Connecting Public Health and Food Sector Collaborators: Reducing Sodium in Food Service Settings

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>> DAVE CLARK: Greetings! And welcome to today's Dialogue4Health web forum on Connecting Public Health and Food Sector Collaborators brought to you by the National Network of Public Health Institutes.
My name is Dave Clark. I will be your host. Before we get started there are a couple of important things that I would like you to know about. First of all, realtime captioning is available for today's web forum provided by Home Team Captions. The captioning panel is located on the right side of your screen. It can be toggled on and off by clicking the Media Viewer icon at the top right of your screen. On the Mac it will be on the bottom right of your screen. If you would like to use captioning you will see a link that says show/hide header. If you click that link you will be able to see the captioning more easily. If that window disappears during the web forum today click the Media Viewer icon I mentioned to bring it back again.
Concerning today's audio, today's web forum is listen only. That means that you can hear us, about you we can't hear you. But that doesn't mean that today's event won't be interactive. We will be taking your questions during the web forum and you can type those questions at any time into the Q&A panel. The Q&A panel is also located on the right side of your screen and it can be toggled on and off by clicking, you guessed it, the Q&A icon that you'll see on the top right of your screen. Again on a Mac you'll see the icons and all of the icons on the bottom right of your screen.
This is important, in the Q&A panel make sure it says all panelist insurance the dropdown menu. If it doesn't, make sure to choose that option. That will ensure that your question gets sent to the right place and we will be able to answer it. By the way you can use the Q&A panel to communicate with me and my colleague, Laura Burr. We will be behind the scenes in case you have technical problems like audio issues. Type your problem into the Q&A panel and we will help you out.
We are interested today in your thoughts, comments, questions. Be sure to get all of that into the Q&A panel as I mentioned and we'll answer as many as we can. In fact we thought we would bring your voice into the conversation right off the bat here. Let's get interactive. You might be interested in seeing who you are attending today with. Here is the poll. Some of you are already participating. Tell us whether you are attending today alone or whether you are in a group. So on the right side of your screen just make your selection and then don't forget to click the submit button. You'll see it on the bottom right of the screen. Make the choice to click the button to submit the answer. Are you attending individually by yourself? Are you in a small group of two to five people? Maybe you're in a larger group of let's say six to ten people? Or

maybe you're in a larger group of more than ten people. Let us know. Who are you attending today's event with? All by yourself or in a group?
All right. Let's take a look at the results, get the results up on the screen right now. If you are not seeing the results right away, give them a few moments to tabulate. They will appear. Again if you made a choice and didn't click the submit button you see an option right about now to do that. Click the submit button. We will have more polls later in the web forum. This is good practice to get you ready to participate in the polls we will want you to participate in later on.
A good high percentage of you are attending alone, 94 percent; that's typical. And about 5 percent of you are attending in a group of two to five people.
If you are in a group today, you may want to assign a single person in your group the responsibility of submitting questions on behalf of either the entire group or individual group members. That might make things go easier for you. On the other hand if you are attending alone we don't want you to feel like you are there all by yourself. We want this to be an interactive group event today. Make sure to get your questions in the Q&A panel and join in on the conversation.
All right. Let's get started with today's presentation on Connecting Public Health and Food Sector Collaborators. Our moderator is Kelly Hughes Associate Director of Program Strategy at the National Network of Public Health Institutes. Kelly serves as liaison to the CDC, providing project and relational support for CDC- funded initiatives. For the last several years she managed sodium reduction initiatives at PHI in collaboration the CDC and other partners. Prior to joining National Network of Public Health Institutes she worked as Public Health Analyst in the Division of Community Health; and she is a graduate of the CDC's Public Health Prevention Fellowship. She's a registered dietician and certified health education specialist. As moderator Kelly will be leading us through the rest of today's event. Kelly, over to you.
>> KELLY HUGHES: Great. Thank you, Dave. Thank you all for joining us today. Today's web forum is exciting. We have a great line-up. It does wrap up the series connecting food health and collaborators, supported by National Network of Public Health Institutes and CDC. It shares perspectives and perspectives of food sector collaborators around various topics related to sodium reduction. This is a continuation of two web forum series also related to sodium reduction. You can access the archive of web forums to date as well as other sodium-related tools and resources on National Network of Public Health Institutes' website at www.NNPHI.org/sodium.
Switch gears to today's program. This web forum focuses generally on tools, strategies and promising practices to reduce sodium in food service settings. We have impressive speakers lined up ready to share their perspectives. John Graham from the North Carolina Institute for Public Health. He will be sharing results on strategies and practices for implementing healthy food guidelines in cafeterias and followed by Johns Hopkins Health Systems, who will share his perspective from the Food Service Director point of view. He served as Food Service Director in a number of institutions.
And that will be followed by CDC's John Whitehill, Jr. who will share a resource, sodium reduction healthcare toolkit. It's helpful for plan evaluators who are looking at outcome-focused evaluations. Bringing us home, Erika Pijai from USDA's Food Nutrition Service will talk about the What's Shaking initiative, with a focus on technical resources initiatives and share real strategies that schools can use to boost the flavor of meals with less sodium in a way that students can enjoy.
I encourage you all to submit questions throughout the entire web forum. We are going to do a brief Q&A session after John and Angela present. Then they will have to hop off the line. Then we will have another more formal Q&A at the end of the web forum.
We will do our best to address all questions that come through. But if we don't get to any we will do our best to follow up via email.

