

Dialogue4Health Web Forum

CONNECTING PUBLIC HEALTH AND FOOD SECTOR COLLABORATORS: HEALTHY MENU INNOVATIONS IN SCHOOLS

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> Dave Clark: Greetings and welcome to today's dialogue for health forum on Connecting Public Health and Food Sector Collaborators: Healthy Menu Innovations in Schools. Brought to you by the National Network of Public Health Institutes, the Centers for Disease Control and Prevention and the Public Health Institute. I'm Dave Clark, your host today.

All right, well, let's get started on today's presentation on connecting public food and health collaborators. Our moderator is Kelley Hughes, associate director of program strategy at the National Network of Public Health Institutes. Based in Atlanta, she's a liaison to the CDC, providing project and relational support for CDC-funded initiatives. She's managed sodium reduction initiatives in collaboration with the CDC and other strategic partners. As our moderator, Kelley will be leading us through the rest of today's event. Over to you, Kelley.

>> Kelly Hughes: Thank you so much, Dave. And thank you all so much for joining us today. It is my pleasure to serve as the moderator for this program on healthy menu innovations in the school setting. Now, I presume the majority of you are here today because you're either involved or interested in creating or understanding or improving nutrition environments. But regardless of where you live or the sector that you represent, our presenters today are going to offer insights and perspectives that are both unique, but also relevant to many of you who work with schools to improve nutrition environments with a specific focus on reducing sodium.

So, as we mentioned, we do want this program to be as interactive as possible. So, we have carved out plenty of time at the end of all the presentations to take your questions. That said, I do encourage you to submit the questions throughout the forum, so you don't forget. We will do the best to follow-up with what we get to after the web forum. Here is some information about our audience and where you are located.

Based on the latest registration data, how audience today represents 48 states in addition to Washington, D.C., Canada and Indonesia. With the majority of participants coming from California, New York and Massachusetts. And with respect to work sectors, almost half of our audience represent health departments. And then you can see the other distributions of other non-governmental organizations, academia and so forth. So, thank you all so much for joining us. I think we've got a nice, diverse audience which should definitely make the conversation and discussion at the end very rich.

So, with that, let's get into the program. Our first presentation features the experiences of Healthy Chelsea. It's a collaborative health coalition in Chelsea, Massachusetts. I don't want to give it away too much. I will introduce the presenters. We will start with Madelyn Herzog, the school programs coordinator for Healthy Chelsea. She works closely with Chelsea school food services and the cafeteria around cafeteria improvement initiatives. Additionally, she helps coordinate school garden programming and co-leads Youth Food Movement, a coalition improvement program focused on bringing the student voice into the community. She came in as a service member in 2014 and holds a bachelor's degree in journalism and economics from

Northwestern University.

And you will hear from Scott Richardson, co-founder and partner at Northbound Ventures. He began a decade ago as a consultant for root cause and has been documented in several journals. He spent five years as the director of strategic initiatives for Project Bread, a statewide organization focused on providing healthy food for underserved populations. Scott holds a certificate in sustainable food initiatives from the University of Vermont, a Master of Business Administration from Babson College, an MBA from Rutgers University, and is a Ph.D. student at the Harvard University T.H. Chan School of Public Health.

>> Madelyn Herzog: Thank you, Kelley. Hi, everyone. Happy to be with you here today. I'm going to get started providing some of the context and history behind our school food initiative here in Chelsea. And after that, Scott is going to dive into more of the numbers and processes that we use. And the results. So, to get us started, what is Healthy Chelsea? What is our role in this initiative? So Healthy Chelsea is a community health coalition. We are under the umbrella of Massachusetts Federal Hospital, under their community health arm, which oversees programming in Boston and a few satellite communities, including Chelsea.

So as a community coalition, our job is to work on the issues that our community wants to work on. And to do that we partner with a wide range of organizations and residents in Chelsea. And our strategies are guided by the results of community health needs assessments that are taken by residents every two years.

So, in 2009, Healthy Chelsea formed in response to concerns around obesity and diet-related disease in Chelsea, especially among children. That's when we started working with the community and really in-depth on healthy eating, active living initiatives which became the backbone of our work. And just for some more context, since then there have been a couple more community needs assessments which have led to an expansion of our team's work and we also now help lead initiatives around substance abuse disorders and trauma awareness.

