

CDC, Division of Diabetes Translation

Utilizing the 2020-2025 Dietary Guidelines for Americans to Tailor

and Deliver Type 2 Diabetes Prevention Programs

September 21, 2021

Transcript

Slide 1: Title Slide

Pat Schumacher: Good afternoon, everyone,

Slide 2: Moderator Slide

and good morning to viewers in Alaska and Hawaii. I want to welcome you all to our webinar titled:

“Utilizing the 2020-2025 Dietary Guidelines for Americans to Tailor and Deliver Type 2 Diabetes Prevention Programs.” My name is Pat Schumacher, and I'll be your moderator today. I'm a Registered Dietitian and serve as Chief of the Program Implementation Branch in the Centers for Disease Control and Prevention's Division of Diabetes Translation. There, I lead a multidisciplinary team working to support widespread adoption of evidence-based strategies for diabetes management as well as type 2 diabetes prevention. Before I introduce

Slide 3: Disclosure Statement

our speakers today, I'd like to go over some basic information about the webinar. At this time, we're required to share our disclosure statement. CDC, our planners, content experts, and their spouses and partners have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial

supporters. Planners have reviewed content to ensure there's no bias. The content we'll be presenting today will include no discussion of an unlabeled use of a product or products under investigational service. CDC did not accept commercial support for this continuing education activity, and there are also no fees charged for CDC continuing education. The information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the CDC.

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Slide 5: Please Note

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Slide 6: Today's Objectives

So, the objectives for today's webinar are to describe the major components of the 2020-2025 Dietary Guidelines for Americans, or DGAs, and recognize how they differ from previous editions. And secondly, to incorporate the materials, messages, and resources from the Dietary Guidelines Call To Action to "Make Every Bite Count" when communicating dietary guidance and diabetes education and type 2 diabetes prevention in community or team-based clinical settings. And then, finally, to compare food classification among cultures and apply the basics of the

L.E.A.R.N. model in cross-cultural communication.

Slide 7: Have a Question for our Speakers?

During this webinar, if you have a question for any of our speakers, please type it in the Q&A box below. If you want to direct your question to a particular presenter, please feel free to note that in your question. We'll do our best to answer all of the questions during the Q&A portion of the webinar. If you have a question about obtaining continuing education credits, where to access the webinar once it's over, or other technical questions, please use the chat box feature.

Slide 8: Today's Presenters

So, with that said, it's a pleasure to introduce our panelists for today's presentation. I'm going to start with Dr. Jennifer Seymour. She is currently a Senior Policy Advisor and Senior Scientist in the Division of Nutrition, Physical Activity, and Obesity at CDC. In this position, she addresses the scientific and policy implications of nutrition and obesity interventions. She was the CDC lead and a member of the Department of Health and Human Services Leadership Team for the development of the new Dietary Guidelines for Americans and has been involved in the creation of the Dietary Guidelines since the 2005 edition. She's assisting CDC's Division of Diabetes Translation in updating the nutrition science behind the National DPP's PreventT2 curriculum and was also the lead scientific reviewer for HBO's 2012 Weight of the Nation documentary series. In 2010, she worked as a policy advisor in the Office of First Lady Michelle Obama at the White House. Dr. Seymour received her PhD in Nutrition and Health Sciences from the Division of Biological and Biomedical Sciences at Emory University as well as a B.A. in Anthropology from Rutgers and a chef's training certificate from a culinary school in New York City.

Sacha Uelmen is our second presenter. Sacha is the Director of Diabetes Education and Prevention

Programs at the Association of Diabetes Care & Education Specialists, or ADCES. In this role, she oversees the accreditation of diabetes self-management education and support services as an accrediting organization for CMS [Centers for Medicare & Medicaid Services], providing leadership and guidance for over 800 diabetes self-management education and support programs nationally. She also plays an integral role in working alongside CDC in the National Diabetes Prevention Program. As a registered dietitian, she worked for over ten years clinically at the University of Michigan Health Systems serving people with chronic kidney disease, obesity, prediabetes, and diabetes, including providing diabetes self-management training. From there, she moved on to a national role leading the American Diabetes Association with nutrition initiatives for several years. Sacha graduated from the University of Michigan with a B.A. in Sociology and later completed her Nutrition and Dietetic Bachelor of Science Degree at Eastern Michigan University.

