## **EIC Podcast - Food Insecurity During COVID-19 Transcript**

Michael Donovan: On this episode of the Evidence-to-Impact podcast, we'll be discussing food insecurity during the COVID-19 pandemic from experiences here in Pennsylvania, as well as broader implications, deleterious consequences and future opportunities for combating these challenges, particularly for school age children.

Today, I'm joined by Dr. Muzi Na and Ms. Vonda Ramp. Dr. Na is an Assistant Professor of Nutritional Sciences and the Broadhurst Career Development Professor for the Study of Health Promotion and Disease Prevention at Penn State University. Ms. Vonda Ramp serves as State Director of Child Nutrition Programs at the Division of Food and Nutrition in the Bureau of Budget and Fiscal Management within the Pennsylvania Department of Education. I'd love to start with some introductions. Vonda, would you start us off?

**Vonda Ramp:** Thanks, Michael. I've been with the Pennsylvania Department of Education for about 19 years and State Director for about 12 years, always working in the child nutrition program. The child nutrition programs are federal programs funded by the United States Department of Agriculture but are overseen at the state level.

So, we sit within the Pennsylvania Department of Education. Prior to that, I was a clinical dietician and a food service director. My interest in the public health sector generated when I was doing my dietetic internship. I had an opportunity to work in school nutrition at that time.

And so I was very fortunate to have been able to obtain a job within the Pennsylvania Department of Education and worked up to the State Director position and just really enjoy working in the child nutrition program.

Michael Donovan: Excellent. Thank you. And welcome to the show. Muzi, could you introduce yourself?

Muzi Na: Of course. Thank you, Michael. My name is Muzi Na and I'm an Assistant Professor Department of Nutritional Science. I joined Penn State back in 2017. And before that I was trained in nutritional epidemiology at the Johns Hopkins Bloomberg School of Public Health. And after that I did my postdoc at UC Davis. So here at Penn State, I host a research program that tries to form a relationship between food insecurity, nutrition and a lot of different health outcomes, including sleep and mental health. So I do have different projects in different places of the world. So some here in central Pennsylvania. So, uh, thank you having me.

Michael Donovan: Excellent. Thank you both for being here today. Our conversation today really has its inspiration from an excellent blog contribution that Muzi coauthored along with Dr. Emily Homan and Dr. Jennifer Savage Williams for the Insights from the Experts blog which is a joint collaboration between the Penn State Social Science Research institute and the Center for Healthcare and Policy Research also known as CHCPR here at Penn State. That post was titled, "Food Insecurity in Pennsylvania During the COVID-19 Pandemic: Addressing Immediate Concerns and Opportunities for the Future." And of course, we'll have a link to that in our show notes today.

With that effort kind of as our starting point. Muzi, could you give us a brief summary of what has specifically happened in the Pennsylvania environment, what kind of operational hurdles, we've experienced and some of the effects on children?

Muzi Na: Thank you, Michael, for the question. Yeah, back in the day, when we wrote this blog, we were really fortunate to have this opportunity to look into the pandemic. Just looking at the date, it was almost a year before, and that time we don't have a lot of data related to COVID and food insecurity. But now looking back, we now have food insecurity rate doubled during the pandemic year, last year. So, I have to use data based on that prior data before the COVID data was collected, but it was very shocking to see the increasing trend there.

Michael Donovan: Vonda, really from your perspective sitting in state government, could you break down for our listeners? What exactly food security from your perspective, describe its prevalence in Pennsylvania, as well as any information you have on the national stage.

Vonda Ramp: Let's start with the technical definition of food insecurity, and that is not having reliable access to food due to financial resources. This is not the same as hunger. So, hunger is that physical discomfort or that sensation you'll feel. But food insecurity to really boil it down in sort of simplistic terms, it's when a household or an individual has to change their eating patterns due to financial resources. And this could come in a number of ways. It could be cutting down on the number of meals. It could be changing the types of foods that you eat. So, maybe eating less fruits and fresh fruits and vegetables, in order to save money, it could be decreasing the variety or changing the quality of food. So all of these, if that's the result of financial resources can be categorized as food insecurity.