All right. So, Chelsea, to give everyone a little bit of context for those unfamiliar with this community, Chelsea, Massachusetts, is a tiny city just north of Boston. It has a population of more than 35,000 in a land area of less than two square miles. So, it's a very densely-populated city. And Chelsea has pretty much always been a landing spot for newly arrived immigrants and refugees. Today Chelsea is home to folks from Central and South America, Africa and the Middle East. 35 languages are spoken. And currently about 63% of residents are Latino.

So, Chelsea High School specifically has a majority Latino student body. 75% qualify for free or reduced lunch. Although we are now in our second year of offering free lunch to all students, regardless of income through the community eligibility provision.

Okay. So, the school food collaboration started back in 2011. So, Aramark has been Chelsea's school food provider for a while now, since 1989. Chelsea had some smaller food management companies for several years in the middle. But Aramark returned in 2002 and has been with us ever since. So, in 2011 Healthy Chelsea's director approached the school to talk about school food improvement as part of the community-wide obesity prevention effort. And the district was very interested. They did not have the capacity to take that on internally, but were more than happy to support the work and hand off the facilitation to Healthy Chelsea.

So, our main contact within the school district has been the district director of administration and finance, Jerry McCue. He has been supportive. To be frank, without him, we wouldn't have gotten as far as we have. And initial meetings started between Healthy Chelsea, the district, Aramark's local Chelsea leadership and Scott Richardson who you will hear from in a minute. And at the time Scott was with Project Bread, a statewide hunger organization, and able to offer some pro bono consultation. And I want to note at the beginning of this collaboration, our goals were not targeted at lowering sodium and saturated fats specifically, although those were definitely important factors that we were thinking about.

We were looking to move toward more fresh fruit. At the time there was a lot of juice and canned fruit being served. Less starchy vegetables. Moving away from fried potato. Side of vegetables to red, orange and green vegetables. And just to increase the diversity of menu options and have more variety there. And Scott will talk in a minute about how our goals and processes evolved into using sodium and saturated fat as our

main metrics for this work.

And one last note here, we decided to focus in on just the high school because at the time in 2011 the lunch participation there was by far the lowest in the district. So, it seemed like a good starting point.

And here is just a visual of that timeline for you. So, in 2014 Aramark's five-year contract was up. And Chelsea did decide to put out an RFP to open up the search and consider other management companies. So, there had been some progress made with Aramark over the previous couple years, but it was very slow. The food service director at the time was not very open to these changes and not willing to fully engage with the collaborative process. And, again, because the district was so supportive of this work, they actually added new language into the RFP that formalized the partnership between Chelsea school food service and Healthy Chelsea. So basically, Jerry added a few sentences that said, the district valued the input from Healthy Chelsea. The collaboration had been successful so far and it would continue to inform the implementation and progress toward our program goals. The contract also required a formal evaluation each year during the five-year contract and included some new language around incorporating more nutritionally dense foods into the menu.

So, Aramark was able to agree to these stipulations and we did re-sign a contract with them. And we were able to speak with Aramark's district manager and request a new food service director in Chelsea that would be willing to engage in the work. So, in fall, 2014, we when a new food service director who was very cooperative. He actually left halfway through that school year for personal reasons. And that's when Amanda Muniz was brought in and that's when the work started to pick up. Amanda was fully in it with us and continues to be fully in it with us and her and her team are on board which makes the progress move a lot faster.

All right. So, just to quickly list out the different stakeholders involved in our process for you. Of course, Chelsea food services, Aramark, Healthy Chelsea, that's me. My supervisor. We have a Food Corp. service member. That was my position originally when I came to Chelsea. The business office, that's Jerry, the district's business manager, a couple of their staff. And I definitely did not want to leave out an essential piece of this collaboration which are our youth interns. So, since 2013 Healthy Chelsea has led a paid internship program for Chelsea high school students to infuse youth voice into the school food process. And they're really amazing. We have about ten high school interns each semester. They provide input on the school meals.

One main project that they work on is, each year they design and administer a school food satisfaction survey that goes out to all their peers. All Chelsea High School students. And after it's taken, they take the results, analyze the results, and actually get a chance to present it directly to Aramark to Chelsea food services in a meeting.