And our third presenter is Lorena Drago. Lorena is the founder of Hispanic Foodways which received the New York City Small Business Award in 2006. She's a registered dietitian consultant and certified diabetes care and education specialist. Lorena specializes in the multicultural aspect of diabetes self-management education and is an expert in developing culturally and ethnically oriented nutrition and diabetes education materials. Lorena served on the American Association of Diabetes Educators Board of Directors for 2006 to 2010 as the Chair for Latinos and Hispanics in Dietetics and Nutrition. She's the author of the book "Beyond Rice and Beans: The Caribbean Guide to Eating Well with Diabetes" published by the American Diabetes Association, as well as numerous other publications. Lorena has appeared on several national TV shows speaking about diabetes management. Lorena graduated Cum Laude from Hunter College of the City University of New York with a Master of Science degree in Food and Nutrition and received her bachelor's degree from Queen's College. I want to welcome our

presenters, and I'll turn things over to Jenna to get us started. Thank you.

Slide 9: Dietary Guidelines for Americans 2020-2025

Jenna Seymour: Thanks, Pat.

Slide 12: Healthy Eating Can Promote Health and Reduce Risk of Chronic Disease

I'm happy to be presenting again about the Dietary Guidelines for Americans. There's a lot in the Guidelines where I will only be able to whet your appetite. And I say that pun intended. So, in the end, I hope this presentation gives you more reasons to look at the Dietary Guidelines and see all of the details. Because this will just be a broad overview for diabetes care and education specialists. There are several major changes to this edition of the DGA, as we saw in the poll question. The biggest change is the addition of guidance for women who are pregnant or lactating and for infants and toddlers from birth to 24 months of age. The science supporting the DGA is extensively documented in the scientific report of the 2020 Dietary Guidelines Advisory Committee, which is available at [dietaryguidelines.gov](https://www.dietaryguidelines.gov) if you really want to dig into the science. The report examined the science on key topics related to diet and health, and the figure on this slide shows outcomes with either strong or moderate evidence. Specifically, a lower risk of type 1 diabetes seen in the birth to 24-month population and lower risk of type 2 diabetes for all adults.

Slide 13: The Guidelines

So, there are four broad guidelines. One is to follow a healthy dietary pattern at every stage of life. Two is to customize and enjoy nutrient dense food and beverage choices to reflect personal preferences, cultural traditions, and budgetary considerations. Three is to focus on meeting food group needs with nutrient dense foods and beverages and stay within calorie limits. And four is to limit foods and beverages high in added sugars, saturated fat, sodium, and to limit alcoholic beverages.

Slide 14: The 85-15 Guide

It is important to note that when you look at all of the foods that really are needed to get the nutrients that you need, about 85% of the calories that a person has in their diet are taken up by those food group recommendations, which only leaves 15% of the calories for anything like added sugars, solid fats, alcohol, any extras that you might put in your diet. And so, there really is a very tight limit on how much room there is for people to move outside of the basic food groups that are needed for a healthy diet.

Slide 15: Dietary Intakes Compared to Recommendations

So, on this slide, it's going to be hard to read all the details, but I just want to give you this broad picture of the fact that the purple on these slides represents being at or above recommendations and the blue represents being below recommendations. The first six bars here represent vegetables, from total vegetables and then all the different vegetable subgroups, and the seventh is fruit. And what I want you to see on this slide, just is the broad fact that we are nowhere near getting the majority of the population eating enough fruits and vegetables. The next three bars shown, are about grain, and it looks like things are a bit better from the point of view of the bars are much higher for the purple side of things, but what you should see here is that really almost no one is eating the recommended amount of whole grain, which is the middle bar there. But people are eating a lot of refined grains, and that really is not where we want things to be going. Same thing for the next bar that is dairy. People are not consuming enough, and I will say just in case you're wondering in terms of people who are vegan or have other reasons to not consume dairy, that category does include appropriate substitutes like lactose-free dairy for people who have issues there or soy milk. And finally, the total protein foods. Again, you can see that it looks like things are okay, but really, people are not eating anywhere near enough seafood per the recommendations.

Slide 16: Top Sources and Average Intakes of Added Sugars

So, I do just want to go through a couple slides to show a little bit about the nutrients that people should not be consuming as much. So, for added sugars, sugar-sweetened beverages are the number one source of added sugars at almost a quarter of intake with 16% coming specifically from soft drinks. The number two source of added sugars in people's diets is desserts and sweet snacks at almost 1/5 of intake. So, together, this accounts for about 40% of the added sugars intake.

Slide 17: Top Sources and Average Intakes of Saturated Fat

For saturated fat, the number one source is sandwiches, and the number two is desserts and sweet snacks. Together, that accounts for 30% of intake.

Slide 18: Top Sources and Average Intakes of Sodium

And then, for sodium, the number one source is sandwiches, and then you can kind of see just by looking at this slide that really, sodium intake is spread out throughout the diet once you get outside of sandwich consumption.