So, the numbers right now are very volatile as a result of the pandemic and incredible fluctuations in individuals being in and out of jobs. But nationally about one in six children are estimated to be food insecure and there aren't real great numbers right now because although it's been a year that's a very short period of time. As of right now, it's estimated that one in six children are food insecure. This could have been as high as one in five in 2020 during peak of the unemployment. So, just to give a perspective of this, it was at its lowest point prior to the pandemic and only one in seven children were considered food insecure. So, two factors that play into food insecurity are unemployment and poverty.

Unemployment is definitely something we heard a lot about during the pandemic. And again, just goes into why those numbers are so volatile right now and can fluctuate so much from month to month or quarter to quarter. Pennsylvania really is sort of maintaining where the national average is, in about 22% of children fall into the category of being food insecure. So that is pretty much in line with where the national average is.

Michael Donovan: Muzi, from your perspective what groups are at some of the greatest risk or disproportionate risk being affected by it. And what causes this to happen despite efforts

to combat it. I know as Vonda pointed out the driving factors of poverty and unemployment. Could you expand on that at all?

Muzi Na: Yeah, I appreciate Vonda's comment. And I agree with her that poverty status and unemployment. It probably is the most primary reason for people being food insecure. Among the other risk factors, if we look at the USDA Annual Household Food Insecurity Report. We could find there are other risk factors related to food insecurity. For example, households with children, they have more higher prevalence of food insecurity than a household headed by single parent and also racial and ethnic disparities are still existing. And we know a household headed by people of color do suffer more from food insecurity, than a household headed by a white population.

And for the second question that you mentioned, why what is the cause? And why it, it has to continue despite the effort to combat it is a great question. And I appreciate it. Like people like Vonda and other policymakers, have shown great policy commitment, and we, in our country, we have one of the best food assistance system, I have to say. But in terms of the why part, I think there are a lot of complexities outside the food assistance system and outside the policy commitment. For example, neighborhood conditions matters. You will make sometimes, may not consider it, but if you think about food desert, is a term to describe how difficult people, are living in environment to acquire healthy food.

So, in some of the areas in our country where people simply don't have the option to acquire fresh produce, like fresh vegetables and fresh fruits. So, what can we do to really change the neighborhood conditions so that people can really have no barriers or lower the barriers for them to buy and access good food.

Michael Donovan: And Vonda, I'd love to bring this into the school setting. What are some of the particular challenges, in combating this growing challenge? And what are some of the best tools to combat it? As the last year plus has rolled out, we've had very unique spread of how schools have been closed down, and how that has affected families in very different ways. So, if you could just kind of put this into the school setting for us.

Vonda Ramp: Absolutely. So before I do that, let me just take a second to brag about the school meals. There was a study just recently released by the Journal of American Medical Association. I have to say, this is something that all school nutrition professionals should really be proud of. And I think it's a great segue from Dr. Na was talking about with access to healthy foods. What the study reported is that there has been a tremendous improvement in the nutritional quality of school meals. Based on the study results the poor diet quality from school meals decreased from 55% to 24% over the last 15 years. And when you compare this to grocery stores, the nutritional quality of meals from grocery stores or from restaurants is significantly better in comparison. That is really important as I lead into the, into answering your next question because so many children are dependent on school meals.

But just talking about those challenges. The other challenge is the access. So keeping in mind that for school meals, school is only 180 days of the year, and it can be anywhere from six to eight hours long. We want to ensure that students have as much access during the

normal school day. And you'll hear me say normal many times because as our listeners know, we're definitely not operating in normal school year type of setting, but in that normal school day, it's an important to ensure that students have as much access to those healthy nutritional school meals as possible.

That includes breakfast, lunch, and when possible there's the after-school snack program. So that covers the school day, but then there's also supplementary programs that help bridge the gap whenever school is not in session like the summer meal programs. So all of these are important factors in improving access to these foods.

The second biggest challenge then is stigma. The eligibility for the school lunch and breakfast programs are based on household income. So a student is either free, reduced or paid. And although this information is confidential, students tend to know, you know, what other students are and no child wants to be identified as poor. If you're an adolescent or a teen, it's much cooler, far cooler to skip a meal than it is to be considered looking like you are the poor student.