Let's learn a little bit about you all. So here is where you all are located. Based on the latest registration data our audience represents 47 states including our in addition to Washington, D.C. Puerto Rico, Canada, Senegal republic, Indonesia and the U.K. Great to have so many joining from around the glowed globe. I would like to personally welcome everybody.
Work sectors, a quarter of the audience represents health departments followed by non-governmental organizations, state government, other local government and federal agencies.
All right. So now I'm pleased to introduce to you our first presenters, Dr. John Graham is a Senior Investigator at the UNC-Chapel Hill, Gillings School of Public Health. Dr. Graham has overseen a number of the institute's consulting activities and research projects with a particular focus on the translation of scholarship to practice.
Among these projects have been the oversight of community health assessment, design and development of extensive health assessment data warehouse, various regional public health institutions and a number of information technology solutions.
And Dr. Graham is also joined by Dr. Angelo Mojica from Johnson Hopkins Health Systems. He earned his Bachelor degree in dietetics, Masters degree in public health, culinary arts -- thank you for advancing that. Culinary arts degree, and recently completed a Doctor of Public Health degree in health leadership. And he holds the distinction of being the only Certified Executive Chef and Registered Dietician to practice at the doctoral level. He worked for nearly 27 years in food service management in acute and long-term care settings and fortunate to have worked at prestigious institutions such as UNC Healthcare, Cleveland Clinic and Johns Hopkins Medicine. I'll turn it over to Dr. Graham and Dr. Mojica.
>> JOHN GRAHAM: Thank you very much for the opportunity to talk with you all today. We will be talking about a couple of projects that we have been working on. Again I'll have some comments, and Angelo will follow up and we'll have a Q&A session for everyone.
This is what we are going to be looking at in particular, is sort of taking a practical look at the implementation of healthy food service guidelines. The focus will not be specifically on sodium reduction but more broadly at the larger set of guidelines.
As a brief overview we'll talk a little bit about how we came to work on this project an what our focus is. We will provide you oversight into the objectives, our methods. What we found out, including successes and lessons learned and I'll difference you a brief update on a project we haven't finished but are currently working on right now.
As you know, obesity is a major problem in the United States. It is a problem everywhere including work sites. We are particularly interested in hospitals and federal agency work sites. The cafeteria operations and adoption of healthy food guidelines in those work sites and their cafeterias.
In particular, with regard to hospitals, we have been working with the Partnership for Healthy America, Healthier America. They are a nonprofit that focuses on childhood obesity and they have a lot of advocacy initiatives. They've adopted what they call the hospital healthier food initiatives. We are working with hospitals that adopted that initiative as well.
As far as the federal agencies are concerned we are working with agencies that adopted the health and sustainability guidelines put together by a team of representatives from Health and Human Services and GSA.
So the first project is one we called Improving Healthy Food Sales in Institutional Settings. We are analyzing the food service operators. This is a practical look at the things that they are concerned about overall. The second project in progress, we don't have the findings in yet. We are looking at the policies and practices that food service operators either adopt or would recommend that relate to maintaining the stability from a financial point of view. As you'll see from the findings, profitability is a major concern for operators. The objectives of the projects were to look at barriers and facilitators of the implementations, look at the behavioral health strategies, which were harder or less likely to be implemented and why. So the challenges that

food services operators face. Some profit implications of the implementation and then look at some keys for success. Finally I'll talk briefly about the project status for the second project.
We used a mixed method approach to data collection analysis with a quantitative survey in one, five from hospitals and four from work sites. Project two, eight respondents, seven from hospitals and one from a federal work site.
We developed a standard set of questions an asked these questions to profile our respondents to help us with the analysis of the qualitative data principally. With the qualitative interviews we followed up with the surveys using an interview guide that we developed based on lit reviews understand also on the quantitative survey results. We transcribed, recorded and transcribed them and went through and did content analysis using different analytical tools. I'll talk more about the status of the second project at the end of this presentation. What we found was that this were 14 changes made by all federal work sites. There were 12 made by hospitals. I have a listing, given the time I won't go through them individually but will say as you expect they overlap. There is a degree of independence since both sets of guidelines were developed independently and for this group something to notice is that purchase more lower sodium products was included with both groups of sites.
With regard to those changes that were made least frequently, if you look at the federal work sites and the hospitals, what you find is that in common you have resistance to removing salt from cooking water which I'm sure is of particular interest to this group; then the reduction of fried foods. What we found was that the food service operators were particularly concerned about making sure they continued to have tasty offerings that people would enjoy and they were concerned that a lot of the customers really had an attachment to traditional food offerings like fried chicken. In some in fact considered these to be comfort foods. They were resistant to trading off to healthier foods and food service operators had an eye to keep sales up and profitability up. We'll talk about that.
How easy or hard are each of the guidelines to implement. In this graph we have a listing of the various guidelines and then we have a second set of guidelines on the following graph. I'm not going to go over those in detail. Again the guidelines are down the left-hand side. The number of respondents are across the bottom on the axis. The color of the bars gives you a sense of how hard or easy the guidelines were.
And what I want to point to in particular are the most difficult guidelines were having at least 50 percent of the breakfast cereals with 3 grams of fiber and relatively low amounts of sugar, making sure that all the foods meet low sodium requirements, that all the items listed had calories listed and that they had 100 percent juice with no sweeteners.
In this case what we found is that the cafeteria operators found these were particularly difficult guidelines to implement because they were unable to really find affordable options. This is true of the food service operators and the organization, the vendors that were supporting those operators. Here are quotes. I won't go through them in detail but they highlight the points I made earlier.
So let's look a little bit at the experience of the hospitals. What we looked at a moment ago were the work sites, the federal work sites for the hospitals. What we find is that there are a number of items that are also challenging, that overlap, like with the fried food products and then labeling of all calories per serving, et cetera.
And here are some quotes that we see here that reflect some of these guidelines. These are the barriers that we've observed. The time and resources need for product development. This is a key theme we saw throughout our interviews. The need for new equipment. Of course, there's always the expense associated with that, getting the support you need to purchase this equipment.
A couple of things that were interesting in particular, the need to think entirely about how food, how the cafeteria operates and food is prepared and presented.

We are going to move over to the basic design strategy comments. Here we are with the strategy comment for the federal work sites. There are a number of things that they point to. Need for nutritional information, the need for fliers and other media to promote the healthy food items and there are specific strategies like the sampling of healthy foods.
Here we have some of the least likely initiatives. Things to keep in mind here is the pricing. There was a concern about pricing initiatives and the problems with profitability.
Hospitals, we see many of the same things in terms of the particular ability to design strategies. Here are the least likely strategies to be implemented. Again you'll see pricing is a particular concern around issues of profitability. What challenges do the agencies face? These are the work site agencies. Concerns about costs and customer dissatisfaction which are consistent with some of the comments I made earlier about some of the interventions or guidelines.
Here are some comments. We have comments about foods that people are accustomed to, the comfort foods and unwillingness to move away from those. Costs go back to the question of profitability.
We look at the challenges that hospitals face. They also face cost concerns and concerns about customer dissatisfaction. Related to this is the concern that people would move from the hospital cafeterias and the federal work sites to other providers, restaurants and other places near by where they can still access the more tasty but less healthy foods.
Again here are some challenges. Customer dissatisfaction. Here are some comments. Key point here is that a lot of time is spent explaining the implementation of healthy foods guidelines to customers. And then there's a general, pretty widespread that there were problems with having the right staff with the right skill sets to bring on these new products.
In terms of profit implications, going back to what we talked about, in some cases they actually found that the healthy foods were in demand and that they actually saw profits go up. You can see that in the first quote. If you look at the bottom quote here, we actually increase sales in our companies as a result of introducing better tasting healthier foods. It is possible that profits go up even though costs go up as well through sustained sales. Last quote here, other responders didn't have issues of profitability because they were subsidized and willing to subsidize the healthy food programs in an increased way. Then the other was that in some cases they actually just increased prices to cover the costs of the healthy foods. Typically what they did is increased prices across the board for the entire menu.
Keys to success and lessons learned, couples of course with staff and customers, letting them know well ahead of time and with thorough communication strategy that the healthy foods program is coming along. Of course you all would anticipate leadership support was critical. The quote I think that is entertaining, make sure everybody knows that this is the organization and they are not just blaming it on food service. They are looking for that kind of coverage as well.
Then the last things that we've learned about keys to success are vendor cooperation. We see that more foods are becoming available and the food service vendors are really in this with the food service operators as well.
Most importantly it is important that the healthy food guidelines is part of a larger program that looks at healthy lifestyle choices for the overall organization, the overall organization.
Real briefly we did a lit review. We finished our quantitative and qualitative surveys with respect to the sustainability project. We hope to disseminate this information in some academic articles, some trade journals and we have to do some presentations and web publishing.
Thank you very much. I'll turn it over to Angelo.
>> ANGELO MOJICA: Hello, everybody. I hope you all had lunch. I'm going to get you hungry. I'll probably get you hungry even if you have. I will spend time talking about producing quality foods in a healthcare setting in both retail and patient settings, and really most of my time is going to be spent talking about how do we produce these foods and not just buy foods and make things from scratch?