Slide 19: Infants and Toddlers

So, now, we're going to start looking at specific chapters that give details about life stage groups and ways that the recommendations are slightly different than the broad standard recommendations for the entire population. So, we're starting with infants and toddlers.

Slide 20: Birth to 24 Months

It's important to know why infant and toddler nutrition matters for diabetes care and education specialists, and so I'll say first diabetes is being diagnosed in younger and younger populations. And second, dietary habits start early, and it can be much harder to change a person's diet later in life rather than start early and set healthy habits. So, the first 24-month period is critical for growth and development in setting eating habits during this period. The DGA

specifically says that for the first six months of life, exclusively feed infants human milk and continue to feed infants human milk through at least the first year of life, longer if desired. Feed infants iron fortified infant formulas during the first year of life when human milk is unavailable. At about six months, this is the time to introduce infants to nutrient dense complementary foods, and it's also the point to introduce potentially allergenic foods at the same time. This is a really big difference. A lot of people were in the past under the assumption that potentially allergenic foods should not be introduced, and there's much more evidence coming out that introducing them early really helps to avoid allergies. And as infants wean from human milk or infant formula, transition to a healthy dietary pattern.

Slide 21: Special Considerations

So, there are special considerations for infants and toddlers. All infants who are fed human milk exclusively or who have human milk as well as formula—called mixed feeding—will need a vitamin D supplement beginning soon after birth. And, infants fed human milk also need to be supplemented with zinc and B12. There are a number of foods infants should avoid completely. Young children have virtually no room in their diet for added sugars. Taste preferences for salty foods may be established early in life, so it's best to really keep high sodium foods away from young infants. And honey can contain *Clostridium botulinum*, so that really should not be consumed by infants. And no safe limits of caffeine have been established for infants and toddlers. And of course, there are other things on this list to avoid: 100% fruit juice, cow's milk, soy beverages, plant milks, toddler milks. So, there are a lot of things to really avoid with infants.

Slide 22: Women Who Are Pregnant or Lactating

So, now, we will turn to recommendations for women who are pregnant or lactating.

Slide 23: Pregnancy & Lactation

Dietary patterns for women who are pregnant or lactating should be pretty similar to the healthy dietary patterns for the overall population, just with different calories. This chapter on pregnancy and lactation goes into details on issues around nausea, vomiting, food aversions, and cravings. It also explains that women do not need to restrict their dietary choices to prevent allergies in their children. And there's guidance for vegetarian and vegan women, guidance for appropriate weight gain, and food safety issues with this population. So, as I said, there's a lot to look into, and I am just sweeping over this really quickly. And there is reason to get into the details here.

Slide 24: Special Considerations

So, again, there are special considerations for pregnant and lactating women. There are certain critical nutrients. Folate, folic acid, iron, iodine, and choline are really very important for pregnant and lactating women, and there is information in the Guidelines on consuming seafood, alcohol, and caffeine in these populations. So, again, really digging into that and knowing what the Guidelines say.

Slide 25: Older Adults

And now, for older adults.

Slide 26: Older Adults

So, first of all, it's important to know that "older adults" is defined by the Dietary Guidelines as 60 plus.

Older adults are more susceptible to chronic diseases including osteoporosis and sarcopenia, which is the loss of muscle with age. Older adults can also have issues with chewing and swallowing, and food safety is very critical since there is a decline in the immune system with age.

Slide 27: Special Considerations

So, some of the special considerations for older adults include protein for lean muscle mass, B12

because the ability to absorb it decreases with age, hydration because thirst decreases with age, and older adults may react faster to alcohol, and it can have a greater effect as well.

Slide 28: Customizing the Dietary Guidelines Framework

So, again, this slide you really can't see. The point is that there are available resources for customizing information about the Dietary Guidelines. You just need to find this on the website. The link below or I believe the link is in the chat as well, can get you to this information. So, this specific resource on the slide shows that the Dietary Guidelines can be customized for many different diets, cultures, budgets, and more by giving many examples of the kinds of foods that fit into the five food groups with the dietary patterns presented in the DGA. The Dietary Guidelines were written for professionals with the intention that they will adapt it to the population with which they work, and that's important to note because I think there are a lot of people who may have remembered the Dietary Guidelines from a long time ago and believed that they are really talking about a very specific type of diet. But these Dietary Guidelines discuss the broader categories of foods that are part of a healthy diet such as vegetables. But those broad categories can be made up of all types of food such as Kongnamool which is used in Korean cuisine, taro leaves used in native Hawaiian cuisine, nopales from Mexican cuisine, and the three sisters, corn, beans, and squash, in certain American Indian cuisine. Or broccoli used in many cuisines throughout the U.S. So, thank you for the opportunity to present, and now I will turn this over to Sacha.