And last but not least, Northbound Ventures. And that is Scott and his partner Holly. And you're about to hear more from Scott right now.

>> Scott Richardson: Great, thanks so much, Maddie. And thank you everyone for joining today to listen in on that important topic. I wanted to start by framing the conversation around what we call the three pillars of school nutrition. Any time you are thinking about intervening in the nutritional intervention in schools, it's important to be mindful of the constraints that food service operators, whether it's operated by the district itself or through a management company such as Aramark, that there are constraints in the program.

Primarily around operations and finance. The school guidelines set the nutrition goals and regulations for what is allowable through the program. The operations and finance reimbursement scheme from the Federal Government sets essentially what is possible in the program. But the key piece, and Maddie touched on the youth interns and their role in helping to bring improvements to the district is around -- without each of these pieces no nutritional improvements to the school menus is possible. If it's not financially sustainable, it's not doable. And if the kids aren't eating the food, you're not actually getting the nutritional improvements that you want to see.

So, in terms of the process that we underwent with Aramark, Aramark is required -- and all food service operators are required -- to track daily food component and nutritional data as part of the national school lunch

program. We chose to focus on vegetables and fruits early on and later on sodium and saturated fat, which I'll get into. Those are the nutrients required for tracking. And there are guidelines set specifically for those nutrients.

Aramark would submit monthly reports to us for analysis, and we would come back with a report that showed essentially where the district was in terms of sodium and saturated fat. And we would make suggestions for either replacements or removal of certain entree items. We would discuss the feasibility of the changes. And we would make the changes during the school month and track them and repeat the process on a monthly basis.

In terms of the methodology that we employed, we focused on entrees because they tend to be the major source of calories, saturated fat and sodium on the menu. And fruit and veg typically provide just a very tiny fraction of saturated fat and sodium for the day. So, entrees were where we could get the most bang for our buck in terms of making replacements. And it also -- the entree was also the component of the reimbursable meal that was selected most often by students.

Students are required -- in order for a meal to qualify for reimbursement, students are required to select three of five components. A grain, a meat, meat alternate, fluid, milk, side vegetable or fruit. And when we looked at are the reimbursable meals served on a monthly basis and took the number of entrees served and divided that, it was pretty much a one-to-one match. With fruit -- rather, vegetables and milk, one out of every four to five students were selecting those components. So, entrees offered the biggest chance for making meaningful improvements to students' daily diets.

Now, in terms of setting targets for saturated fat and sodium, one approach that you could take is to look at abject levels for the day. And what you might do is you might look at the daily recommended levels through the institute of medicine and then you might look at the USDA guidelines for school lunches and set those as maxes. Because we were looking at entrees, we had to adjust that down to allow for additional sodium and saturated fat from the other components should the students choose all five components. And then we wanted to set the stretch goal, as well, beyond what was mandated by the National School Lunch Guidelines. Looking at potentially lowering saturated fat in accordance with the American Heart Association recommendation which is a few points lower than the National School Guidelines, and looking ahead toward sodium reduction requirements that were going to be in place in 2017.

Those have actually since been pushed out for a few more years. But this was our target. Now, in terms of what that means when looking at a meal, if we take an example of a panini that was on the menu when we started, it was quite high in saturated fat and a little bit on the higher side with sodium. We could replace that with a barbecued sub, but you might have the unintended consequences of increasing sodium by doing that. Another challenge for using this methodology for using meal replacements, it doesn't take calories into account. You can have two items that are similar, but look at the amount of calories, they can be quite different. So, we employed an approach that adjusted for calories. And that was a sodium per calorie ratio, on the X axis on the bottom. And the Y axis, sodium per calorie. And we color-coded, a simple scheme, entrees based on the metrics. The green entree being the target goal. Yellow entree, something that's acceptable. And red entrees that should be targeted for removal.

And here we can see where we started in September 2014. Each blue dot represents an entree for that month that was served. And then same for March 2017. What you can see is that we made a number of removals of red items and we increased the number of greens. When you take the number of entrees served per recipe, you can also see that we made some very meaningful reductions between the beginning and the end of the intervention. In fact, we lowered the entrees served in the red category from 62% down to about 17%. And we more than doubled the amount of green entrees served. Now, this had quite an effect on the average sodium and saturated fat selected by students.