Everything I show you, I have 15 slides, all pictures of foods served at the hospital in either the patient, the retail areas or both. The first slide is from a culinary competition, actually. Fennel-dusted shrimp, quinoa, nice succotash. These are two retail concepts in hospitals I worked at, Asian and Latin that we mashed together into a nice spring roll and then a play on cookies and milk. And I'll get to why I am doing this in a second, but this was really interesting for us. This is a mousse that took about 15 steps to make, whipped ricotta, a meringue, has strawberries, of course and we are trying to punch the protein. Very low fat. And have a really wonderful texture as you would in a mousse. What I'm going to focused on and what I focused on for the last 15 or 20 years is producing foods authentically. Really going to what is the quality of the product and what should it be? Because for years in healthcare, as in schools and some other areas, in some of the B & I accountings we have seen, we take the easy way out and we do things like our Chinese food is white rice with soy sauce and we buy a fried food item and reheat it. You can tell. When you go to a good restaurant, you know it's good. When you go to a bad restaurant, you know it's bad and you don't come back. We have captive audiences in our places but that doesn't mean we shouldn't be producing great quality food.

So going to my next slide. This is interesting. This was a low fat cookie. These are really good looking cookies. The one in the back is a snicker doodle. The one in the front is a chocolate chip. We spent three years on this product, tasting it, revamping it. Low fat cream cheese, whole wheat flour. Stick di dough, hard to make. Getting the team to agree on making the best quality product. How do you do that? Go to the lab and make the food until it's right. You know it's right because it's good. You and your team should be able to produce foods that are the best quality. And once you get there, you kind of know when you're there and launch that to your patients and to your guests.

We on Wednesdays at one of the hospitals I worked at we sold, I think we made a thousand cookies on Wednesdays because they were so popular. In fact in the retail settings it was interesting when we launched them, they sold out so quickly you had to kind of know where to go and where to find them because people wanted them so much. We had to learn to make more and more because they were a good quality product.

Next, highlighting some of our items. Roasted red pepper soup, portobello sandwich. Again speaking to quality and authenticity. The next slide is interesting. On the left is a concept from a hospital that I worked at, Chipotle, brown rice to start, beef schwarma or chicken or hummus. You see these vegetables salads, nuts, tzatziki and other sauces, the ability to customize, so if you didn't want the hummus, higher in fat, you can take it, or some of the saltier items; you can select others.

A rotisserie plan that we ran in one of the hospitals, to produce the product the best you can. The right rub, the right time in the oven and it was so wildly popular we struggled with making enough. We had a cafeteria with six or eight other concepts, but we concentrated on this because it was really good. Good food sells. It's weird but if it's really good, people know. If it's healthy, low in sodium and in this case lower in fat, then it is also going to hit those other needs. Let's see, what other pictures I have here.

So this is a good example of being able to -- that was one of the questions I looked at, examples of items that we changed. This is a grilled chicken breast. We marinate the chicken, make a melon-pineapple salsa and lay it on top and let the food speak for itself instead of always pouring a sauce over something or try to make something that it isn't. That's important for us is to really take the items down and produce them from scratch. The more we make it, the more we can control it.

So often we think we don't have enough labor. We can't do this. I don't agree with that. I feel like if you have a place that has a retail venue you'll make enough money in the retail venues by increasing the sales to then increase your labor to support this additional effort to make the food better.

The next slide I have is good old -- oh, actually it's the one after that. This is just a chicken marsala in our patient menu and in the retail areas, but chicken noodle soup. We spent, I want to say a month. I had a high caliber chef who worked in New York, D.C., Philadelphia, one of the top chefs in the area, a really strong culinarian. I asked him one day about the chicken noodle soup. It's a scratch made soup. What do you think of it? He said it was okay. I challenged him. Why isn't it the best? Why isn't it the best chicken noodle soup you ever had in your life? I sent him back to the kitchen and said make it that. Spend the time to make this taste the way it's supposed to taste and not just buy a soup but produce it. We spent a month on it and said that's it. It sells a lot more and makes our patients more satisfied. That's important.

Next slide, kind of pushing yourself a little bit. Nice mashed sweet potatoes and pork tenderloin. People shy away from pork. People don't want pork, but we sold a lot of pork tenderloin to the patients because it was different. Putting a nice apricot glaze on it instead of something like a barbecue sauce that can be a high fat item.

I think showing a salad, not just ice berg lettuce, but think about the lettuce that you're putting on, the dressings you make, and how many from scratch instead of buying jars of dressing which are high in fat and sodium. The butter milk ranch was fabulous because we made it from scratch, not thick and gloopy like you see. We had a flank steak on the menu and it was a lean cut that we marinated that we put on a flat top, put nice vegetables and simple mashed potatoes. It's a great dish. The last slide and I'll talk about more details. These milk shake and smoothies that we had that we served to the patients. We created our own recipes. We didn't buy a mix. That was important to us.

How do you do all this? You go to the lab, like I said. You get into the kitchen and produce the food. You don't rely on just buying some. If you have to buy something, you need to push your vendors for the quality of the product that you want, where when you can take it to the kitchen, you can manipulate it in the way that you want. You also have to get in touch with your team and explain what you are looking to do. You have to have a culinary training program in place. We developed one at a couple of our hospitals where we needed to teach our folks how to cook because they didn't know. They had bad habits from places they worked and they didn't know how to do the things that we needed them to do. So we just decided to develop our own culinary training program. As a result, our sales went up. Our satisfaction went up. At one facility we went from the 11th percentile and we went to the 99th percentile in satisfaction by making better food. It was cleaner labeled, it was everything that you wanted it to be.

So my experience has always been if you can make the food as it should be, you don't have to worry so much about the nutritional content because you're in control. So people are looking for that. We are experimenting with a pizza now where we are going to make our own dough so we know everything that is in it. We can make whole wheat dough and put fresh tomatoes and fresh mozzarella and it was ridiculously good. Low in fat and low in calories. It is that kind of example of putting your hand on it. That's so important for us.

