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**PUBLIC HEALTH INSTITUTE
DIALOGUE4HEALTH WEBINAR:**

**"Reduce the Salt, Keep the Flavor:
Getting Started with Food Service Providers"**

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**ROUGH DRAFT TRANSCRIPT
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>> Star Tiffany: Hello, and welcome to "Reduce the Salt, Keep the Flavor: Getting Started with Food Service Providers." My name is Star Tiffany; I will be running today's web forum, with my colleague Joanna Hathaway. Closed captioning will be available throughout today's web forum. Steve with Home Team Captions will be providing realtime captioning. The closed captioning text will be available in the media viewer panel. The media viewer panel can be accessed by clicking on an icon that looks like a small circle with a filmstrip running through it. On a PC this can be found in the top right-hand corner of your screen. On a Mac it should be located in the bottom right-hand corner of your screen.

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The audio portion of the web forum can be heard through your computer speakers or a headset plugged into your computer. If at any time you are having technical difficulties regarding audio, please send a question in the Q&A panel and Joanna or I will provide the teleconference information to you.

The recording and presentation slides will be posted on our website at www.dialogue4health.org.

We are encouraging you to ask questions throughout today's presentation. To do so, simply click the question mark icon, type your question in and hit send. Please send your question to all panelists as we will be addressing questions throughout the presentation and at the end, during the discussion period.

It is my pleasure to introduce Kristy Mugavero, who will be moderating -- I'm sorry, who will be first introducing our web forum. Kristy leads the Sodium Reduction in Communities Program in the Centers for Disease Control and Prevention Division for Heart Disease and Stroke Prevention.

Prior to joining, Kristy worked in the Policy Office of the National Center for Chronic Disease Prevention and Health Promotion. In this role, Kristy worked on multiple chronic disease related issues, including adolescent and school health, obesity and physical activity, and cardiovascular health. Before joining CDC, Kristy began her career as a registered nurse in a postsurgical cardiovascular units. She earned a master's in nursing and public health in 2006.

Kristy, please go ahead.

>> Kristy Mugavero: Thanks, Star. Good afternoon, or good morning, everyone. Thank you for joining. Like Star said, I'm Kristy Mugavero; I lead CDC's Sodium Reduction in Communities Program. On behalf of CDC, I thank you all of you for joining today. As most of you probably know, sodium reduction is a priority for CDC. Seeing the opportunity to accelerate progress by better connecting public health and food service, we're pleased to have this opportunity to work with the National Networks of Public Health Institute and Culinary Institute of America to provide information about working with food service providers to reduce sodium in meals and products served and sold in different settings. We're looking forward to a very informative webinar.

Without further ado, I hand off to Christopher Kinabrew, chief strategy officer for the National Networks of Public Health Institute. Chris, please go ahead.

>> Christopher Kinabrew: Thank you very much, Kristy. We're proud to launch this series in collaboration with Culinary Institute of America, Dialogue4Health platform, and CDC.

Before we start, I want to share a few words about the National Network of Public Health Institutes, for those who don't know us. We and member institutes are nongovernmental organizations and implement public health policy and program initiatives across the countries. Our current membership of 44 organizations is in 32 states and Washington, DC. We're also serving as the new national coordinating center for public health training, working with 10 regional public health training centers serving the entire public health workforce.

Specific to this initiative, we support a number of national health system initiatives, including sodium reduction, and a key component of our approach is fostering a learning community through events like this webinar series, and also building bridges across sectors through collaboration with organizations like the Culinary Institute of America. We anticipate today's presentation will stimulate great conversation and learning across food systems and health organizations.

I also want to acknowledge the broader team, including Kelly Hughes, associate director for program strategy, and Josh Jennings. As Star Tiffany mentioned, we do encourage you to ask questions through the chat feature in WebEx and look forward to answering those following Brad and Sanna's presentation.

Without further ado, I want to introduce Brad Barnes at the Culinary Institute of America, in Hyde Park, New York, and also a couple other locations across the country. He's responsible for the oversight of CIA's Food Enthusiast program, ProChef certification, and does consulting with organizations, including this initiative. So thank you, Brad, for joining us today.

Next, Sanna Delmonico. She is a senior manager of Culinary Nutrition for Strategic Initiatives at CIA. She has been involved in a number of health and wellness programs with Culinary Institute of America, including Healthy Kitchens, Healthy Lives, Healthy Kids Initiative, and CIA Healthy Menus Research and Development Collaborative.

In terms of past work, Sanna was a pediatric dietitian for many years, and something I found interesting about her bio, for 12 years she published a nationally distributed food and nutrition newsletter for parents and pediatric nutrition professionals called "Tiny Tummies."

Thank you Brad, Sanna, for joining us today. I turn it over to you all for the presentation. Thanks again.