In terms of the timeline, this occurred over the course of several years. It is important to note that these changes don't occur at turn, you know, turn of the dime. They do take some time. Particularly because the way that large institutional food service works, contractual relationships are put in place months in advance. So, there are purchasing requirements that are contractually obligated. So, in order to meaningfully change the menu, you need to be looking well in advance. Including commodity foods coming through the

government, you need to be actually looking a year in advance.

So, taking that time frame into account is very important when implementing an intervention such as this. As Maddie mentioned, we tried to increase the inclusion of fruits and vegetables in the entree. And we also swapped out Ingredients. In this example, there's a Quesadilla that was swapped out for a lower sodium and saturated fat option. And, as mentioned, we removed several items from the menu. Substituted lower saturated fat and lower sodium ingredients where possible and integrated local produce.

One thing to take into account as well is the competitive food environment that these initiatives, you know, often occur within. Because it is such a densely-populated area and a small geographic area, within a ten-minute walk, there are a lot of other options. They have an open campus lunch policy at Chelsea. So, the food service operators had to take that into account in order to compete with these other very tempting options. Regardless, we were able to keep participation up in the program. Meal volume did not go down. And you can see that we lowered maximum sodium. We took the maximum sodium entrees off the menu across the course of the intervention. That was -- that resulted in bringing down the average sodium. And we brought down the max amount of saturated fat entrees as well. This was the removal of the red items from the menu.

Sodium reductions follow changes in the offerings. So, by changing the menu, you can actually change what students are selecting. And the outcome of that ends up being a significant reduction in sodium by over 200 milligrams.

So, the, the beginning of the course of the intervention we were at about 750 milligrams of arch sodium, and we brought that down by almost 200 milligrams. And the mix of menu items changed significantly as well. We more than tripled the number of green items served. And you can see a significant reduction, a steady reduction over the course of the intervention in terms of the red entrees served.

So, a couple of takeaways before I pass it off to Linda. We've significantly reduced sodium by several hundred milligrams. We brought saturated fat down by 2.5 grams. Student participation stayed solid. But one thing to keep in mind as you're implementing an intervention such as this, you have to work with the team that's providing the meals. Look for the low and medium cost opportunities. The low-hanging fruit. If it's low -- if it's a low or medium cost intervention and it's low or medium difficulty to do and it's a high impact, that is worth doing. It's also worth noting that, you know, taking a collaborative approach with the meal providers is actually oftentimes a much more productive approach than coming in as a watchdog and trying to hold people accountable. Accountability is important, but a collaborative approach is most important to actually achieving the results that you want.

So, at this point I'll pass it off to Linda.

>> Kelly Hughes: Well, thank you so much, Madelyn and Scott. I'm going to interject here and make sure I can introduce Linda. It's more pleasure to introduce your next presenter, Linda Scurman. The national director of nutrition at Aramark. And will be discussing healthy for life 20 by 20. Aiming to improve the health of awe Americans by 2020 by reducing saturated fat and sodium levels by 20% and increasing vegetables and fruits and whole grains by 20%. As a registered and licensed dietitian, Linda is responsible for nutrition program planning and development, including menus and related programs that support the Aramark education health and wellness initiative. Linda completed a bachelor of science disagree at Penn State University and began her professional career as a school food service director. She later completed a dietetic master degree at University of Washington. Linda joined Aramark in 1997, serving in various positions in the health care division before joining the K of-12 education division in 2006. And with that, I'll turn it over to Linda.

>> Linda Scurman: Thanks for the introduction, Kelley. And I am happy to be here with all of you today. Looking forward to sharing, as Kelley indicated, some information about the Aramark 20 by 20 initiative. Aramark's personnel and partners really do touch billions of lives every day. Not just our relationship with Chelsea, but around the world in a lot of different venues. And we have been focused on our dietitians and chefs have been focused on health and wellness for a lot of years. So, it made sense for us to partner with the American Heart Association in 2015 to create the Healthy for can have life 20 by 20 initiative. This

initiative combines industry-leading healthy menu commitments as well as health awareness and education programs to support our goal and the Heart Association's goal of improving the health of Americans by 2020. So, this is just a quick overview of the Heart Association goal. And it certainly is a bold goal. I'm sure many of you are aware of this. But essentially, we're looking at improving the cardiovascular health of Americans by 20% by specifically focusing on reducing the incidence of death from cardiovascular disease and stroke. We know that this is a particularly significant challenge, but less than approximately 2% out of every 100 adults in this country really eat an ideal healthy diet. There's lots of reasons for this. I'm sure that you can all think of some.