Slide 29: How the Dietary Guidelines Promote Health, Prevent Disease, and Inform Diabetes Education & Prevention

Sacha Uelmen: Thank you, Jenna. Alright

Slide 30: Our Health is Suffering from Diet-Related Chronic Disease

so, kind of tagging onto everything Jenna mentioned, I'm probably going to focus a little bit more on a lot of the things that haven't changed in the Dietary Guidelines over the years. But for one thing, just to focus with my expertise, really just to know our health is suffering from diet-related chronic diseases, and the Dietary Guidelines, you know, do highlight this, that over 74% of Americans have overweight or obesity, and six in ten adults are living with one or more diet-related chronic diseases.

Slide 31: Lower Risk of Type 2 Diabetes

So, again, I mean, lowering the risk of type 2 diabetes does align with the Dietary Guidelines, and so when we think about diabetes self-management education and support in type 2 diabetes, we see a lot of the same things with risk of heart disease can be lowered by following the Dietary Guidelines. Lowering the risk of type 2 diabetes, cancer, obesity, or even hip fractures.

Slide 33: Make Every Bite Count

So, really thinking about, and this is I think an important point because as a dietitian, I always think is my job is really to translate this information for the person I'm talking with, depending on what their skills, need, understanding, comprehension, goals are. So, I just want to talk a little bit about nutrient density and sodium here. I'm not going to get into too much detail because Jenna covered that in her slides, but really focus on how do we make every bite count. I really like this message because I think it focuses on the positive versus limiting things. Really focusing on, you know, increasing nutrient dense foods and drinks and limiting those that are higher in sugars, fat, sodium and trying to stay within calorie limits. So, you know, currently, 75% of people are not eating enough vegetables, fruits, and dairy. These are the things that can increase our healthy nutrients and our, the nutrient dense foods. Sixty-three percent of people exceed the limit for added sugars, 77% for saturated fat, and 90% exceed, you know, the intake for sodium. So, we're not doing so good as a population here.

Slide 34: Daily Goals

I think one of the mantras when I was working clinically in counseling people with diabetes every day was, one of the mantras I said to people, and it still holds true, is really eat less sugar and fat. Eat more veggies and fruit. Eat a variety of foods and pay attention to your portion size. And this is kind of the same message. It's really the more you can replace some of those things; most people know the things that are a little bit less nutrient dense, even if that term doesn't mean anything to them. They know that fruits and veggies are going to be, you know, a better choice. So, wherever you can, replace those. I always encourage people to get more bang for your buck when it comes to this stuff. We're going to talk about that in a second.

Slide 35: Daily Goals

So, really, nutrient density, like I said, is choosing a piece of fruit over a sweet and salty snack. Maybe not all the time, but as often as you can. If there's a particular time of day where that'd be an easy thing to do, that's what you're aiming for. Trying to eat two servings of vegetables at dinner, if possible, even if it's the same vegetable. Just getting twice as much can help increase your vegetable intake. Choosing whole grain bread instead of white bread wherever you can and looking at, you know, where the chunks and seeds are. Try to find some preferences. Or having alternative protein day each week. Maybe you have one day a week that you're going vegetarian instead of eating meat. And then, when it comes to dairy, you know, cutting down on the portion if you're drinking a lot of milk or dairy products or choosing lower dairy fat options. There's a lot of different ways to increase your nutrient density, and you really want to think about what works within your normal eating habits and think what makes the most sense with the food choices that you normally consume.

Slide 36: What's the Opposite of Nutrient Dense?

So, what's the opposite of nutrient dense? I know Jenna mentioned it's only 15% left in your calorie consumption for the day. So, if you're thinking of your whole days' worth of calories, I always look at it as, you know, you've got 15% left for some junk food. And you know, I didn't grow up as a dietitian. I enjoy junk food just as much as anybody else does. So, really thinking about these are foods that maybe don't have nutritional value. They may not be things that have a lot of fiber or, you know, vitamins or minerals. But this is where you fit in those little snacks where you would have a beer or some cookies or some chips. Thinking about what are those things do you not want to eliminate and how do you make those closer to 15% so that they're not expanding on that as best you can.

Slide 37: DGA and PreventT2 Updates

So, the Dietary Guidelines did impact the PreventT2 curriculum for [type 2] diabetes prevention. So, some of the things that we're focused on in this update that's coming out very soon is really a focus on food over macronutrients. Because when we're talking about people who are living and breathing in the daily life, not focused on nutrition like some of me and my colleagues here who are really interested in this nutrition science. They're really talking about food, not fiber or protein. They're eating food. It's also focused a lot more on nutrient density. Looking at how to figure out what foods have more nutrient density and helping people make those decisions with the choices that they have in their normal day-to-day eating. Portions are still always going to be a key element, but there's also some practical tools and resources in this update, and there's a big emphasis on habit formation and personally meaningful goal setting. And cultural considerations are much more prominent in this new updated version.