There was a question about a management company. I think it's a little more difficult because they are more focused on making profits than on your bottom line being satisfaction and healthy foods. So I think that's a little bit of a challenge. I recommend against it, if it's something you are trying to decide on.

But that has been my experience.

I tend to push for subsidies of healthy food items because we need to get people there if they are not there yet. If you can make a chicken sandwich be less expensive than a burger, you are going to sell more chicken sandwiches, but it has to be good. If you make it where you're marinating it and cooking it to order. Now it's good and it's less expensive and then people tend to purchase it.

All right. I think I got the notice that it's time for me to turn this over for questions. So let's go ahead.

>> KELLY HUGHES: Thank you, Angelo. Thank you, John, for your presentations. We have received a few questions through the Q&A feature that I'm pulling up now. In the meantime I wanted to see if you could comment, Angelo, as you are making changes to some of these items that you are serving, how do you approach marketing of these items? Like if you are creating a lower fat or lower sodium version of, and making, revamping a recipe to make it will healthier, how do you pro motel that? And/or do you?
>> ANGELO MOJICA: In our case we've experimented with showing it as healthy and showing it as just good. My experience is just showing it as good works better because the healthy kiss of death in saying this is a healthy item as opposed to boy, that salmon is good. If it's subsidized it's even better for people because they see the value in it. If I charge five.99 for salmon, people know that salmon is expensive. Now I have them eating salmon with farro and grilled vegetables. It is not look at the healthy salmon, it's look at the good tasting.
>> KELLY HUGHES: What about hospitals and workplaces that don't have the infrastructure and lack the money to do a re-haul of their culinary program? What do you recommend for a small rural hospital that may only have one cook?
>> ANGELO MOJICA: I still think you have to start with something. You have to pick that thing. What is the nucleus that you do really well? We launched our program at a 25 bed critical access hospital. I think we put 28 entrees on the menu for the patients. We pushed them a little bit and said yeah, we have folks in the kitchen who didn't know what Cilantro was. We educated they will and brought them through the experiences with food so that they understood what we were looking for.
I think you just have to pick something and say we are going to make really good grilled chicken. Then you can resonate out from there. But overhauling, it's difficult especially with a small staff. The future is going to show products that will be available to smaller hospitals because there are a lot more smaller hospitals out there these days.
>> KELLY HUGHES: Okay, great. And can you share what ingredients made the chicken soup better?
(Chuckles.)
>> ANGELO MOJICA: Basic ingredients?
>> KELLY HUGHES: Or is it proprietary?
>> ANGELO MOJICA: No, quantities, cooking chicken instead of buying frozen already diced chicken in some cases. Using good quality stock. It's great if we can make stock from scratch but we are not quite there yet. It is really quantities. It comes to holding people accountable to your standards.
We launched a Burr REIT toe concept that was like chipotle. Every day for probably five years I went and tasted the product myself. I sent it back if it wasn't right (correction Burrito.) so making the chicken noodle soup once is easy. Reproducing it every day is the hard part. Getting it to: This is great. It has the right amount of sodium, the right amount of flavor, the right number of vegetables. How do we reproduce this? That's the whole inspect what you expect piece.
>> KELLY HUGHES: Great, thank you so much. We will wrap up so we can transition to the next presentation. I want to thank John and Angelo for their presentations. There are a couple questions we received, Angelo, so I'll follow up with you to see if we can get to those offline. Now I'm thrilled to introduce the next presenter, John Whitehill, Jr., within CDC's Division for Heart Disease and Stroke Prevention, where he worked for three and a half years. He is the lead investigator for the Sodium Reduction in Communities Program. He also contributes on things like the national evaluation of the WiseWoman Program, enhanced evaluability assessments and the qualitative component of the Shandong-Minister of Health Action on Salt and Hypertension Program in China. In his spare time he trail runs with his dog Smoky. Now I'll turn it over to John.
>> JOHN WHITEHILL: Thank you, Kelly. I apologize if you hear my dog Smoky since we have thunder in the Atlanta area.

Hello, everybody, I'll be sharing with you the fresh off the presses toolkit around sodium reduction. Quick history and purpose of the toolkit. I will give a quick overview on the content and a little bit of the justification for the importance of evaluation. And then I will kind of go into just a one quick little component on actually how to use the toolkit and we will be doing questions later on. Keep your questions and we'll have the Q&A session later on in the forum.
So the purpose of the toolkit. Well, it was to provide a step-by-step guide for program staff and evaluators who are planning and or implementing any kind of sodium reduction outcome focused evaluations. Unlike other CDC programs, the Sodium Reduction in Communities Program did not have an evaluation toolkit developed already. This was primarily because in the start of SRCP it was more of an exploratory grant. We are trying to understand the effectiveness of working in different settings, venues and in a variety of strategies.
Now SRCP is moving out of its second round and we are in the third round of the grant. We need a guide that would help the grantees and partners who are or are thinking about implementing sodium reduction strategies like how to properly evaluate that.
The toolkit was written for the programs currently funded in SRCP, but the information actually provided in the toolkit could be applied more broadly to any kind of sodium reduction evaluation.
There are exercises and PDF, worksheets in the appendices of the toolkit. Those are to be used by the users. As you fill out these worksheets, actually the evaluation will be developed.
I'll get into this a little bit more in the presentation.
So for the history, I know many of you might know this, dietary sodium reduction has and actually is a public health priority. Excess sodium intake is associated with increased blood pressure and risk of heart disease and stroke. The SRCP program is aimed to community support for sodium reduction and build practice-based evidence around effective population based strategies to reduce sodium consumption. Some of you may not know, what is practice-based evidence? The simplest way to put this, it is learning from real world practice and or experience. And so if this happens through or when this happens through complete and accurate execution of an evaluation of the strategies, we learn and develop practice-based evidence.
Many of you might be thinking gosh, is the evaluation that critical? Yes, it actually is to building this practice based evidence. This is why the toolkit is here to help provide steps on how to build a stronger evaluation plan. Many of might have seen this before. This is the CDC framework for evaluation. The actual toolkit breaks this down step-by-step with corresponding worksheets for the user to use to build their evaluation plan. Effective program evaluation is a very systemic way to improve an account for public actions, by involving procedures that are actually useful, feasible, ethical an accurate. That's really important. The framework guides public health professionals or users in their use of program evaluation. It is hoped to be practical, a nonprescriptive tool and designed to help summarize an organize the essential components or information in program evaluation.
By adhering to the steps and the standards of this framework you actually have a better understanding of the program that you are evaluates. So any of the work you are doing in sodium reduction. You will use that information to improve how the program workings or actually conducts.
The framework encourages an approach to evaluation that is integrated with routine program operations. It is the hope of this to be practical. Evaluation strategies should be ongoing. It should involve all programs stakeholders and not just evaluation experts. All that information is actually in there.
This toolkit uses this framework to implement sodium reduction outcomes.
Where do I start? If this really is a toolkit that might be the biggest question. I used this leg owe building instruction photo because this is how the toolkit was developed. It is a step-by-step process. As you work through each the CDC framework steps slowly you are building on the previous steps and by the end you will have not a leg O model but you will have your evaluation.