Labels are often confusing. We know consumers expect that healthy means oftentimes a lack of flavor. And nutrition information. You know, it's changing sometimes. It's confusing. One day cholesterol is bad for you, the next day, cholesterol may not be so bad for you. So, it's a challenging landscape for Americans. Our goal, as we see it, is to make eating healthy. A bit easier for the consumers we serve and the constituents that we work with. And to help the American Heart Association achieve these bold goals.

Now, let's take a quick look at what this really means to each of us. For most Americans, this translates into increasing access to the good stuff that maybe we're not eating quite enough of. Things like whole grains, unprocessed fruits and vegetables, and other high-nutrient-dense foods that contain fiber and essential vitamins and minerals. But at the same time, looking for ways to decrease calories. Especially calories coming from added sugars and fats. And, of course, lowering our sodium consumption.

Now, it seems to us that the time is right for all of this. Because, based on a recent survey by the International Food and Information Council, we see that more than 75% of adult participants in the study indicated that they are trying to make healthy changes in their diet. We also know from internal surveys -- and this is result of a proprietary research with approximately 140,000 middle and high school students across the country -- that a significant number of students are also telling us that they're trying to eat healthier.

Many of them specifically are focusing on eating less fast food. So, we see a lot of consistency between adult data and student data. That people are interested in eating healthy. So, let's take a minute now to find out what you, our audience, are doing in terms of changing eating inactivity patterns. What was your primary reason for making these changes if you have changed your eating and activity patterns? Is it to improve overall health? Is it to feel better? Were you diagnosed with a health condition? Are you trying to lose weight? Or is there some other reason? So please take a few seconds now to answer the polling question. And, again, don't forget to hit the submit button at the bottom of the panel.

I'm thinking a lot of you, since it's January, probably made New Year's resolutions in this area. So, it's a good time to find out what people are doing in this regard. So hopefully everyone has had a chance to make their -- submit their response. And just going to take a few seconds here until we see the results come up. Yes. Excellent. All right. So, based on the polls results, it looks like 55% of you are changing your eating and activity habits as a means to improve your overall health. Excellent. And then 16% just to feel better. 5%, diagnosed with a health condition and 18% to lose weight and 2% for other.

Again, not real different from the results of the IFIC survey that was completed in 2016. So, good information for us to have.

But we also have to consider what else are consumers looking for? We've done a lot of proprietary research, again, in -- with both adults and with students to really understand what is driving consumer behavior when it comes to food purchases. And you can see from the grid here that there are really four dimensions. Four broad dimensions. Quality of food, which really is interpreted by consumers as taste and presentation.

The perception of health. Does the food look good to me? Do I think it's fresh? Certainly convenience. Very, very important to the average American consumer today. And then that personalization or customization. These qualities are true for both adults and students. And it shouldn't be any real big surprise to any of us. I think we have all heard things like, "Taste is king." In fact, I think that's part of the burger king slogan. Fresh is best, we eat with our eyes. Again, not a big surprise, but it's critical information when we are trying to put together menu innovation programs.

So, we have used this consumer information, or this consumer insight, in conjunction with food preference data

to help us translate our commitment into deliverables in each of these areas. It's the cornerstone for the development of the recipes and menus that we create, and inspires the platform to engage and educate our customers. So, what did we do and how did we do it?

Going to spend a little bit of time now focusing really just on our menu commitment. And our specific goals included, of course, a reduction of calories, saturated fat and sodium by 20% while increasing the use of whole grains, vegetables and fruits in menus by 20%. And that's as compared to baseline data across all of our business units in the company.

I would be remiss if I did not mention that, of course, we want to do all this also while satisfying consumer demand for indulgence, menu favorites, seasonality, variety, and local preferences. So, let's talk about how we did this. I'm going to specifically talk about, now, how we did this within the K-12 segment. Because you've already seen a great overview of the regulatory in the school meal program segment by both Maddie and Scott. And I just wanted to dovetail with that. Because, in fact, in parallel, at the time that a lot of the changes were happening with Healthy Chelsea, particularly in the early days of the program with the district, we were also making a lot of changes behind the scenes in Aramark K-12.