Slide 38: PreventT2 Updates and the DGAs

So, you know, some of the things that are incorporated is really, as I've said a couple of times here, it's eating foods you like. Not just picking things that are healthy that you don't like. It's going to

be really hard to implement that and sustain an eating plan if you don't like the foods that are in it. So, you've got to think about how, what within the foods that I like are going to work. It also incorporates, you know, practical messages for a wider audience, and as I've mentioned, you know, familiar foods. Focusing on variety but really, the familiar foods people are eating every day. I mentioned nutrient density. That's a common thing throughout, but really and drinking mostly water and reducing some of those sugary beverages is another theme throughout the update. Portion and calories do still matter, so that is still covered, but there's a little bit less focus on numbers and a little bit more focus on just choosing the healthier foods. And definitely an emphasis on reflecting personal preferences, cultural traditions, and budgetary considerations as well. Because those things impact the foods you can choose and have access to.

Slide 39: PreventT2 Updates

So, in addition, the stories, scenarios, and examples in this new curriculum, this updated curriculum, are a lot more realistic. They're less, I would say more realistic and less idealistic. There's a little bit more flexibility within the curriculum to tailor healthy eating approaches to meet participants' own needs. There's an emphasis, as I mentioned, on habit formation and setting personally meaningful goals. Really thinking in terms of what matters to me. Because if it doesn't matter to me, I'm not going to be very successful in achieving this goal if it doesn't really matter. So, really making sure that these goals that people are setting throughout this program are going to be something that matters to them, and they will be successful with and be able to build on them. You know, we really, there's emphasis on enhancing cultural relevance depending on a variety of different cultures. You can't do that on paper so much, but it really is trying to include a lot of different cultural backgrounds throughout the curriculum and being able to give coaching tips that help the coaches and facilitators of this

program really customize the curriculum in ways depending on the community that they're serving. And then, you know, there's definitely more coaching strategies like games and storytelling included and some guidance for virtual delivery and engaging participants in between sessions. And incorporating the 2021 Diabetes Prevention Recognition Program Standards is also a part of the update.

Slide 40: MyPlate Kitchen

So, some other resources that are helpful for people that are facilitating [type 2] diabetes prevention as well as DSMES includes the MyPlate MyKitchen app or website. This is a really cool website from the USDA that includes a bunch of recipes and videos and lots of different information on, you know, different ways to cook. And it's pretty simple from when I was looking at it. A lot of the recipes are pretty simple and straightforward, and so they meet the needs of people who may not be cooking all the time. And so, giving people some good directions.

Slide 41: Start Simple with MyPlate App

Other tips, I really like this app, and I actually have it on my phone and use it. What I like about the Start Simple app from MyPlate is it's very simple. You start out by picking your goals, and you can kind of see. I know the images are small, but you can kind of see, you can focus on what is my goal. Like, my goal right now is to get enough vegetables in. Yes, I'm a dietitian, but I struggle with this, too. So, really trying to make sure I'm choosing at least three vegetable servings a day, or maybe it's five. But you can kind of set your goals for these different things. So, it really is food focused, and I think that's a nice resource. There are lots of other cool parts about this app if you're really interested in badges to celebrate your success. That's something you can do, and then you can kind of see real time progress for how you're doing. So, I think it's a good reminder without being too overwhelming. Sometimes, these apps for nutrition tracking can be so overwhelming with so many numbers and details. People would come in

with their results and be like I don't know what to do with this, hand it to me and say, "Tell me what this means." And so, this one, I think is really tangible for most people.

Slide 42: Additional Resources

And then, there's a bunch of other great resources that I would encourage people to review and check out that are available at government resources. Like Healthfinder, to get tips on how to eat healthy on a budget. You know, planning ahead to save time. Eating away from home. So, Healthfinder.gov has some really cool resources. There's some really great nutrition education from the FDA, U.S. Food and Drug Administration, and some really nice materials for teaching about label reading and the Nutrition Facts label. And then, as I mentioned, the Start Simple with MyPlate app. And then Foodsafety.gov. This is something I think that's important. As we talk to people, as a dietitian and talking to people, about increasing cooking at home and especially over the last year and a half people have been, I think, really experimenting more at home. And food safety might not be top of mind. So, it's some, there's some really great teaching tools and information at Foodsafety.gov that you can share with participants or people with diabetes or prediabetes or any of your participants or people you're working with to really focus on food safety and keep them safe and understanding some of the basics there. With that, I'm going to turn it over to Lorena.