>> Sanna Delmonico: Thank you. Good afternoon, everybody. Thanks for joining Brad and me for "Reduce the Salt, Keep the Flavor: Getting Started with Food Service Providers." This is such an important topic; I'm so glad there are so many of you joining us today. Thanks, Chris, for introducing us both.

We have a slide with our bios. Some of the work I've been involved in most recently is working with the Healthy Menus Research and Development Collaborative on a number of issues related to improving menus on -- volume food service menus, and specifically on sodium reduction. I'm excited to share that today.

>> Brad Barnes: Thanks, Sanna, and everybody for taking the time to join us. As Sanna indicated, we're really happy to be a part of this. Certainly very exciting work. I've spent much of my life focusing on cooking and being somebody that always kind of looks for flavor first, and then supplements with salt. I was taught that very young in my career. This whole concept is something I'm very happy to be a part of. We appreciate you taking the time to listen to us.

So one of the things that we wanted to go into today is the idea of true change, and I've spent a good portion of my career, the past 15 years or so, talking about and working with organizations across the scope of food service in changing the way they do business. That is from a number of perspectives.

So I thought I would share with you some ideas. Since we're all kind of talking about how do we make impact on the food service industry, it really is about causing change operationally and culturally both.

So a few of the things that are important to keep in mind is that our ideas, our missions are clearly defined and understood by everybody. We design change so that it positively affects all the stakeholders, meaning that once we put it in place it really does continue to be a part of the evolution of the goal. And goals are thrown out there way up the road, and we do all these things to eventually get to them. That kind of design and construction of that sort of a plan is what we're hoping to help you all as grantees think through and how you may be able to get there, because the industry that you're trying to impact is incredibly idiosyncratic and very foreign to some as to how it moves and works. So to change that, and cause change within that, that's effectual in meeting our goals, is not going to be easy. I think, with the right information and with the right assistance, we certainly can make some great impacts.

We also want to make sure our change is permanent and measurable, so that anything that we put in place continues to be a part of what we're doing, and then is measurable in its effects and how well that worked. Because, in the idea of continual improvement processes, we want to know what worked, what didn't work so well, and enhance the stuff that did and diminish the things that didn't.

The next piece would be to embrace the constant values, and that goes back to bullet 1 of clearly defined mission, and being able to constantly design change strategies that embrace everything that we're doing and keep those constant values at the forefront.

Our topics today, and we have broken this into a few, is causing a paradigm shift, the true change.

High sodium, the 10 top and changing those proportions in the way they work.

Communicating with the food service provider community. And don't take that one lightly, because that's a very interesting group of folks, and they have a lot of things that are going to be helpful for you to have the right attention put to the right subjects. We'll try and help you get a frame there to work within.

Then some really good best practices and successes that we have noticed. We know they work. Sanna has done terrific amount of work with the college on changing the way that menus are evolving and, of course, the Healthy Kitchens, Healthy Lives series that has done great stuff, and you saw in the past that she's done a lot of things to help effect the idea of folks eating for a more healthful outlook. So we have really good stuff to discuss.

Looking at this, and I like to frame things up in a lot of tactile ways so that you can see what we're thinking, and we've created this little chart here about where we feel all the subjects kind of lie, what boxes are there.

What we want to do, of course, is cause change that will stick. In doing that, any paradigm shift needs a couple of things. One, we have to understand what the current paradigm is. Two, we have to be able to decide what our true tactile goals are and define those goals in order to cause the shift. Because, we're not just making up great ideas. We're making up great ideas, then we're designing strategies that will leave us with true implementable tactics in order to reach those great ideas.

So hopefully, this idea of the columns here that are diet-focused and kind of all the helpful things that support that perception, how do people really perceive food, salt facts, do people really understand salt? Do they understand what's going on there, and all the opportunities there are to be able to effect the use of salt and reflect back and address the perception issues that occur when you're going through that?

Later on in some of the webinars we're going to talk about actually the functionality of salt, what that means to foods.

Then of course, cooking, and cooking as an act, an entity, an art, how that really works. That's important for folks as they start to have discussions and engage food service providers. Because, one of the things that in many industries, if I as an individual involved in food service that doesn't really believe that you understand much about my world, then your ability to impact me or convince me to change gets less and less. So hopefully we'll give you insight into how that works and be able to speak to the idea of cooking and know what's important to those that do that for a living.

Part of the paradigm shift number one would be value-based deliciousness. It's really important to remember that folks serving food to other people were doing it for the reason of running a business, and therefore all the business awarenesses and acumen that are responsibly part of that are about serving people and making them happy. So we do need to think about diet focus. The idea that plants first and conversion from process to fresh are critical areas within that part of the paradigm.

Customers' perception, how they retrain their taste buds, so to speak. We can help as food service providers. We can help that to happen. We don't need to tell people about it, but we can help that.