Muzi Na: just want to add a quick comment to Vonda's point and I'm so glad you mentioned the study. I was about to talk about it too, by Lu et al., published in JAMA Network Open. I was invited to, to write a commentary and I want to just comment quickly about the, how the COVID situation may complex the situation here, because when you think about school meals and picking up by the families when the schools are closed, and it sounds like, well, we found a solution, but maybe not, especially for the vulnerable population. Think about whether they have their transportation to go there and pick up the food, do they have the storage space to really store the food that's maybe provided in bulk? So, these are some questions we have to think about when things are suddenly changing to remote learning and while schools are closed. So, I just want to mention that really quickly.

Vonda Ramp: So, so true. So true because those are definitely some of the factors that we had to take into consideration as waivers came down from the USDA about being able to provide meals in a non-congregate setting. Because that is a situation we're totally unaccustomed to, is students show up to school, they get, they can get breakfast, they can get lunch right there on the school grounds. So, sending these meals home and worrying about food safety and worrying about that storage of multiple meals or bulk food preparation for families has never been in consideration before. So very true.

Michael Donovan: Another layer of this that Muzi and your other authors discussed in your post was the phenomenon known as hidden hunger and Vonda touched on the scarcity versus quality conversation, but could you explain the concept of hidden hunger, Muzi from a nutritional and kind of health concerns related to this. And my second question for you really around measurement. How do we really measure these effects across whatever population we're discussing?

Muzi Na: Yeah. So put it simply, hidden hunger refers to the lack of micronutrients in the diet. If you think about micronutrients, these are the nutrients that we need, essentially, we need them, but we need them in small amounts, such as vitamins and minerals. So when people's dietary quality is compromised, like Vonda mentioned, even when they're

consuming sufficient calories, energy. But they may have been put into the high risk of a micronutrient deficiency category. When we say it's hidden, because sometimes the symptoms may not show up until many, many days or even weeks or months or years until the deficiency is very, very severe, so that's why we call it hidden.

And back to your second question about measurement, I feel like this has been the challenge. When I was working in the global nutrition field, it's been a huge challenge because over the years we have been tracking people's nutritional status by weight, height, arm circumference, a lot of the measurement you can do in the field in large scale. But now talking about micronutrient deficiencies without biomarkers is really, really hard to track and assess. So, another proxy we could use is to assess people's dietary intake, but that again requires a lot of technology, techniques and, training. For example, the 24-hour recall method. We would have to follow the protocol and try to assess people's diet very carefully so that we can estimate their risk of micronutrient deficiency. So, we still have a lot of challenges in the field to assess those markers.

Michael Donovan: This set of challenges affects individuals and groups in, in different ways, and that barriers to quality nutrition vary across populations, socioeconomic backgrounds, developmental stages, geographic location, region. There are many different parameters of this that make it a very complex problem. Cultural factors for that matter. I don't know if Muzi or Vonda, could you elaborate on this and how these multifaceted features, lacking kind of a face to food security really affects its prevalence and its challenges in combating it.

Vonda Ramp: I think one of the things the pandemic really brought to light was the one paycheck away from hunger or not being able to pay bills. I think that unfortunately, the pandemic really made that surface and literally families of all categories that you mentioned were one paycheck away from not being able to go to the grocery store or pay their rent or pay their mortgage. The pandemic really showed that there's so many more faces to this issue than we would have ever believed imaginable.

One of the populations that we're always concerned about in Pennsylvania, due to our geographic diversity, is the rural population. So, just talk about that one briefly, because as Muzi has said a little bit earlier is that transportation for that rural population can be quite challenging. When you have school students that are not in school, how do they get access to the meals that the school is providing?

If the family is working or if there's only one car and one of the parent members have that car to go to their employment and it's especially challenging in the summer months. So we talked about those programs to help fill the gap when school is not in session.

So those programs that operate over the summer months are spread much more sparsely than during the school year. How do you get children in those rural populations access to those meals?

Muzi Na: I want to maybe add from a different angle, through the different life stages perspective. So we have talked about school children, but think about preschool age

children, or even infants. They're taken care to by adults, so they have no ability to acquire food or secure their food security by themselves.

So, that really depend on the adults, caregivers, feeding practices and other skills so that they know how to feed the children properly. In our study, we have found that feeding practices related to food insecurity status. So if you are food insecure, you're more likely to adopt more inappropriate feeding practices.