And we specifically started out probably back in 2007 really identifying what's the low-hanging fruit? What are the quick and easy things we can do in our operations to try and begin to create the impact that we wanted to create?

And so, we started out removing saltshakers pacts. If any of you are still putting those out in your schools today, it's an easy win. You might get some grief initially, but it's absolutely worthwhile. And eliminating salt where possible from recipes. Even simple things like taking out the phrase "Salt to taste" is important when we're trying to make these kinds of major health changes.

Our next step was assessment and modification of existing recipes. This took a little bit of time, but it was well worth the effort. Chefs and dietitians got together, collaborated, reviewing all of our recipes that we use in K-12. And really stratified them and identified the ones that already were lower in fat and salt. And then began revamping menus to include more of those recipes. But at the same time, we also recognize that we needed to establish criteria for future recipe development. And recipe improvement focused on a number of different areas. It increased the amount of vegetables in recipes. We decreased some of the protein components and/or chose leader options and those with less sodium.

A good example was one that I think Scott already mentioned. Replacing American cheese with natural cheese can be a quick and easy way to significantly reduce the sodium content. Integrating more whole grains. We actually started ten years ago working with folks to begin to replace enriched grains with whole grains. Even in simple things like the breading on fish patties, on chicken nuggets, a number of different category areas.

And then looked at fruit-based dressings and sauces to replace cream-based sauces and gravies. That's been helpful in particular recipe categories for us. And then, of course, condiments. A lot of people don't think much about condiments, but there's a significant amount of sodium that can be found in condiments. And, of course, you know, when you're focusing on reducing sodium, your efforts cannot be on just removing the sodium or removing the fat. A lot of times you do have to add something else back in order to get an acceptable product and certainly to maintain and enhance the flavor when you're removing salt.

Since about 75% of the sodium in the average American diet comes in the foods we buy, and not from what we add during preparation or at table, the next obvious step for us was to work with manufacturers. So, we shared our goals and strategy and enlisted their support in reformulating and developing products with a healthier ingredient profile. Initially, we did develop our own nutrition profile based on our overall menu targets and strategies. But with the implementation of the USDA school meal regulations and especially the competitive foods regulations, we now use the smart snack in school nutrition per serving criteria for entrees, sides and beverages as our targets for development.

These can be useful as a common platform to work from for a lot of food service personnel as well as for a lot of R&D groups. And, in fact, since the advent of these standards for K-12, we have seen a significant increase in the number of products that are available in the market with the necessary ingredient and nutrition

profiles to help us achieve our goals.

So, our broader strategy really focused attention on enhancing the acceptability and consumption of fruits and vegetables by kicking up the flavor based on our trend research. Using 100% fruit juice as sweetener instead of sugar. Using fresh foods where possible and offering a wide variety of fruits and vegetables at all meals in as many ways as possible was key. We offered in the master menus, we offer entree, topping bars with lettuce, tomatoes and a variety of other fresh vegetables. And we have seen some really, really great success. It's always amazing to me and very pleasing to me when I see in schools a student actively going after those salad bars, you know, the topping bars and uses the fresh vegetables that are available to them on those topping bars.

So, what are our results? And this slide just shows you results from across our company that were reported just recently. This is our 2017 update on the partnership with the Heart Association. So, you can see that across the company -- and that is not specific to K-12 -- across the company we have made a reduction in 11% of calories. A 15% reduction in saturated fat and a 14% reduction in sodium in the menus that we use across the enterprise. But I also wanted to touch briefly on the results specific to K-12.

Because I think, as most of you were aware, and Scott already mentioned, certainly, we do have federally-mandated nutrition meal standards in K-12 that we have to measure ourselves against. And those meal pattern standards have been in place now for several years. So, they have dragged in a lot of change and innovation in the marketplace. And certainly, you know, we've all been adapting to them over the last couple of years.