Bold flavors. Everybody that eats enjoys bold flavors. There's a big gamut what that means, and to each person, but in general one of the things that salt has been used to do, from a cook standpoint, is to increase flavor. And from my standpoint, one of the reasons we use salt is that sometimes cooking is not as good as it could be. So when we're not a great cook and not a great technician, and not able to effect methodology in a way that delivers delicious flavors without supplements, then we're already at a deficit. We need something to make that happen, and generally the easy fallback is fat and salt. So the idea of cooking, column number three, and using seasoning and cooking well from a methodological standpoint is a critical piece of the discussion, and a critical piece of the way that we view how we can help folks to change.

The other piece of this, and in any change, is communication and marketing. This is internal and external. Perception. Again, one of the important columns here to look at. We think about product quality, and we think about retraining taste buds. We think about bold flavors, and special salts. How do we create perceptions that are worth talking about, both to our teams in the preparation world, and our customers.

From an operational standpoint, salt facts, we have to understand salt, the top 10, where do we really see people getting the most salt and what can we do within those top 10 to effect them positively from a sales and marketing standpoint, but also from a salt reduction standpoint?

The operators, the food service professionals need to read labels, they need to develop buying standards, and they need to understand menu tactics. These are going to be opportunities for us all to engage in places that can not only make their businesses stronger, but can allow them to meet our goals of reducing salt.

Then when it comes to cooking, global styles provide us a lot of great new venues for creativity, bold flavors, and developing all the things that we're talking about: Seasonings, cooking well, all support those global styles. So very important to understand when you have a great idea, hey, you should be able to do this with your pizza. How do we really talk about that? What do we say are the key elements in order to change a pizza from a salt-laden item that's delicious to something with less salt that's even more marketable and more delicious?

One of the key things we're going to focus on, I put this in the corner here as a cornerstone, by the little gold fella there on the slide, is measuring reduction. We have to be able to measure where we did this and how it worked.

So I'll turn this over to Sanna, and she's going to talk us through some really important facts, and we'll get started with more of the meat of the presentation here.

>> Sanna Delmonico: Thanks, Brad. I loved what you said about cooking being so important for sodium reduction, and when I work with culinary students I always say don't be the gratuitous salter. In movies there's gratuitous violence. Don't be the person that just throws in another car chase or a shooting. Don't be the person that piles on the sodium just because that's an easy way out. Be a more thoughtful salter.

>> Brad Barnes: Great way to say it.

>> Sanna Delmonico: Yeah. You're right, it is something that people fall back on, and so people need to learn how to be more subtle with their food.

So you may be familiar with the 2010 dietary guidelines around sodium, and of course they're to reduce sodium intake to less than 2300 milligrams a day. For about half of the population or more, further reduction of 1500 milligrams per day if you're over 51 or African-American or have a chronic disease.

There's been some controversy, especially in the media, I think, recently about what's the real number? Is it 1500? Is that too high? Is 2300 even appropriate?

I think because we have so far to go, and on the next slide it illustrates this very well, we have so far to go in terms of reaching either one of those goals that I think the exact number really may be less critical than reduction in general, and that's what we're really focused on.

So as you can see, we're not doing very well in terms of sodium intake at any age group, for any age group. We're exceeding that 1500 level across all ages and the 2300 milligram per day level across everybody except very young children are exceeding that goal. Certainly, men have higher sodium intake than women. That's partly calorie related. There's a certain amount of sodium in the food supply per calorie, then men consume more calories, therefore more sodium. That's especially critical when looking at sodium reduction.

This next slide is looking at diets in general, typical intake. Of course, we're exceeding the limits for sodium and other things like refined grains, saturated fat, calories from solid fats and added sugars. As Brad alluded to, a lot of sodium reduction will be about increasing the things we're not consuming enough of, like whole grains, vegetables, fruits, dairy, seafood, healthy fats, nutrients like fiber, potassium. When we do better towards those goals, we naturally do better towards reducing sodium. That is really important as we continue this discussion about sodium reduction.

Where is all the sodium coming from? Well, we have a top 10 list here, which includes yeast breads, chicken and chicken mixed dishes, of course, not just the chicken which has been oftentimes injected with brine, but also the salty breading added onto the chicken dish. Pizza. Pasta and pasta dishes. Cold cuts and other processed meats show up later, number 8, sausage, franks, bacon, ribs. Condiments, dressings, ketchup, other liquid and dry condiments. Tortillas, burritos and tacos. Regular cheese, not low sodium. Then grain-based desserts.

This list is a little different from the Centers for Disease Control and Prevention list, but it does a good job illustrating how these 10 foods really provide about half the sodium in US diets.