And we also found there was another dimension related to food insecurity and feeding is the food resource management skills. You can think about those skills as a way to buffer or stretch the food dollars to last longer. So if they're educated or if they know how to better use their money, even the limited resources, it's related to better feeding their children. So thinking from the vulnerable population, like young American children in our country, we have to think more carefully about how to properly educate the food insecure population so that they can take care of themselves and also their dependents.

Michael Donovan: Thank you. That's very important to think about the broader developmental stages that experience in different ways. I would say that to look at governance and command and control of authority in Pennsylvania around education, thinking of that as complex would be an understatement, thinking through the over 500 school districts in Pennsylvania. And Pennsylvania being a local rule state where authority is often vested in the school districts themselves and their school boards. With that in mind, from your position at the Pennsylvania Department of Education, what kind of programs and policy levers do you have and how do you work with school districts themselves to try to tackle food insecurity, particularly during the COVID 19 pandemic, but broadly. And also how does the Pennsylvania Department of Education interact with other agencies and departments on an inter-governmental and intra-governmental level?

**Vonda Ramp:** Let me first frame this up and say that the child nutrition programs are federal programs. And so, as I said at the beginning, they're under the United States Department of Agriculture. At the state level, they're administered through the Department of Education and more specifically in the Division of Food and Nutrition.

So, let's talk first about the pandemic, and then we can talk more broadly about the program in general, hopefully post pandemic in the hopefully near future. The pandemic, as we had talked a little bit before has really stretched the ability to access the child nutrition programs. As I said already, it's sort of a captive audience, right? Because kids come to school and then when they come to school, they have access to a breakfast and access to to a school lunch. But the pandemic has really stretched that access. So it's hard as schools have worked, and let me tell you, we saw schools from the first day of the pandemic. So the schools were closed on March 13th. We saw schools on March 16th up and running what we call "grab-and-go".

But with all of the hard work that schools did to try to ensure that their students still had access, only half the number of meals are being served compared to a traditional school year. And that's given all of the flexibilities that have been passed down from USDA. So, we're up to about 83 national waivers from USDA, because keep in mind these child

nutrition programs are very regulated; where you may serve, who you may serve, when you may serve. So there's all kinds of time and place limitations. In order to accommodate the public health concerns, there had to be a lot of a lot of flexibility and that flexibility came through in the form of national waivers.

So, we're up to 83 national waivers right now, those are nationwide waivers. That doesn't even include state specific waivers that that we had applied for. Even with all of those waivers in place that allowed for the grab-and-go meals that allowed for traditionally we operate the national school lunch program at this time of year, but that's based on free, reduced and paid lunch categories. One of the waivers was to allow the summer meal program to continue in non-summer months, and that allows for all meals to be accessed for free in areas that are considered economically eligible. Well, so that brought about another waiver because geographic areas that wouldn't normally be eligible and don't normally meet the criteria in this pandemic situation were certainly meeting the criteria due to the large number of layoffs and economic implications as a result of that.

So, that was one of the other waivers that USDA provided. And so that was area eligibility. But in addition to that, then you need non-congregate waivers because usually kids have to eat in the school setting or they have to eat at the setting where the meals are provided. They cannot take meals off site. Well, obviously that wasn't safe in a pandemic. So it was really necessary to have those non-congregate waivers, and that way families could, or students could come and pick up meals and then take those meals back to their home or where students or families couldn't come up and pick up the meals, schools were able to deliver those meals to families' houses, or where parents didn't feel safe for their children to come out, parents could come and pick up those meals.

But one of the things that we realized with all of these waivers is that the child nutrition programs in their traditional sense are not well situated, obviously when it takes 83 nationwide waivers and a number of different statewide waivers, they're not well-positioned to serve in an emergency situation. So that's one of the things that possibly at the federal level, because again, being federal programs that could be a potential, outcome of the pandemic to prepare us better in the event of other emergencies. Doesn't have to be a pandemic, but certainly there's statewide emergencies all over the place.

