. If they're healthy, they'll just have the salt. I did look at that. There was a reason in my thought process.

AUDIENCE: Oh, yeah, that's [INAUDIBLE].

PRESENTER: I'm glad you clarified that.

AUDIENCE: I'm glad you did.

PRESENTER: And now we see why our patients, sometimes we're giving them information, and they're doing that. Often, they don't go back and read. When I worked in dialysis, [INAUDIBLE], one would say this was OK. One would say that one wasn't OK. Well, you don't know what you're talking about. 85% of the foods are all the same, but you picked out the one thing that was different. [INAUDIBLE] might be cut off at 200 other ones might be 225. But they're smart, and they're looking for reasons. Everybody wants to do the right thing. They get in trouble when they convince themselves they're doing everything right.