So for the purpose of this forum I will kind of go through one aspect or one step of the toolkit. That is to engage stakeholders. That is the first big step when it comes to the CDC framework. Stakeholders could be any entity or individual who has an interest in any sodium reduction activities. In my work, a lot of common stakeholders can be venue or entity partners. It can be the grantees part of our program. They can be programs engaged in any kind of sodium reduction activities or program partners. Some other grantee stakeholders could be consumers. Could be other evaluators. It could be other organizations working on sodium reduction. And of course, the leadership here at CDC is also a stakeholder.
So stakeholders can play a critical role in helping you collect your data, sustaining the program beyond its funding period. In some cases obtaining additional funding for future sodium reduction. What this slide kind of shows here, it actually provides questions about who are your stakeholders. That might be a question that in your work you might not think about who are all the people that could be associated or labeled as stakeholders in your work. So a couple that kind of stick out here. Like motivation, it. What motivated you to participate? Who are key staff members?
I like the dissemination one, the second one. What information is most useful to you in engaging the sodium reduction? And this is important because a lot of times when you finish an evaluation you get the big report. That might not be what every stakeholder wants to learn or read about in terms of getting their results. They might want something more tailored. When it's more tailored, maybe Pauler, a two-pager and tailored to the information that is important to them and it increases the utility of them using the results to improve their overall program and that goes back to the CDC framework that this toolkit is based off of.
This provides filled in tables but also fillable PDF versions of the table in the appendixes. What we recommend is that you go through these and as you fill these in and piece these together you slowly build to -- move to building your evaluation. This is an example from engaging stakeholders, where you record the information from your stakeholders. It is important to revisit this throughout the entire process to make sure you are utilizing your stakeholders to the best of your and their ability and you keep them engaged throughout the entire evaluation process. I brought up dissemination in the last slide. You can see here in the notes that they prefer a one-page brief on evaluation outcomes per quarter and interested on how current systems can be used to provide data for their program. That was just for this example. This is something that you can think of or an example that you can when you fill this out, you could keep your stakeholders organized on the information important to them.
So finally, I just want to talk about just the toolkit at large. I went over real quickly what the engage the stakeholders component of that step is. I only had one tool in it. There are five more steps in that evaluation framework, and there are another nine tools for you to go through and kind of fill these out. As you go through and work through these exercises your evaluation plan is kind of strengthened. So in summary you might not need help in all of the areas for your evaluation plan development, but the toolkit provides steps in worksheets to guide towards a more rigorous evaluation. The efforts towards sodium reduction is really, really important. Evaluation can provide the documentation and the record keeping for highlighting how effective your current work or even your future work is.
It can also provide the justification on why your program should be replicated or even scaled up to reach a larger population.
So when done correctly evaluation can actually build practice-based evidence.
And that's all I have on the toolkit.
>> KELLY HUGHES: Great! Thank you so much, John. Before we transition, can you share a little bit about how folks can access the toolkit?
>> JOHN WHITEHILL: Yes, that's a really good question. I will say, I mean, you could not have explained it better. It is fresh off the presses. It actually has not been even uploaded to our website as of this morning. It had to go through some 508 compliance checks. I was told it

should be up by close of business today. That will be on two places: One, the sodium reduction and communities website on the CDC's website. Then it can also be found on my evaluation team, the evaluation and program effectiveness team evaluation tools website. We can make that link available as soon as it is uploaded. I apologize but it was a time crunch to get it through clearance to be able to present it today.
>> KELLY HUGHES: Thank you, John. Everybody mark your calendars maybe for Friday to check the CDC Sodium Reduction in Communities Program website. You can Google CDC SRCP and that website should pull up and you will be able to check there for the toolkit. Thank you, John.
And last but not least bringing us home is Erika Pijai, Senior Nutritionist for Child Nutrition Programs at USDA' Food and Nutrition Service. And she manages nutrition education, training, and technical assistance for National Child Nutrition Programs. She coordinates the agency's national sodium reduction initiative and leads efforts to enhance the schools and childcare nutrition environments. She is a Registered Dietician and holds a BS degree in dietetics from Cornell University and MS in nutrition education from Columbia University.
Without further ado, I'll pass it over to Erika.
>> ERIKA PIJAI: Great. Thanks, Kelly, for the introduction. Hello, everyone. It is my pleasure to join today's panel and provide an overview of the work we do at USDA's food nutrition service for a healthier school environment. First I'll talk about the sodium guidelines at the programs were developed and what we in the USDA are doing in terms of our focus for national sodium reduction initiative and I'll share with you some real strategy schools across the nation are employing to reduce sodium in school meals and show you where you can access materials and things for school settings. Before I get started let's do a quick poll. I would love to get a sense of how you all interact with the school nutrition environment if at all. If you are currently working in the school nutrition space with a focus on child nutrition health or wellness if you can click yes or no there. Of course, remember to click submit.
Just want to know if you are working in the school nutrition space with a focus on child nutrition, health, or wellness. Make sure you click submit.
So the results are probably tabulating right now. It will show up momentarily. If you made a choice, please click submit.
Let's see the results.
It will show up momentarily I'm sure.
Why this is important is the USDA's Department of Agriculture Food and Nutrition Service administers 15 federal nutrition programs and our mission is to work with partners to provide food and nutrition education to people in need in a way that inspires public confidence an supports American agriculture. In partnership with state and tribal governments our programs serve one in four Americans during the course of a year. These include child nutritious programs.
It looks like a third of us work in the school nutrition space focusing on child nutrition and two-thirds do not. Hopefully you will hang in there and hear about some of the sodium reduction efforts going on in schools and what you can do to help assist with that.
So among the programs that USDA administers are the child nutrition programs. In these blue bubbles you see on the screen you'll see programs under the umbrella of Child Nutrition Program. These include the school breakfast child. Child and adult, the summer food service, fresh food and vegetable program and special milk programs. These are administered by the USDA at the national level and administered at the state level by state agencies. And each of these programs reimburses organizations such as schools and childcare centers and after school programs for providing healthy nutritionally balanced low cost are or free meals an snacks to children.