On the next slide, we get a look at those 10 foods, with yeast breads in the dark green, and all those other 10 foods making up about half of the sodium that the US population consumes. So if we could reduce sodium in these 10 items, these 10 categories, then we'd be doing a lot towards overall sodium reduction.

Part of the reason, of course, why these are such big sources of sodium in the diet is that they're just big sources of calories. We eat a lot of these foods. Grain-based desserts is the number one source of calories in the US diet, people over 2 years old. Those are high in sodium. Yeast breads, chicken and chicken mixed dishes, it's the combination of the brine and breading. Soda and energy drinks don't contribute sodium, but pizza is really -- we'll talk more about pizza. It's a build of high-sodium ingredients, one on top of the other. We're really preferring the calories from high-sodium foods.

>> Brad Barnes: I want to just drop in here, because one of the things that is interesting as you look at this, we all know that to have a better, more healthy diet, variety is key. These last few slides illustrate that's one of the things that we as a population are not very good at, is exercising variety.

One of the things that I like to speak with culinarians about is when you think about the idea of all the things out there that are so great to cook with, it's up to us to cause marketable, interesting creations from this variety and this great bounty that we all have to cook with in order to gain people's attention, draw it away from some of their normal go-tos.

>> Sanna Delmonico: Absolutely. Because, for everyone taste is what drives food selection. So this is a survey done by the International Food Information Council Foundation this year, and going back to 2006, and for every year the thing most driving food selection is taste and flavor. So we can never forget that. 90% of people in 2014 say taste is the major thing driving food selection, followed by price. It's a little encouraging that healthfulness is up to 71%, in that little green arrow, indicating a significant change from the year before, and convenience is less significant.

So whether it's the taste of the food or even the perception of the taste, that's really critical when we're talking about sodium reduction efforts to customers. We really have to think about both the taste of the food and perception of the taste.

So sometimes less is more when it comes to communication about sodium reduction efforts. Sometimes stealth health is really critical for preserving perception and flavor. The good news is that 67% of people, according to this same survey, are doing things to cut back on foods higher in sodium. 46% doing this for more than a year, and 20% began in the last year. That's encouraging. We don't know exactly what foods they're reducing, but people are aware of the need for sodium reduction, and that's really key.

Where is the sodium coming from? I think the reason that we're all here this morning is that we understand that much of it is coming from processed and prepared food. 77% of it or more, virtually all, we could say. It's not the saltshaker on the table, but it's the food being eaten, processed foods, frozen pizzas and food eaten out, food taken away from supermarkets and restaurants. That's why we've got to reduce sodium in those particular foods. So targeting that processed and prepared segment will have the most impact.

One of the reasons that we have so much sodium in the foods I mentioned before, the big 10, we love these dishes that pile on high-sodium ingredient upon high-sodium ingredient. Because yeast breads and processed meats and cheese are all very high in sodium, when we pile them together, as in a pepperoni pizza, one of the best examples, I haven't mentioned the sauce either, then we've got a real high-sodium product.

There's lots of dishes like this, including sandwiches. Here's an example of a sandwich which has quite a large roll, 3 ounces of bread, 2 ounces of ham and 2 ounces of cheese. This just piles on the sodium. I haven't added onto this mustard, which could also bump up the sodium quite a bit. When talking about those favorite foods, those classic American foods, oftentimes they're naturally sodium piled upon sodium.

Another thing that is the elephant in the room in volume food service is portion size, because nobody wants their customers to feel like they're not getting their money's worth. Nobody wants their customer not to be satisfied or not feel like they're getting a good value. But portion size is a really simple way to cut saturated fat and calories and sodium.

In this example, we've got a smaller portion of spaghetti and tomato sauce and meatballs, compared to a larger portion. Not changing the food at all reduces the sodium by more than a third. So very dramatic change. One of the things our Healthy Menus Research and Development Collaborative is working on very hard is strategic calorie design. How do we make food portions strategically lower in calories, while still having the good perception of value and satisfaction?

>> Brad Barnes: Critical, you know, the idea, and I don't want anybody to lose sight of this, this is about value perception, at the end of the day. There's a lot of ways within food to cause value perception, right? Whether it's ingredient quality or craft in preparation, or the look of the dish, the aromas and the tastes of the dish and how interestingly it's marketed. All those contribute to value perception, the least of which, truthfully, is portion size. That's growing to be less and less of a driver of value, which is good news for us, because the better we are at cooking, the more interesting we are with dishes and ingredients, the easier it is for us to move that needle.

>> Sanna Delmonico: Great point. Sometimes it's about reducing portion size overall or changing proportion. So this is an example of changing the proportions of things. On the left-hand side is that classic slice of pepperoni pizza with a large slice, with the crust, sauce, mozzarella, pepperoni. It's got 1500 milligrams of sodium.