And then just kind of bringing this down to outside of the pandemic. Prior to the pandemic Governor Tom Wolf was very committed to food security and that's one of the first things he made a priority, whenever he took office, and he established the Food Security Council. So increasing access to school breakfast has been important to both him and the first lady and they've committed their time and concern and efforts to promoting school breakfast, to ensure greater access across the state. And I'll say, one of his biggest concerns, once the pandemic hit was making sure that children continued to have access to food during the pandemic. At the state level, it's definitely a priority to ensure that kids have, this continued access and obviously, in the Department of Education, definitely a priority. Our Acting Secretary Ortega, definitely a priority for him, and was a priority for his predecessor. The Division of Food and Nutrition is definitely committed to ensuring that we implement as

many waivers that come out from USDA to just continue to promote that access and ensure that kids have access to the meals.

Michael Donovan: That's really some wonderful programs and efforts Commonwealth-wide. And Vonda, you really kind of got at some of my next question. I was trying to think through from both of your perspectives, how could we look for opportunities to improve access to healthy, affordable food, throughout the continuing pandemic and the economic downturn that we've experienced, you've already noted that some agility and flexibility in regulation in order to permit those waivers to allow for changes on the ground. I wonder if we just had any brainstorms about what are some low hanging fruit, if you'll forgive me the pun here.

Vonda Ramp: Well, I'll just start off in just reiterating having that flexibility. So it might not be waivers as they look like today, and it might be different types of waivers that are needed and different types of types of flexibility that are needed as we sort of emerge from the pandemic. Some families may recover quickly, but other families that might take longer, and we don't know what exactly the school environment is going to look like next year either. And especially coupled that with personal family choice of what they want their school environment to look like. 'Cause you know, they absolutely have the ability to decide if a child will be in school or out of school. So keeping that in mind that we don't know how long this recovery is going to take that flexibility is definitely going to be necessary.

One of the things prior to the pandemic that worked quite remarkably is the Community Eligibility Provision. And that is where all kids in a school setting were able to eat both breakfast and lunch for free if that school qualified based on their free and reduced population. If this school qualified all of the children without need to apply were eligible to receive meals for free. We talked about access in those schools that participate in CEP, participation increases. The biggest thoughts to why that is, is because it takes away the stigma and it just makes meals part of the school setting. It's not you don't get school meals because you're free of reduced, it's because it's just part of the school setting. Everybody gets them for free. So, it takes away the stigma, increases the access as a result. Continuation of those types of thought processes and programs, I think could definitely benefit the general population that could be very susceptible for the next several years as a result of this.

Muzi Na: Yeah. And low hanging fruit is probably tailoring interventions and start to make small changes. For example, we can probably better inform the population by providing the understandable information about the food. one project I always feel very proud of from Johns Hopkins, where I was trained is a group of colleagues, they want to go out and change the Baltimore carry out environment. And what they did was to include a very colorful and understandable sign on top of the food choices. So the food is promoted and people are buying it. It's working. A lot of the time, when we think about the barriers, there are a lot of multifaceted barriers, but we can probably start from the smallest change in work from there.

Michael Donovan: That's an excellent point. And I, I will say with full disclosure, my fiancée is a, a ninth-grade health and wellness teacher. So the education piece is vital in this household. No doubt about it. Because this is a common theme of our show, I always love to

think about opportunities to better collaborate, better create an environment for collaboration between our government partners and the academic community. So I just want to pose that question for anyone. What are ways that we could brainstorm how to better connect to shorten the distance between our academic work and our daily work and communities in a policy environment? So that that's for anyone. So feel free to jump in if you'd like,

Muzi Na: Yeah, maybe I can start. And, Vonda, I'm happy to learn from you, what do you need from a policy makers perspective, but from a researcher working in the university, I think we probably could do our best job to provide and generate high quality data. And I think it's very helpful for the policymakers to make data-driven and evidence-based decisions. So I'm thinking the data from different levels. So at first, we could monitor, food insecurity more closely. And now I think everyone, probably more people understand the term food insecurity than before the COVID-19 era. We have talk about COVID 19. It has posed a lot of risks, increased risk for vulnerable people to have food insecurity, but it's actually a bi-directional relationship. You think about food insecurity population maybe are more susceptible to get COVID-19 through different mechanisms.