So you can get a sense of our reach, the national school lunch program serves 30 million school children each school day in about 100,000 schools an residential childcare facilities with 73 percent of meals served free or at a reduced price.
Team nutrition is an initiative of the USDA to provide technical assistance for nutrition education for children and caregivers and school and community support for healthy eating and physical activity. We are committed to improving the nutrition of America's children and one important strategy that team nutrition focuses on is providing the appropriate training and technical assistance that will support school nutrition professionals as they plan, prepare, and serve healthy school meals that children accept.
So I'll talk more about the sodium reduction efforts in the Child Nutrition Program, the National School Lunch and Breakfast Programs.
For those of you following the programs over the last six years you might already know this. Those of you who may not be as familiar with our recent past let me give you a quick update. So in December of 2010 Congress reauthorized the Child Nutrition Programs through the passage of Healthy Hunger-Free Kids Act. This specifically charged the USDA with revamping the breakfast and lunch programs because our country was facing an epidemic of overweight and obesity children. We released the final standards for school meals and all of these standards were based on recommendations from the National Academy of Medicine, or formally known as the Institutes of Medicine. They were rooted in the dietary guidelines for Americans. The standards were implemented using a faced in approach. From school year 2012 to '14, schools started offering fruit daily at lunch and also offering vegetables from various subgroups on a weekly basis. Schools also began meeting calorie specifics at breakfast and began only offering whole grain, rich grains at breakfast and lunch. In school year 2014-2015 the schools had to meet a sodium target or standard. The sodium target that applies to both breakfast and lunch went into effect July 1 of 2014 and this brings the sodium date to year two. They take a sensible approach to reducing sodium over many years and this allows operators to modify menus and to lower sodium products and children to adjust to new flavors. We recognize these are big changes from previous school meal requirements but we are pleased with the progress that schools are making.
And sodium reduction is just one piece of the puzzle as we work towards healthier meals. As a result of the act, the schools menus contain more whole grains and a variety of vegetables and fruit. It includes only low fat and salt-free types of items, sodium reduction and balanced meals with the right sized portions for children.
Now that you know about the nutrition standards for school meals I want us to take a look at how the sodium targets were developed. The most recent patterns were based largely on recommendations from the institute of medicine, committee report on school meals, building blocks for healthy children. This committee suggested that by establishing sodium limits, school meals could help lower the sodium intake for children which is one of the key recommendations. They finalized the targets based on the dietary reference intakes and more specifically the tolerable intakes sodium recognizing that these levels will vary depending on children's age. The UL or tolerable upper intake level is the highest level nutrient intake likely to pose no risk of adverse health effects for almost all individuals in the general population. So as intake increases above the upper limit, the risk of adverse effects increases. You see here the upper limit that the tolerable upper intake level for sodium is based on age.
And here is a slide that shows how schools are doing in terms of the sodium content of their meals in 2009-2010. The fourth iteration of the school nutrition dietary study is a study that we conduct that collects data from a nationally representative school districts and schools in school year 2009-2010. According to the data, in 201062 percent of secondary and elementary schools were already offering breakfasts with less than 575-milligrams of sodium per meal. If you examine the baseline sodium average per week back in 2009 and then take a look at the

sodium reduction targets 1 and 2, you see that many schools are already making fantastic progress even just seven years ago.
And the same story goes for lunch. According to data that was collected as part of the study in 2010, more than a third of schools were already offering at least one lunch meal that had less than 800 milligrams of sodium. But we recognize that getting students to choose the healthier challenge is a challenge. We have been exploring strategies since 2012 that demonstrated success in getting children and students to select the healthier options in schools. I also want to point out that the school lunch sodium targets represent a portion or about a third of the sodium expected to be consumed in one day. So the sodium targets are for an average lunch based on an average of all meals offered throughout the week. They are not supposed to reflect all the sodium consumed in one day.
The graph is taken from the CDC and depicts the average child's sodium intake. The guidelines for American adults recommends a maximum of 2300 milligrams of sodium a day which corresponds to the tolerable upper level for high schoolers or 14 to 18-year-olds. You can see on the right part of the chart there is an upper trend as children grow older, 12 to 19-year-olds consuming 1100 more sodium than the recommended maximum amount as per the dietary guidelines recommendations. This goes to show it is incredibly important to assure that the youngest children just developing taste pallets an preferences do not grow up to prefer salty foods. The school environment can have an impact.
Speaking of schools recent data indicates that about 10 percent of children's daily sodium intake comes from the school cafeteria. However, the remaining 90 percent comes from foods obtained at stores, fast food or pizza restaurant, restaurants with wait staff and other venues. 10 percent from schools might not seem like a lot, the amount of sodium that children get from school meals is significant and impacts the overall intake. So what foods are contributing to the excessive sodium intake? Another quick poll here to test your knowledge. So what is the number one contributor of sodium in children's diets? Is it cold cuts, do you think? Pizza? Bread, savory snacks like chips or pretzels? Make your selection and click submit there.
What do you think is the number one contributor of sodium in children's diets? Cold cuts, pizza, bread, savory snacks like chips and pretzels? Make your selection and hit submit there. Then we will see the poll results show up in just a moment.
Click submit there interestingly enough, the children sodium intake is not attributable to the salt taker. They come from popular foods kids love to eat in large quantities. We have guests here. We have 15 percent with cold cuts, 29 percent pizza, bread at 34 percent and then 20 percent savory snacks.
The current answer, I'll pull it up in the next slide. Is pizza is being number one. So according to the CDC 48 percent of sodium consumed by children comes from the ten food categories shown here on the slide. So with the exception of plain milk which naturally contains sodium the top ten food categories contributing to U.S. children's food intake 2011-2012 comprised of foods in which sodium is added during processing or preparation. So not from the salt shaker.
So USDA food and nutrition service is committed to sodium reduction an creating healthier school environments. We are leading an initiative to bolster support for lowering sodium in school meals. This initiative is called What's Shaking, boosting flavor with less sodium. It involve everything from best practice webinars with local schools sharing stories to engaging youth to speak on behalf of peers about the importance of having healthy meals in schools.
And What's Shaking partners include those national associations organizations, food industry and trade associations that are working in a school or child health and wellness space. Thus far over 45 partners have signed on to the initiative and they've committed to sharing information, resources and best practices for sodium reduction in school meals an at home. And through What's Shaking we are working with the USDA regional offices, state agencies an partners to lift up the outstanding work being done in schools across the country to highlight these items you