If we think about switching it up a little, making it a thinner crust, changing up the cheese, slightly lower sodium cheese, slightly less cheese, rather than a processed meat, putting on grilled chicken and arugula, it's not a low-sodium piece of pizza, but cut the sodium by 1/3. So significant change just shaking up a traditional dish.

>> Brad Barnes: Yeah, and keep in mind too, one of the things that is really interesting about yeast breads particularly, and I see this in the field quite often, is that the process of making even the poof-and-bake items if you will, of making those correctly and allowing them to produce and get the volume that they're supposed to get from the activity of the yeast doesn't always happen.

So many times, people end up using more of an item to supplement for their lack of doing the proper preparation of an item. So interesting little things that happen that fight against us in this particular strategy.

>> Sanna Delmonico: Here's another example with a burger, that classic burger on the left-hand side with the large bun, salted meat. Of course, you got to have bacon, cheddar cheese, pickles. In the other example, on the right-hand side, we've changed it up a little bit, and spiced the meat differently, right, Brad?

>> Brad Barnes: Yes, we've used a spice rub without salt in it, but a really flavorful, interesting spice rub.

>> Sanna Delmonico: Little less cheese, little less bacon, and an interesting Greek yogurt and mustard combo for the dressing. And ice box pickle, lower in sodium than traditional pickle. Maybe the ice box pickle is the traditional pickle.

>> Brad Barnes: Right, right. That's an interesting thing as well. So many times, even for dressing an item up, the idea, the deliciousness of a pickle is not the cucumber. It is what you do with it. If you take and make your own pickling solution and drop things into them, just keep them in the ice box, there's a little process to do that, but it's very simple, and you're controlling the salt.

Things like using mustard as an ingredient with yogurt, all of a sudden dilutes the salt and the mustard. We keep that flavor. We get interesting menu copy, and we're in a whole different place

with our dish. And we're chipping away at the sodium, and we're getting a message across to the cooks that they can make delicious food without -- and still please people.

One of the things that's most important to any cook anywhere is being able to make something that people enjoy. That's why we do what we do, and they get very scared when you take away things that they believe make food taste delicious.

When we say watch out for the salt, change the way you're doing things, they're like, Oh, people won't like my food. It sounds kind of funny, but it's really a very true piece that affects the way the cook feels about this sort of message.

>> Sanna Delmonico: One thing we've also found really useful for volume food service operators is this idea about different kinds of salt providing different amounts of sodium per volume.

Regular iodized table salt has about 2300 milligrams of sodium per teaspoon. The reason it is higher, the crystal is very small, so it packs into a small space, whereas some of these other, sea salt, Morton kosher salt, coarse sea salt, which varies depending on the size of the crystal. The lowest is the diamond crystal kosher salt, which has this really different texture than table salt. It's much fluffier, are larger crystals. When you put it into a teaspoon or tablespoon, there's more air and space between the crystals, therefore less sodium per volume.

When you measure this in terms of weight, you have exactly the same amount of sodium per weight. But this is really useful if measuring with volume, because if you were to overnight change the type of salt that you are using in a food service operation to the diamond crystal kosher salt you could reduce the amount you're putting in. If you are hand seasoning, you are allowed a measure of more control. If you put in a pinch, which is the next slide, a pinch of salt, if table salt it's almost 300 milligrams of sodium in a pinch. We've done extensive research at the CIA on different size fingers and different size pinches. We've come to the conclusion that a pinch is generally about 1/8 of a teaspoon. So if it's table salt, it's 295 milligrams of sodium. If the fluffier crystals of the diamond crystal kosher salt, it is significantly less. If you're weighing, this doesn't make a difference, but allows for more control in the salting process.

>> Brad Barnes: That pushes us in the next direction for our upcoming slides. Currently, the paradigm is we as the culinary community season with salt by feel. And ultimately, we also season very early in the process. We add salt very early in the process, which helps salt to hide underneath the profiles being created in the dish.

It's also been proven through research that the later we salt, the less we use. So I was even taught very early on in my career that we salt three, four, five, six times during the preparation of an item. So that's a very classical approach for classically trained individuals. So interesting stuff.

So we promised we'd talk to you about getting a food service provider's attention, and this, of course, is one of the critical points that CDC and NNPHI asked we address. I know when I made my visit and spoke with the grantees this was a big piece, how do we connect with these folks?

Certainly, in one webinar, in a couple of slides, we're not going to be able to cure that for you, but I thought I'd give you ideas what you can think about as you look at doing this.

Now, number one is, this is a little bullet and a huge subject, you have to understand their challenges, which generally revolve around training, cost and constraints of their business. So you might say to somebody, and I just spent two years working with the Department of Defense in how do we change and move the way we feed all the branches of the military, and you can say to them, Well, shift from processed to fresh. What that means immediately, you say that to me as a chef, that means I need a bigger refrigerator, I need less of a freezer, and less dry storage.