Slide 44: Every Encounter is a Cross-Cultural Encounter

Lorena Drago: Thank you so much, Sacha. So, today,

Slide 45: Food Intake Assessment

I wanted to talk about how we bring culture into our assessment. So, I wanted to bring all this together, the assessment, diabetes, Dietary Guidelines, and how we bring culture, the questions that can elicit the information that is important. How do we view it from our point of view here in the United States? But, how we also bring the cultural aspects together. So, let's

think about MyPlate and how we think about food and how others think about food. So, in this country, when we talk about foods, we think about macronutrients. We think in terms of protein, carbs, fats, and when we think about our plate, we think in terms of fruits and vegetables, grains, protein, and dairy.

Slide 46: Food Classification Systems in Other Cultural Groups

But how do other people think about foods? So, when others outside of the States or even in the United States from other cultures or groups and someone thinks about breakfast, they're thinking about different combinations of foods. For example, chilaquiles, a Mexican breakfast, a combination of beans and tortillas and cheese and eggs. If someone says oatmeal to you, what do you envision? And I want you to take a minute and think of oatmeal. What do you envision? For some of you who know me and for those of you that don't, I am Colombian, and I am from the coast of Colombia. I am Caribbean. I am from Cartagena. And in Colombia, oats do not mean what many people think of oats which were typed there which is the oats and the water and the milk and the porridge, the hot, creamy, mushy oatmeal breakfast. So, the picture that you see there is a beverage, and you don't even see the oatmeal. It looks similar to atole, and I think someone typed atole. And it's a beverage. It just looks like a shake. That's pretty much what it looks like, a beverage. That's what oatmeal meant for me. So, when people, the first time that I asked, that I, someone said that they had oatmeal for breakfast, I thought they had a shake, a beverage. So, when someone presented oatmeal to me, it was totally different from what I envisioned as oatmeal. So, in other cultures, people classify dishes as main dishes, side dishes, snacks, desserts, or beverages.

Slide 48: Dietary Guideline Recommendations from Around the World

So, what I wanted to share here is how the world views the Dietary Guidelines and what is different.

So, I just wanted to share two, and we look at MyPlate, again, and the plate method is not the

only method to teach about balance, variety, and health. And it's also interesting to see what other world includes, what other places, what they include and also what they emphasize and what's not emphasized. So, I just chose China and Guatemala. I wanted to include Asia and Central America, just two different countries. And I wanted to showcase two things. First, China and Guatemala both include physical activity. And it's interesting because we don't, right? We don't include physical activity. Another thing that I wanted to point out is how China and both Guatemala include hydration. You see how China has water and also Guatemala also has water. You see how there is the amount. China has it, of course, in grams. The different types, the portions, and Guatemala does, has also some, the quantities per week. And it also includes aquatic products, includes eggs, and another thing that I also wanted to include was, and that's because I have read the equivalent of the Dietary Guidelines of Guatemala. And that is because iron deficiency anemia is a nutrition concern in Guatemala, they recommend that for every tortilla that is consumed, it should be accompanied by two tablespoons of beans to complement the protein intake. Eggs are also advised, and there is another product that is used not only in Guatemala, but also in other places in Central America. And it's called Incaparina, which is a powder that contains four grams of protein, and it also contains iron, B vitamins, and folic acid. So, it is recommended for all children so that most children will have enriched products that it's accompanied with many of the foods that are consumed. Kind of the equivalent of having enriched flour, but also contains protein as well. The same recommendations using, you know, increasing the amounts of fruits and vegetables and the intake of meat, especially because of iron deficiency. But the emphasis is done with corn and bean combination to increase the plant consumption and also to increase iron as well. So, I thought that it is very interesting. And then, look that China also has the same recommendation to include whole grain and mixed beans as well. So, I just wanted to give you

that context and Mexico does exactly the same thing. But at the same time, when you look at the pagoda, in China, you're also taking, you also see that dairy products and salt that there is an emphasis on not emphasizing the higher consumption of certain foods that are not considered to be as healthy. And there is more emphasis on more plant-based or plant-forward foods.

Slide 49: Dietary Guideline Recommendations from Around the World

So, in this slide, what I wanted to point out is that I know that we are always showing the plate method and the recommendations of half your plate should be fruits and vegetables or in the case of diabetes, make half your plate vegetables and then the other half then choose half of it should be the protein foods, etc. But what happens when we have mixed foods? How do we make those recommendations? So, let's say that we have a hearty soup, or we have tacos, or we have lasagna. What do we do when we have mixed foods? So, my recommendation is to have a ratio. Always try to provide the recommendations as a 2 to 1 or 3/4 of the foods to make sure that they come from plant foods, 1/4 from the animal protein if that's what you're going to recommend. Or half should be from the vegetables, 1/4 should be from the starch, and then 1/4 should be from the protein foods.