see here, we've created a What's Shaking website. This hub links to resources on healthier school meals. And provides background information on our What's Shaking initiative.
So if you were to visit the website address at the bottom of this page, if you scroll down from the home page you'll see that the website is laid out in sections which pertains to specific audiences, including school nutrition professionals, school administrators, teacher and staff and parents, care-r caregivers and students. There are reports on studies, as well as a calendar of events that links to the archived webinars on sodium.
Let's take a minute and delve into some of the will resources we have for school professionals. If you click there you'll find various resources on menu planning, sample menus and recipes and techniques from various federal and state allegations. You can access the Indiana Department of Education. Recipes, chart of common seasonings to use in, and Iowa flavor shakers which are low sodium herbs, seasoning mixtures and Kansas Department of Education three week cycle menu and more. We link to the sodium info graphics for nutrition professionals depicting the tips on reducing sodium content of meals. Let's look at the best practices on this info graphic. The first tip, use herbs and spices. Many schools are getting creative in creating flavor stations where students can add flavor without adding sodium. One creative way came from the Food Service Director at Cincinnati Public Schools, Jessica Shelly. She needed to give students different ideas on how to give low sodium condiments in order to add flavor to the meals. She created banners that she put on top of the vegetables toppings on a salad bar. This gives students ideas on how to boost flavor. She put peppers, flavored vinegars and other herbs and spices. There are flavor shakers there that students can shake on herbs and seasonings and individual portion control packets or flavorings can also be an option. This is an innovative way to allow students to personalize the cool without compromising the integrity of it. Taking sodium out of meals it's important to focus on what schools can be served an they are flavor full, colorful, delicious. You saw before of different foods served in other settings. The same can be done in the school setting as well. It's matter of getting creative.
In strategy number 2 we encourage schools to look at existing recipes and modify them. You can cut them in half or conduct taste tests for acceptability using lower sodium, chicken bases, replacing broth with low sodium broth and not adding sodium to cooking water.
If you are looking for delicious kid friendly recipes for school meals or even at home I encourage you to look at the USDA what's cooking website. There are videos showing you how to make the recipes. And you can find recipes in English and Spanish that come in household and larger quantities for schools and childcare centers. These are kid approved recipes that we standardized for large quantities with updating crediting information for the school meal pattern requirements. There is nutrition analysis as well.
In terms of resources for school nutrition professionals, we have available our recipes for Healthy Kids Cookbooks with large scale quantity servings. In these cookbooks there are recipes that encourage consumption of dry beans and peas and whole grains and dark green vegetables. The recipes won a nationwide recipe competition. School nutritionists, parents, chefs and other community members competed we have standardized recipes available on our website which are 200 new recipes that we modernized and standardized to assure consistent yield and credited to include the vegetables subgroup. Definitely check those out.
And then for strategy number three we let schools know they have access to many low sodium options through USDA foods.
USDA foods offers a variety of no salt added and lower sodium options to help schools prepare healthy meals. This is a reformulation effort and we are looking at all the specifications to understand opportunities for further reductions. They have an unseasoned grilled chicken strip that is very popular and minimally seasoned pulled pork that is popular with schools and they can use them as a base to add flavor to tacos, sandwiches and other entrees. You can see the list here for school year 2017. Lastly we mention the important step of staying in contact with food vendors. Schools can require that the vendors provide them with sodium information or a

list of lower sodium options and other similar products to compare. The Department of Defense is fresh program is another option for obtaining fresh produce.
We've heard from many successful schools that are meeting target one and even 2 target environments. Some of the things they are doing, providing more culinary training for of is that, doing more foods for scratch or speed scratch, you start with tomato sauce and add other things to. They are incorporating more spices to enhance flavors. Seeking out reduced sodium, salad, cheeses, sauces and soups. And whipping up their own salad dressing using yogurt. Others are using fruit purees that are replacing the ranch dressing. Attending food shows and working with vendors on a regular basis and the most successful schools are reducing the sodium levels item-by-item over the school year, over many years. Of course, performing taste tests to garner student input.
So these two pictures were shared by Turlock, the director of food service for Turlock unified school district in California. This demonstrates what he has been doing to help lower the sodium in the meals an getting students to eat more fresh foods. They are marketing the image of fresh in the schools and setting up farmstands and quick stops. He knew that his students had a tendency to eat packaged and eye sodium, he decided to can he the snack culture in the school and is promoting the fresh concept by making daily salads and these are selling like crazy. It looks like something that you would purchase at a nice food court or a little restaurant like chipotle.
What is next for our initiative? We are currently in the development stage of developing a series of tip sheets that can be used by school nutrition professionals that focus on a variety of topic areas. We are continuing to collaborate with established partners and updating our What's Shaking website with resources. We are also collecting a bunch of success stories from schools around the country that are implementing innovative strategies to lower the sodium of their meals while boosting flavor. If you know of any stories in schools, please email us. And then in terms of other resources, I want to bring your attention to the team nutrition resources that I mentioned before. Our team nutrition initiative we focus on the distribution of a variety of nutrition and technical assistance materials to support an overall healthy school environment. This slide displays a small selection of the resources we have available. And these materials help support schools' efforts to help offer healthier choices at lunch, breakfast an snacks an definitely check out the website here to access all of our wonderful materials. Everything is free. We also have a team nutrition catalog that provides general information about team nutrition including strategies, messages and details on team nutrition schools, how to sign up to be a team nutrition and it outlines all the resources available for schools and childcare. Best of all, the resources for free. You can download a PDF directly from the website. If you work directly with schools that participate in the federal child nutrition programs like the national school lunch program you can requested free print companies to be mailed to the school you work with free of charge. Schools can directly order printed copies of materials by using the resource order form on our website there.
Feel free to follow us on Twitter and sign up for our eNewsletters to get updates and news about the latest and greatest resources available at team nutrition. Feel free to email us stories, challenges, concerns. We are always here to help.
So that concludes my presentation.
>> KELLY HUGHES: Great! Thank you so much, Erika. It was fantastic. Tons of resources to access. Now I'm excited to on it up to the audience for questions. Just as a reminder, please send your questions in and make sure you mark to all panelists. As you are submitting, you can submit a question by typing a question into the Q&A feature.
With that I will share a couple questions that we've received. One is related to, I think Erika, your presentation. What tips do you have in regards to engaging with food service staff who may be resistant to changing because they say that kids won't like the lower sodium foods?

>> ERIKA PIJAI: A key part of engaging staff and also students is bringing everybody to the table. We heard that successful schools solicited the input of students into the menu. Once they see the excitement of the students or the interest of students to making these healthy choices staff can become more engaged or motivated and sometimes it comes from the top too. If there's a school nutrition director who is especially excited about this, we've heard that different strategies that are being employed and engaging in different trainings. Sometimes school nutrition directors have brought on chefs from local restaurants or businesses that can help provide the trainings.

So there's different strategies that schools can use that are really engaging for staff. It's fining out what motivates and what sparks staff to take that next step about the importance of creating these meals that students will enjoy.

>> KELLY HUGHES: Thank you. And then Erika, do you have resources for successful flavor stations? Independent of the Cincinnati model that you shared?

>> ERIKA PIJAI: Flavor stations, yes. On our What's Shaking website there are some ideas for different combinations of spices. There's also Kerry Beagle from Cloverleaf District, really interesting. She engaged her students and they had some sort of contest to invent their flavors for the flavor shakers. They had a naming contest. They came up with some really creative spice names like Jamaican me crazy, stuff like that. There's ways to engage youth and make it fun and ideas for different combinations of spices as well on our website.