Now, obviously, it's really cheap to operate dry storage. So I'm saying, Oh, boy. Now I got to increase utility use, refrigeration costs. These sound easy. They're huge considerations from business standpoint.

Training folks, incredibly expensive operation, to be able to change what they're doing. That piece, and it's great, and we need to do it, and that's the things we got to think about, but how do we do that and how do we make that less painful and frightening for operators? And I really do mean frightening. Cost touches everything, when we start talking about change.

Customer satisfaction, sure, I can do this. Are my customers going to hate me? Are they going to complain? What do they want? They don't want this. Stop telling me I need to do X, Y, or Z, because my customers don't want this.

Well, at the end of the day what your customers want is a great value proposition with delicious food, when they want it, where they want it, and the variety that they like. And I would never suggest that we take away. I only suggest that we add and we change the way that we're doing business so that things feel different, and that's the way we begin to move things.

So on the military bases, for example, we did not ever say we'll take away the bacon grilled cheese sandwich and the pile of fries and the hotdog. We're not going to touch it. It's there. We're going to position things against it to attract attention and attract use and enlighten people's palates. I can't tell you how many soldiers I fed things like barley salad, lentil salad, couscous and quinoa. Google CBS Sunday Morning "Feeding an Army ." It is all about what we did in that operation. Very interesting stuff. The soldiers try things, they say, Hey, that's great. Even once a week, rather than a burger or something more salted, that's an incredible movement.

I thought I'd let you in on the process to change. We say here's a great idea, I'd like to get to X. The operator says, OK, I got to figure out the goal; I have to design the tactics to help implement that, equip the facilities to support that activity; I have to document what that is going to be; I have to teach people what the documentation says; I have to make sure they do it, and they understand it; I have to buy the things that are needed to support that, so I have to go through this process of procurement, then actually implement it and market that to the end user.

That goes for any change that you make. Certainly, those things can be on very macro levels or they can get bigger and take over an entire group's activity for days and days and days, if we were to change an entire menu, per se.

So that gives you an idea what we're asking when we go to a food service provider with a fantastic idea or real goals in mind. Hopefully, it helps you think about how we can approach those people so that they don't freak out and run out the back door.

>> Sanna Delmonico: Yes, we don't want them running out the back door. Thanks, Brad. This is a slide that was made by the CIA Healthy Menus Research and Development Collaborative produce working group. It really well illustrates what Brad was talking about, which is the complexity of making change. This group was looking at increasing produce on volume food service menus and all the things that had to go into that planning: Seasonality. Am I going to get this when my menu is fixed four seasons a year? What's the distribution issues? What formats am I going to use? What's the consumer demand for this? Are people familiar with it? What are the labor and operations issues? How am I going to communicate this to customers? Should I be stealth about it? Should I be open about it?

So many, many things impacting these changes.

>> Brad Barnes: Actually, it's a great map, because it can help somebody decide if they have a change to undergo, this is really all the considerations. I love this slide, and I think it really shows, you know, you can plug and play any given idea into this.

With the idea of changing and how do we talk food service providers, we came up with a couple of ideas of what were some things we can do simply. And the next slide is going to talk about something that is going to maybe surprise you, but I can assure you that it is the industry norm.

One of the things that is our current paradigm is, like I said, we salt by feel. We don't measure. We don't measure ingredients, and most cooks and facilities are not outfitted to follow recipes. If you query the operator about this, they'll say, of course, we use recipes. Of course, we use production standards. If you really look into the operation, you will notice that they're probably not outfitted to do that in any sort of a way.

One of the things that I think we could talk about is how do we make sure that everybody that produces food in a given operation has access to a scale when they need it so that they can add the appropriate amount of salt into a particular item?

Most of the places that we use salt, so a great example is the water to boil pasta. You can leave out the salt in boiling pasta. There is no functional effect, and there is effects of taste that are so minimal that very few people could detect it. So right there is a way that we can stop adding salt.

Blanching vegetables. I was taught very early, you've got the water, you put the salt, you blanch the green beans. We don't need that salt. Totally unnecessary. It does nothing functionally. It's only there so when the veg comes out of the water it tastes good, but 99% of the time we're going to do something else to them. So that's where we want to end up seasoning, i.e., potentially salting.

So the key strategy, number one, to get people aware of measuring the salt they're using, and that way they can really, truly start to reduce it and they can reduce it in ways that we can all measure and say, Hey, we scored one there.

Key strategy number 2 is more fun than you can imagine, because most kitchens have these big spice racks, and it's very interesting, I've done this from a very pragmatic standpoint, I've taken their recipe book and I've looked at it against their spice rack, and about 70% to 80% of the spices on the rack are not in any recipes.