But note that breakfast and lunch menus must provide calories within a range. There's a minimum and a maximum range of calories designated by specific grade groupings for school meals. The limit for saturated fat is less than 10% of total calories. And sodium targets vary by grade and group. But are no more than 26% of the upper limit for breakfast and approximately 62% of the up limit for lunch. And I should note here that while the USDA standards are the baseline nutrition targets for menus, we do support a master recipe database of over 6,000 recipes that affords our operators the opportunity to customize menus to meet a school district's unique local wellness goals such as we have been doing with Chelsea that may go beyond the USDA standards by using approved alternative products in recipes

So, you can see that our menus are tracking favorably, not just against the Heart Association goals, but certainly against the current standards that are established by the USDA. So, our calories on our menus are always, of course, within grade range. But our saturated fat, on average, across all of our federally-created menus are actually running lower in saturated fat than the maximum 10% limit.

And, of course, sodium, then, is below the target one level that I think Scott had already mentioned. So, what does our menu look like today? And you can just see here a couple of highlights that I've mentioned. We've sourced a number of new plant-based forward selections. One of the more popular ones is meatballs of beef and mushroom or chicken and mushrooms. So those are real popular. We've, of course, done a lot with whole grains. Portions are controlled very carefully. And more and more vegetarian/vegan options are available to all of our students.

And, again, we still have to remember that students, as well as adults, do want their food to still be indulgent and crave-worthy, even knowing that it is good for them. And I often remind our folks that our favorite foods don't really change just because we decided to eat healthy. Our goal is to make favored foods be healthy. You can see some examples here on the side of this slide of offerings.

But in the meantime, there's also been some important lessons learned and I just wanted to highlight a couple of those. This is one that was really important for us is understanding these two specific areas. So, I'm just going to take a minute now to pose another polling question, quickly. And this one really does relate to the functions of salt in food systems. And I have a number of options here. Please check any and all that you think apply to how salt functions in food systems. Is it just flavor? Flavor enhancer? A preservative? Texture enhancer? Nutrient source? Or binder?

And don't forget to make your selection and then hit your "Submit" button. Looks like the poll has ended. So, it's going to take a few seconds for us to see the results.

But if you were the person who selected all of these, then you are absolutely correct. In fact, it is important for us to recognize that sodium and salt in particular, does provide a number of different properties within food systems. Within various food systems. And it looks like, yes, we do have 71% of flavor, flavor enhancer. It looks like most of you got flavor, flavor enhancer, preservative and nutrient source. It looks like not so many people figured out the texture, enhancer and binder. All right.

So, those are important. The other thing that I wanted -- a key important point that I wanted to make is that we're dealing with complex food systems. And so, when we impact one item, like sodium, it oftentimes will also impact and cause some other changes in the food system that we have to be aware of. So, just to close off a couple of other learnings that I think is important and that I wanted to share, Scott already mentioned menu innovation and work to improve health is a collaborative sport. A lot of people have to be involved and everyone has to be committed.

Starting slow and building when even little wins will add up can make a big difference. It's all part of that evolution. And giving people's taste buds, for example, a chance to adjust. Focusing on replacing so the, not just removing it. Absolutely critical. And then certainly understanding all of those other functional properties of the food systems that we're working with. And how we can impact individual components positively without creating negative results in another aspect.

And in closing I just want to mention that all of the work that we've done has proven to be successful. We do a lot of customer satisfaction evaluation and thanks to the efforts of all of our folks, dietitians and manufacturer partners, our customer satisfaction data does show that we are providing healthier menus.

So, with that, I'm going to end and turn it back over to Kelley and Dave.

>> Kelly Hughes: Thank you so much, Linda. Thank you for that presentation. And now I just want to transition us to the question and answer portion. We have a couple minutes remaining, so I'd like to take some questions from the audience. Just a reminder with you can send in your questions to any of our panelists by typing your question in the Q and A box. And it's helpful to submit your questions to all panelists. So, jumping right in, I wanted to start with a question for Healthy Chelsea. Can you say more about the decision to not look at added sugar? Why did you choose to reduce sodium and saturated fat and not sugar directly?

>> Scott Richardson: Sure. Sure. So, this is Scott. And Maddie, if you want to chime in, please feel free. The reason we didn't look at sugar and we looked specifically at sodium and saturated fat is because those nutrients are actually regulated by the USDA and there are set limits based on weekly averages that are required of providers of food. Sugar, unfortunately, is -- and added sugar, especially -- is not currently regulated by the USDA in school meals. That function is essentially covered by calorie restrictions that are also based on weekly averages. So that is the main reason why we didn't focus on sugar.