>> KELLY HUGHES: Thank you. Another question for you, Erika. How do you make sure that school systems follow these guidelines? Are there consequences for school systems who can't or won't follow guidelines?

>> ERIKA PIJAI: Every three years our state agencies do an administrative review of the school food authorities across the country. So they are reviewed for compliance with the school meal standards and a bunch of other things as well that are requirements of the USDA. As a part of that, that's looked at. If they are not found in compliance, the first step is to offer technical assistance, of course. And referral to resources and sort of connect them with schools that are doing a good job. And then with plenty of follow-up if they are still found to be non-compliant there could be fiscal action. I than want to point out for target 2 going into place this July, we recognize the challenges about some of the operational challenges in meeting the target 2 requirements. We did put out a memo that if food school shorts are working towards compliance with target 2 but are not in full compliance they will not incur fiscal action during the administrative review. There is that bit of flexibility as well as they are starting out to meet the second target.

>> KELLY HUGHES: Okay. And another question, Erika. You mentioned that schools are improving on lowering the sodium that they use in cafeterias. Is there a core correlation with, a positive correlation between reducing sodium and childhood obesity rates that you've seen?

>> ERIKA PIJAI: No, not directly but as the sodium decreases, the sodium decreases as calories decrease but we haven't found a direct correlation between sodium and obesity rates.

>> KELLY HUGHES: Is there a USDA mechanism that will certify school districts for their implementation or success? If not, how can we instill such a mechanism and suggest ways to promote incentives?

>> ERIKA PIJAI: That's a great question. We do have what we call the healthy U.S. school challenge, a voluntary certification program for schools that are meeting certain criteria in terms of nutrition education, the school meal standards, physical activities, physical education and other activities like school wellness policies. We have that voluntary certification process. It comes along with the monetary awards at four different levels. The gold award of distinction would be the highest level. They would earn once certified $2,000 that will be applied towards their school food service account all the way down to gold, silver, bronze. Bronze would earn $500 towards the nonprofit service school account. We promote that and there are a thousand schools certified. Uh-huh.

>> KELLY HUGHES: Thank you. So another question and I'll open this up to all panelists because I think there may not be one right answer, but what is the recommended target amount of sodium or kind of percentage of salt reduction? What is the recommended amount of sodium that you would reduce in a community or food service setting per year? So what is a good annual target that folks should aim for?
And then how can they measure that? It is kind of a big question here but I think it is getting at if we are going to get started where should we start and what are the recommended target levels we should aim for?
If you want to answer specifically for schools and others want to chime in for other venue, that's great, too.
>> JOHN WHITEHILL: This is John and I can speak a little bit to that. I don't know if I can be really exact with it just because we work in so many different venues from schools to government work sites.
Usually what it has been, you have to have realistic expectations with your program or your entity or your partner. We here at CDC have had some grantees try to look at 5 percent, up to 10 percent over the life of a grant. So that last round of the grant was a three-year grant. So their three-year targets were much more ambitious. One of the things in the evaluation toolkit that we talked about was setting targets. With that, you want to make sure that the targets are not so large or ambitious that you are not going to meet it. That can be disappointing. But you also don't want to make it so low that it's very easy to make one change an it has to be a low sodium tomato sauce and that happens to have a huge reduction on all their offered meals. So I think it really varies. I think that some items, that some particular venues use are easy, what we call low hanging fruit. That would be a quick win and that might necessarily, if you had a 5 percent goal, they got that very quickly and maybe you may not getting that partner to reduce a little bit farther after that because they met such a low target.
To be realistic I go with 10 percent. And it is all flexible depending on the venue and the partner you're with, too. As mentioned with some of the speakers, sometimes partners might not want or be technology change certain recipes because it might be a fan favorite or a consumer favor. So it's hard for them to change. So you do find kind of that, I don't know, a marker. I would start with 10 percent. That could be 10 percent of the total sodium. It could be 10 percent of the particular product. Evaluation from our perspective, there's many ways to look at where the reduction is taking place.
>> KELLY HUGHES: Thanks, John. Erika, do you have anything to add to that.
>> ERIKA PIJAI: It would be setting goals again and then low hanging fruit. In terms of sometimes the higher things could be sauces, salad dressings, if I canning one thing and focusing on just one thing. That may help decrease the sodium across the course of the week. So picking one thing and then working towards that, thinking about how can I change my menu? Can I pair high sodium items with low sodium items? Taking a look at combinations of food when planning the menu an things like that. There's different strategies that schools can take from that perspective.
>> KELLY HUGHES: Thanks for that. And Erika, this is an interesting question. This will be our last question for the web forum. We'll try to address any other questions via email.
But so please keep submitting them. Have you seen any examples of schools that have integrated either sodium reduction or even just improving the nutrition status, the nutritional status of a food item into like a standard curriculum? So maybe science or chemistry? Have you seen that kind of melding? Does that question make sense to you?
>> ERIKA PIJAI: It does sort of. I haven't seen anything specific to sodium reduction except for -- oh, I change my mind and take that back. Out of Baltimore there is a curriculum called spice my plate. So this is expect to high school and high school settings. It was a pilot curriculum implemented in a high school in Baltimore, Maryland. So they used a combination of nutrition education as a baseline and then sort of a arm for testing was nutrition education coupled with

the six-week curriculum for spice up my plate as well as, which included grocery store tours and taste testings, cooking lessons with a chef and revamping meals. There is something that exists out of Baltimore which is called spice my plate. But it was looking at high schools. I haven't seen anything, to my knowledge, in elementary or middle school.
>> KELLY HUGHES: Okay. Thank you for that.
And with that I think that will conclude our Q&A session and all of our presentations for the web forum today. I want to thank everyone in the audience form attending the web forum today and for your participation. And great questions. Special thank you to all of our presenters for their efforts and sharing all these great resources. Of course we also need to thank our sponsors, and folks working behind the scenes. CDC and folks from Dialogue4Health for supporting this web forum and our work overall. It has been a pleasure to connect with you all today. I'll turn it over to Dave to share a couple more closing messages with you all.
>> DAVE CLARK: Thanks so much, Kelly. I as well would like to thank all of our presenters today for their insights into reducing sodium in food service settings.
A recording of today's session as well as the presentation slides that you saw, all of that will be available very shortly at Dialogue4Health.org, Dialogue4Health.org, the website. We will also send you an email with a link to take as well, the recording, the slides. Be sure to check the email inboxes for that. That will arrive shortly. That will also include a link to a brief survey we hope you will take. We would like to know your thoughts regarding today's web forum and also would like to know what topics you would like to hear about in future web forums. We would like to hear from you. We will read all of that feedback you send us, all of the comments. Be sure, that take a couple of moments and complete the survey. Thank you for being with us today. That does conclude today's Dialogue4Health web forum. Have a great day, everybody.
(The webinar concluded at 3:30 p.m. EDT.)
(CART provider signing off.)

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