So one of the things that brings great flavors to food, and you saw it on the pizza, arugula is one of the tastiest things you can use. It's basically a zero when it comes to how does it affect your health, negatively or positively. It's great. It looks good, tastes good. Spices are the same way. Many of them have somewhat interesting positive effects on health, but even if they're inert and all they do is taste good they're not going to hurt you.

So key strategy number 2 is to figure out ways to impart these global flavors, these seasonings, delicious, delicious flavor enhancers into recipes so that the food tastes good before we need to put the salt. And then we measure the salt that goes in the food, and I guarantee you we could all be really proud of ourselves if we just did those two things and were successful at that.

>> Sanna Delmonico: So this is a slide that looks at our Healthy Menus Research and Development Collaborative. The CIA has a partnership on several initiatives with the Harvard School of Public Health. Several years back, we started a conference called World of Healthy Flavors, which brought together the Harvard nutrition scientists and volume food service chefs and culinary directors to look at what is the nutrition science and how could volume food service providers, in fast casual restaurants, in fast food and campus diners, how can we improve menus.

Out of that conference came this desire by many of the chefs to say, well, this is great information, but how do I do it? How do I make this operational in my situation?

This is what developed into the Healthy Menus Research and Development Collaborative, which involves all of these companies and organizations, which collectively feed over 100 million Americans every day. They're working on issues including sodium reduction. The idea is it is a place to come and share nonproprietary, very practical information.

The next slide is all the priority areas. They started with sodium reduction. That was one of the first issues, because knowing that there were the new guidelines and increasing produce is another priority area. Recently, we added improvement in carbohydrate quality and strategic calorie design is the newest area.

So there are a lot of chefs in volume food service working on these issues. A lot of times they're doing it stealth, behind the scenes. You may not be hearing about them, but know that you are not alone in this work, that there's a lot of work going on here, and there's been a lot of success as well.

Within the Healthy Menus R & D Collaborative, 77% of the member companies are actively working to reduce sodium, compared to 45% of the industry overall. So we do surveys every year with our members, and then survey the industry overall as well to compare, see how we're doing.

A lot of different ways this is happening. Culinary techniques, working with manufacturers to reduce sodium in products. And this is great quote from one of our HMC members: "It's a dance. With one step, you're catering to consumers' old habits and menu preferences. And with the next, you are trying to lead them to a healthier place."

I'm sure many of you feel like that, that it's a struggle and back and forth.

>> Brad Barnes: That was good fun. We hope we gave you some info. I believe now we may have a couple of questions that we want to address.

>> Christopher Kinabrew: Thank you, Brad and Sanna. This is Christopher Kinabrew. We have several questions from the audience. I will go ahead and start asking those so you can respond, so everyone can hear the answers. I did want to remind folks who may have noted a question but not submitted it, we would encourage you to go ahead and put it in the Q&A feature. The slide is up how to do that. We'll do our best in the remaining 10 minutes or so to answer your questions.

We have several clarification questions, and I think this first one may have been clarified. I wanted to make sure we got it out there. What is an ice box pickle? I think you all described that a little bit. I wanted to ask if you could maybe summarize again what that is.

>> Brad Barnes: That's a great question, because the whole point of bringing that up is a traditional pickle is jarred or canned. When we jar or can, we do need a level of salt to protect that item from becoming tainted. So if we make pickles and keep them refrigerated, we can absolutely leave out the salt. It's not a functional ingredient anymore, it's a flavor causer.

If I take and make a delicious vinegar-based sort of liquid, and want to pour that very hot over cauliflower or anything and put it in the refrigerator, then I have, from a flavor standpoint, made pickles. However, I have not canned them. So the sodium is not a functional necessity anymore.

>> Sanna Delmonico: The texture is really something that is much more crunchy, much more intense, then the acidity of the vinegar as well. It adds texture and flavor.

>> Brad Barnes: Yeah

>> Christopher Kinabrew: Thank you so much. Does the diamond crystal kosher salt that you all mentioned taste different than traditional salt? Is there a texture, notable texture difference?

>> Brad Barnes: From my standpoint, and Sanna mentioned quite a few salts, salts in general from type to type do taste different. Immediately, I can tell you the difference, certainly from a regular table salt to most of the kosher salts, then if you go into sea salts or more mineral-based salts there's a plethora of different flavor profiles that are caused by those minerality, and of course the way the sodium actually feels, as far as on the palate and how it affects you. There are also pH differences in those. As we'll talk in further webinars, things like pH really come into play when we talk about the functional effect of salt on your palate.

>> Christopher Kinabrew: Thank you. Several other questions streaming in, so that is great. There's a very, what I would say probably more challenging question about how does the cost of ingredients change when making the suggested menu changes, assuming the portion size stays the same? Do you have any knowledge how this maybe has affected profit? I can repeat that if that's helpful --

>> Brad Barnes: I think I get it. So operationally, to kind of get everybody's head framed up, one of the things that I've done for many, many years is make these changes, and many of these changes are directed towards how do we more systematically profitize our business. These have been very complicated settings.