So one is they could have a compromised immune function because of the lack of micronutrients. They're very active working to support immune function. And the other thing is a lot of the people who have food insecurity also have co-existing chronic conditions, and we all know obesity and cardiovascular disease may already put them at higher rates for COVID. I think that we're in a very challenging COVID-19 era, but we are also facing a lot of opportunity to raise the public awareness about the importance of tracking food insecurity because it really matters in terms of our health and in terms of future life quality.

Other things we could do as researchers probably would be to better design epidemiology study, like the things I do, and also test the novel interventions in the real community, in the real world, and try to maybe imply future policy change and programming change toward improving diet and health in the population.

Vonda Ramp: Muzi, you said that beautifully. I don't know that I have a whole lot to add to that because you sort of captured it all. I think the perfect example is how we started off today and the JAMA article, because school meals do have a negative connotation to them that they're not healthy, but that's based on school meals from years ago. That type of research and bringing it to practicality. Those things go a long way in giving parents that, that comfort level to be able to rely, but also encourage their students to participate in school meals. Oftentimes, there's a number of different reasons and this is where academia can definitely be a benefit to policy just to help us better understand: why do children not participate in the school meals? What is it about the stigma, but what is it besides that? Is it not enough time to eat? I can tell you from my own children, my 14-year-old does not want to lose social time to go stand in line to get his meal.

And that's definitely exaggerated even more now with COVID because there has to be such a separation and more time given. So definitely losing that social time is I can tell you from a young teenagers' perspective is very valuable. But what are the other things that prevent the children from accessing school meals and not just school meals, but the other programs

that are offered, those programs I referred to as bridging the gap, like the summer meal programs, after-school programs. I think just continuing to work together. What is it that you want to know? What do you want to know? And where would you like to see these programs go? Oh, okay. This is, this is how we can support that with our with research.

Muzi Na: I really look forward to collaborating with you and your colleagues in the future.

Vonda Ramp: Absolutely. I look forward to it as well. Thanks for introducing us, Michael.

Michael Donovan: Of course, of course. We've got to get working on a collaborative research agenda here. We've had such a wonderful discussion today. Thank you so much. I do want to give each of you the opportunity for any closing thoughts. With that I can open the floor to anyone.

Vonda Ramp: I'll just close with saying unfortunately the pandemic has really brought attention to the issue of food security and how vulnerable our population is, that we never thought would have been so vulnerable. And has definitely also brought attention to the need for support systems and one of those support systems being child nutrition programs, and there's other wonderful support systems out there, like WIC and like SNAP. Coming from the child nutrition programs. But it brought attention to the importance of those and just having that continued support for those programs in their current state, but also in a state that, that maybe helps take these programs to the next level to create better access in all types of situations.

Muzi Na: Yeah. I want to say it was heartbreaking to see the lines of cars lining up to get free meals from food banks, from any assistance programs. I just feel like we have talked about hidden hunger, but I just feel like food insecurity was a hidden problem maybe before COVID, but now it's on the news. It's everywhere and people are aware of the problem and it's a mixed feeling. I feel good because the problem is being exposed and people are paying more attention to it. And we had this conversation today and try and move to move things forward. But also I feel our responsibility may be to really help advance the knowledge, advance the science, and really deliver the scientific evidence to help the vulnerable population in the future. I just feel like I'm very lucky to be sitting in Penn State, and I have food security and I can work on this important issue and I feel very grateful for it. And thank you for inviting us, Michael.

**Vonda Ramp:** I think Muzi said that really well in just in my own words, just being able to be part of the solution, it's a rewarding feeling in a very difficult situation and a difficult time for everybody.

Michael Donovan: Well said by both of you. Thank you both so much for your time today and for your continued work in this incredibly important area. With that we can conclude our conversation. Today we were joined by Dr. Muzi Na and Ms. Vonda Ramp. Again, Dr. Na is Assistant Professor of Nutritional Sciences and the Broadhurst Career Development Professor for the Study of Health Promotion and Disease Prevention at Penn State University. Ms. Vonda Ramp serves as the State Director of Child Nutrition Programs at the Division of Food and Nutrition in the Bureau of Budget and Fiscal Management, all within

the Pennsylvania Department of Education. Thank you both for your time today and thank you for your continued work.