That said, we did focus on replacing canned fruits, which can be packed in light syrup, and removing fruit juice, which is essentially, you know, all fructose, from the menus. So, we added fresh fruit that, you know, provides yes, some sugar, but it balanced with fiber, so it doesn't spike blood sugar levels like you might see with, you know, high fructose corn syrup products or fruit juice.

>> Madelyn Herzog: Really quickly, I would second everything that Scott said and quickly add that we are hoping to take a look at sugar soon. We do have a new point of sale system in Chelsea that will let us look at sugar. And even though the USDA doesn't track that, we are excited to see what we can do around there.

>> Kelly Hughes: Thank you. And another question for Healthy Chelsea. Have you considered replacing salt with potassium salt? Actually, from Aramark. Would be curious to hear. Have you considered replacing salt with potassium salt that has the same functionality as table salt?

>> Scott Richardson: I think that's a question best answered by Linda. And I think that comes down to what is actually being scratch-cooked versus what is embedded in a processed product that's coming into, you know, to basically be heated and served. But I'll defer to Linda on that one.

>> Linda Scurman: Okay, Scott. There's actually, I think, two different parts to that. And one is the salt that is added in preparation or in service. And the answer to that, from our perspective, is, no, we're not actively -- at least in K-12 -- promoting the use of potassium salts. They are somewhat self-limiting. Many of

the potassium salt products on the market today, after a certain level do elicit a very bitter taste. And the functionality in food systems is not really quite the same as sodium chloride.

So, you know, we're not actively using that as a replacement in preparation, again, and during service. But I can tell you that many manufacturers are, across the board -- not just in their K-12 food service segments -- but in their retail segments are really looking at ways to reduce the overall sodium content of foods that they're producing. And many times, you might see that there might be a use of some potassium chloride or other salts as a potential replacement for sodium chloride. But, again, we still run into the same bitter and some deficits in terms of functionality within broader food systems.

>> Kelly Hughes: Thank you. Question for Healthy Chelsea. Would it be possible to obtain a copy of the school food satisfaction survey that was sent to all students at Chelsea High School?

>> Madelyn Herzog: Yes. Definitely. We would love to share that. It looks a little bit different every year as the youth kind of gather -- our interns gather together and see what they want to change and add. But, yeah, we would love to share that with anyone who is interested.

>> Kelly Hughes: Okay. And Maddie's contact information is available on the registration website. Not to put you on blast, Madelyn, but if folks want to contact her for that, please do.

>> Madelyn Herzog: Yes.

>> Kelly Hughes: Another question for Scott. How do you count for the dip two-thirds of the way through the intervention period? If you want to show the slide that's in reference, we can pass the ball back to you.

>> Scott Richardson: Great. It would be great if you could pass the ball to me very briefly, so I could pull up that slide. Okay. Great. I believe we're talking about this slide. That dip in the center there, which is essentially a step function down, if you look across the top of this chart, you'll see two arrows. One I call the inventory transition period and the second arrow is the inventory stabilization period. That dip reflects changes in sourcing of product.

You can see that there's a gradual reduction over the first half of the graph, and then there's that drop down. That is the result of menu changes and purchasing changes that were planned out well in advance. So, as I mentioned early in my portion of the presentation, these changes don't happen, you know, overnight. There are planning discussions that need to be taken into account and purchasing decisions that need to be developed over the course of months in advance. And a year in advance when dealing with the Federal Government and the commodities program. So that's what that reflects. That drop is March of 2016, I believe, and that reflects the abrupt change that happens that month after the inventory that had been purchased prior to that ran out.

>> Kelly Hughes: Thank you so much, Scott. So, I'm going to wrap us up. I'm sorry for those that -- for the questions that we weren't able to get to in the program. We will review the questions, the presenters will, and as appropriate follow-up with any participants to share answers via email. But I just want to thank all of our panelists today for their time and their effort in preparing these presentations for everyone and ensuring their knowledge. Also, I want to thank our sponsors. If this is your first time joining us for a sodium reduction web forum, please head over to NNPHI's website, NNPHI.org/sodium. We have the archived tools and resources.