I can assure everybody that, done in the right way, cost is much less of an issue, because as you look at all the cost areas that come into support a given operation, there are all these trade-offs, back and forth. Now, not to say there are not going to be costs associated with making change, because there always will be. However, ultimately, in the business and in the sustainability of that business, cost weighs very lightly against increasing top-line revenue.

So what we would be after is causing change that increases customer satisfaction and increases business, and ultimately increasing top-line revenue, so if our percentages on cost are a little high, it's OK. We've driven revenue and put dollars in the bank. We're not worried about percentages. That's a great question. It gets extremely complicated to manage; however, it is something that particularly I and CIA consulting specialize in doing.

>> Christopher Kinabrew: Great. A related question: Is there anything you recommend, Brad, Sanna, for the folks on the line working with limited budgets and may not have access to a lot of herbs and spices?

>> Brad Barnes: Every operation is different, and typically -- I don't want to say this wrong, but typically the idea that people don't have access to means they don't have systemization in order to procure it, and they don't have support to make change. There is very few times in my life when I have heard that, that it actually means the sentence that came out of their mouth.

So everybody has access to it. Being facilitated to take advantage of the access is usually a different story, and that's where it gets a little cumbersome to try to work through that, and it does take a particular specialist with the right knowledge to be able to say this is how you can access that.

So that's not an easy question. I don't take that for granted at all. It's tricky.

>> Sanna Delmonico: Based on our work with food school service chefs and directors, one of the things we hear repeatedly is the most cost effective for them is to use USDA foods and use products they can acquire inexpensively, then change up the flavor profiles with herbs and spices, so that they're using few ingredients but actually getting the maximum flavor. They've found that oftentimes is a very cost effective way to use herbs and spices as sort of an adjunct.

>> Christopher Kinabrew: We have a follow-up related question: What if most of the foods at a particular food service location they're providing are primarily processed foods? Are there any tips you would suggest in that scenario?

>> Brad Barnes: Yeah. There's strategies for all of that. Number one, you'll find even in an operation that is simply open it and get it hot, the changes are more difficult, but in many operations, even the idea of how do you use the prepared products to support where you want to get to, and we would not be by any means saying that we think that it's a good idea to start suggesting people make any volumistic conversions from process to fresh. That brings on too many operational issues. It has to happen over time. You have to know the operations and take a look at how the operations function in order to suggest ways that they change. But the idea of the pizza that we showed you, the slides, or the burger, can be a good way to kind of start that. We certainly stuck with the categories of products, but we kind of used them a little differently.

>> Christopher Kinabrew: Thanks. I think time for a couple more questions. One of the hopefully easy clarification questions, there was someone who asked could global profile be defined, because it was mentioned several times in the slides. I'm not sure if there's an exact definition for it. Do you all have any response to that question?

>> Brad Barnes: Global profiles means picking any given ethnicity, culture or global style and bringing that in as a flavor profile. An easy translation might be what's an Italian profile? Garlic, basil, tomato. Or you can certainly go any number of place was that. Ginger, garlic, scallion and soy would be related to Chinese. So those kind of things is exactly what that means.

>> Sanna Delmonico: A lot of times the inspiration from those flavor profiles lead to healthier menu items too.

>> Brad Barnes: Totally.

>> Christopher Kinabrew: Time for one more question. Thanks to everyone in the audience submitting these. Some smaller operators may have trouble finding lower sodium products or they're only available in smaller cans which might cost a bit more. If they don't have big enough orders to go to major suppliers, do you have any ideas for how to find a workable solution there?

>> Brad Barnes: You know, procurement certainly brings up challenges; however, I would go back to what we said before. It's very unusual that people don't have reasonable access to what they need to buy, but it may not be properly facilitated, or many times they may not have time to do the research to figure out how to do it. Certainly understandable.

I don't have a pat answer for that. Those situations are where it's really helpful to know what's going on, what's the operation, what is it they need, then generally there's a pretty simplistic, straightforward answer.

>> Christopher Kinabrew: Great. Well, thanks very much. We're at time. I want to thank Brad, Sanna, as well as Kristy for the webinar today. This is Chris Kinabrew. We will stay in touch about future webinars in the series. Also wanted to thank Star Tiffany and Joanna Hathaway at the Dialogue4Health platform for all the background work.

Thanks so much for joining us. We appreciate your time and your questions. And we'll invite you to the rest of the series. Thanks, everyone.

>> Brad Barnes: Thanks, all.

>> Sanna Delmonico: Thank you.

[Webinar concluded at 11: 33 a.m. PT, 2:33 p.m. ET]