Slide 50: Review Cultural Interpretation of Serving Size

So, the other, this one should be the interpretation of what is to be a serving size. When we're recommending serving size, whether it's one cup, half a cup, etc. or medium size, etc., ask the individual what is considered to be small, medium, large, or extra-large serving sizes. Ask them to show you what are they using. What is the spoon? What is the cup? Ask them to show the plates and bowls whether you're in person or whether you are using telehealth. Next please. The reason for that is because when someone says, "I use a spoon," the spoon could be a serving spoon. The spoon could be a tablespoon, or the spoon could be a teaspoon. So, it is

important to find out exactly what spoons are being used. Many times, when I hear some Hispanic patients say I use a spoon of rice, that could be a spoon, could actually be a serving spoon. Next please.

Slide 51: L.E.A.R.N Framework

Now, this is the L.E.A.R.N. framework. It is an actual framework to elicit information when you want to use a culturally competent manner to elicit the information that you need from a patient. And I want to give you an example of what L.E.A.R.N. means. So, L.E.A.R.N. stands for listen, explain, acknowledge, recommend, and negotiate. So, what does it mean when you are using this in practice? I'm going to give you an example of a patient that comes in, called me, and scheduled an appointment to see me. He was diagnosed with diabetes, and he wanted to know if, he wanted to see me. He had been prescribed metformin, but he did not want to try metformin because he wanted to use something natural. He was African American, so my first questions was [were] what did he feel was causing the problem and how did he feel that the illness was truly affecting him. And what did he believe that the natural products would be of benefit to him. So, then, he said that he wanted to try bitter melon. He wanted to try cinnamon, and he wanted to try *Gymnema sylvestre*. And he did not want to try metformin. So, he was very certain he wanted to try those three herbs because they were natural. So, I listened to him. Then, after that, I asked him to explain how did he feel that those three supplements were going to be superior or at least they were going to be as equally effective as metformin. So, he said that the reason he wanted to do it was because they were not going to have the same side effects as metformin. So, I asked him to tell me what had he studied about those three, and he said that those three were going to lower his blood glucose. So, then, I acknowledged that there were some studies that showed that they were going to lower some of the blood glucose. I also told him that not all cinnamon was going to provide him with the

same effect and that not all of the ingredients were as effective as metformin and that they had to follow a certain mechanism of action in order to produce the effect. I also told him that I would recommend the best supplements and that I would provide him some studies to show which ones he could take and that after two months of taking them and seeing a physician so that he could take his blood glucose, if he was not improving, then he would have to follow the doctor's instructions and take metformin and that he would agree to follow the doctor and that I would discuss this with his doctor. And that he would be amenable to do it. So, after that, he [I] said, "Would you agree to see me, and would you agree for me to discuss this with your doctor?" Then, he agreed. So, that's how I followed the listen, explain, acknowledge, recommend, and negotiate.

Slide 52: Cultural Food Habits Questionnaire

So, the next three slides are some questions that I usually use during my assessments because I need to understand what are some of the potential barriers that patients or clients may encounter. And I'm going to explain why. Which foods do you eat to be healthy? Which ones do you avoid when you're sick? Which foods do you use to treat diabetes, hypertension, or any other medical conditions? The reason that I ask this question, and I'm going to give you an example from real life. The second bullet which foods to you avoid when you're sick. I had a patient that was avoiding oranges, citrus, etc. Why? Because she told me I am avoiding all those foods because my husband has gout. I didn't know what was the correlation between gout and avoiding all citrus food, and the wife said because my husband's uric acid is high. So, she assumed that she had to avoid all foods that were acidic. If I had not asked that question, I would have never known. Many times, patients tell me that they are eating yogurt and oatmeal because they thought that it was healthy. I have had patients cutting eggplant and soaking it in water and drinking it every morning because they think that that is going to lower

their blood glucose levels or they soak oats, and they drink the water because it's going to lower their blood glucose levels. So, just having these questions in the patient assessment, you can truly learn a lot about what your patients or clients are doing to manage their conditions.

Slide 54: Cultural Food Habits Questionnaire

These are some of the same questions but I want to add the last ones. Have you seen other practitioners for the treatment of diabetes? What remedies are you taking? The last one, I love to ask this question. What we all have favorite remedies that we use when we are sick. Which home remedies do you use? Many times, patients do not like to share because they feel that if they share, they may be embarrassed about sharing certain things. So, I may say things such as, "You know, if sometimes we may have chicken soup. Sometimes, we may have prunes if we're constipated. Which questions do you usually, remedies do you usually have when you are sick?"

Slide 55: Cultural Food Habits Questionnaire

Other things that I usually ask, especially if someone is new to the country is, are there any new foods that they have been eating or are there any foods that they don't like. Are there any foods that they're purchasing? And the other thing that is very prevalent now is food insecurity, and those are the questions on the right. Do you have enough food to eat each day? Are you able to get the types of foods that you need? Those two foods [questions] may prompt you to discover that there is food insecurity. So, please do ask those questions. Do you find that just that you have enough food? Is it hard for you to buy the foods that you need? So, make sure that it's not just about cultural foods, but it's just about having enough food to eat.

Slide 56: Cultural Food Habits Questionnaire

The other thing is about how we prepare our foods, and the reason I'm saying this is because once again, we view the world through our own glasses. So, how do you prepare the meal? I went

to an event yesterday, and someone had said to me that when they were growing up, the only way that they knew about beans was beans and franks. That was the only way they knew about beans was about having frankfurters and beans. And then, I laughed because I never knew that beans had frankfurters in them until I came to this country. And we all laughed because they never knew that beans were prepared any other way. So, here, what, there was a cultural moment. So, I never knew about the way the beans were prepared, and I never knew that beans were sweet. And they never knew that beans were not. So, it is very important to never assume that things are prepared a certain way. I never knew, they never knew that rice had oil, and I never knew that rice never had not [had] oil because I always prepared rice with oils. So, always ask how is this prepared? How [what] is this accompanied with? So, always do that.

Slide 57: Traditional Foods and Dishes

The other thing I always ask, is what are the top 20 foods that you always keep in your house? If I went to your house, what are the top 20 foods that you have? What supermarkets do you shop in? What are your top brands of choice? What are your top 20 recipes? What are your holiday foods and your rite of passage foods? If I went shopping with you, what's in your shopping cart, because that will give you an idea of what are the things that they buy.

Slide 58: Counseling Tips

And some of the counseling tips. Do not pathologize cultural foods. I know that many times people always say, "Stop eating so many tortillas." And then people start thinking that tortillas are horrible, and both Sacha and Jenna already said that cultural traditions, it's always, it's always so important to bring cultural traditions with the Dietary Guidelines and when it comes to the NDPP [National Diabetes Prevention Program] it's always wonderful. Focus on the wins. No one is perfect. Sacha was telling us that even as a dietitian, she's always saying how can I

improve my vegetable intake. We are always trying to do better. All of us. No matter who we are. We are always trying to make sure that our dietary patterns fit with our lifestyle and the access that we have. Look for the nutrients in commonly eaten foods. So always try to find out in the foods that we eat, where are the nutrients that we need. For many Hispanics, and I am sure for many other groups, brown rice is very challenging. So one thing that I always say is the Dietary Guidelines say, “choose whole grains but at least half of the grains, make sure that they are whole,” right? So that means that the other half, it’s okay if it’s not whole grains so as long as we differentiate enriched grain from indulgent grain. So remember that there is a difference between enriched grains from indulgent grains. So if this person loves her white rice and you’re [she is] eating other whole grains, let that person use her white rice and make sure that she pairs that with other high fiber foods. So if this person is having her beans and other high fiber foods and other whole grains in the diet, let that person eat the white rice, don’t make it a big deal, and let that be it. As long as this other person is having all other high nutrient foods, let it be. And then offer choices and let that person choose where the modifications are going to be.

Slide 62: National DPP Customer Service Center

Pat Schumacher: I want to just, to wrap up, I want to thank all of our presenters this afternoon. But a couple of things just to mention in close out. Please go ahead and send your questions into the mailbox, it’s DDT_DiabetesWebinar@cdc.gov and we’ll try to get to your questions there. I know a lot of you have asked about the PreventT2 updates, and the updated curriculum, and when will that be available. That’s coming soon here in the next few weeks. The English version will be available first, followed by the Spanish version. You can find both on the National DPP Customer Service Center and the address is shown at the bottom of the slide.

Slide 63: CDC Diabetes Resources

And then finally, just to learn about, CDC's Division of Diabetes Translation also has other resources you can share with people who have diabetes and their families, including recipes, fact sheets, and a variety of other things. You can find them on the website at the link on the screen.

Slide 63: Thank You

And then finally again, I just want to thank everybody in the audience for your participation. Thanks for hanging in there with us, we really appreciate it. If you have additional questions, as I said, please send them to that email address that is on your screen and we will follow up with you after the webinar. Please also be sure to get your continuing education credit. Instructions will be emailed out to you. And as a reminder, a recording of this webinar and the slides will be shared in the near future. This concludes our time together this afternoon. Thank you so much for participating.