Nourishing Communities Part 1: What is Food is Medicine? The Latest on National Initiatives

CMEO Podcast Transcript

Monica E. Peek, MD, MPH, MSc:

Hello and welcome. On behalf of CME Outfitters, I'd like to welcome and thank you for joining us in the first of a series of three CMEO Snacks titled “What Is Food Is Medicine: The Latest on National Initiatives.” This CMEO Snack series is supported by an independent medical educational grant from CVS Health. My name is Dr. Monica Peek, and I'm the Ellen H. Block Professor of Health Justice at the University of Chicago, where I also serve as the vice chair of diversity, equity and inclusion. I'm really thrilled to be joined today by my friend and distinguished colleague, Dr. Seth Berkowitz, who is a leader. He's a health services researcher in the area of food insecurity and how it relates to health and health outcomes. Seth, welcome and I'll let you introduce yourself further.

Seth A. Berkowitz, MD, MPH:

Great. Thanks so much. I really appreciate being here. So yes, I'm Seth Berkowitz. I'm an associate professor of medicine at the University of North Carolina at Chapel Hill. I'm a primary care doctor in my clinical work and I do research around both social determinants of health and health-related social needs like food insecurity, and then also research around how programs to address food insecurity can improve health and health outcomes.

Monica E. Peek, MD, MPH, MSc:

Great. So to frame our discussion today, I'm going to first start by reviewing our first learning objective for the first portion of our CMEO Snack today. And so our goal is that after the CMEO Snack, you'll be able to identify the impact of “Food is Medicine” approaches on health care disparities. So with that, I'm going to turn it over to Seth.

Seth A. Berkowitz, MD, MPH:

Great. So I want to start off just by talking about the prevalence of food insecurity in the United States. So food insecurity, as many of you probably know, is uncertain access to the food needed for an active healthy life. And unfortunately, the prevalence of food insecurity has been increasing in the US. So both last year and the year prior, we've seen substantial increases and now about 47 million Americans are affected by food insecurity each year, which is about one in six of the population. So it's really a growing problem. We also know at the same time that there are many diet-related illnesses in the US that have substantial impacts on both health and spending for healthcare. So for example, around 40% of the US has pre-diabetes. Over 10% of the US has diabetes. Over a third of the people in the US have a cardiovascular disease that may be related to diet.

In terms of spending, almost $200 billion in a given year are spent on obesity related conditions. And that's just one of the many diet-related conditions that food insecurity effects. And in total, what this means is that for each family in the US, there's about $2,500 per year in extra healthcare spending if that family is food insecure compared with if they were not food insecure. And so what this tells us is that food insecurity really presents a big toll on health in the US, or it leads to a lot of potentially preventable healthcare spending.

So then the question is, well, what can we do about food insecurity? And particularly in the clinical setting, one of the answers has been something that we're coming around to calling “Food is Medicine.” So a natural

question is what is that? And so I think of “Food is Medicine” as really being sort of the intersection of healthcare and the way that food and nutrition can impact health. So a definition that is sometimes used is that “Food is Medicine” is the provision of healthy food to prevent, manage, or treat specific clinical conditions in a way that is integrated with the healthcare sector.

In that sense, “Food is Medicine” is sort of a subset of what you might consider population health nutrition. So if you think of population health nutrition as being the totality of ways that diet and nutrition programming can affect health, one part of that is this sort of healthcare system intersecting part that we term “Food is Medicine” where you're really not just using food or nutrition programs to promote overall health, but you're really using it for specific clinical management goals, whether that's to prevent a particular condition or to help manage it once it's occurred. And what “Food is Medicine” tries to do is recognize that nutrition is a key part of optimal management for many conditions and supports that by providing healthy food resources in the context of an overall treatment plan for people. And so it winds up having a lot of connections between both the healthcare system and also the larger food system and community-based organizations that help people access healthy foods and achieve food security.

There are a number of important principles for population health that relate to nutrition and lessening the burden of diet-related illnesses. One is that good nutrition is really sort of an essential precondition for good health and wellbeing. We know that across many types of aspects of health, whether those be physical or mental or behavioral health and throughout the life course, that nutrition plays a key role in many of these outcomes. We know that's important to facilitate access to healthy food across the entire continuum or spectrum of health conditions, whether that's to prevent the occurrence of disease or once the disease has occurred, to help mitigate the consequences of it and prevent complications and more health impact. And so “Food is Medicine” programs are often designed to support disease prevention, chronic and acute treatment and promoting healthy outcomes overall.

Also, it's important that people understand the relationship between nutrition and health, but also recognize that this isn't solely a behavioral issue. There are a lot of structural factors, things that are sometimes called “social determinants of health” that influence the context in which people are making decisions about acquiring food and consuming food. And so this is not simply a problem of teaching people the right things to do, but really making sure people are in the context where they can make healthy choices and have the financial resources and the access to food to be able to do that. Because of the complexities of diet and health, what this means is that we really need partners from a diverse set of disciplines and with a diverse set of perspectives in order to do this well. Some of that will be clinical- and healthcare-based, but many of the partners will be outside of the traditional healthcare system in community-based organizations, in policy, in agriculture and other areas and sectors of the economy.

And finally, I think we have to recognize that though the burdens of food insecurity and diet-related disease are common across the US, those burdens are not distributed equally. And there are particular communities that experience these burdens more heavily generally as a consequence of systems of oppression like racism or sexism and other forms of social hierarchies that stratify people and make differential resources available to them. And the consequence of that often is health that's been harmed by poor nutrition.

I also want to just mention some recent developments in this area. The US Preventive Service Task Force is in the midst of completing an evidence review about whether screening for food insecurity in clinical settings is appropriate. Right now, the view is that there's probably not enough evidence to support this, not because

there's not evidence that food insecurity is harmful to health, but because we don't know enough yet about what the best ways to intervene are. And so there's still a lot of work to be done to know exactly what the best way is to respond when someone reports food insecurity is. And so at this time, it probably doesn't make sense to be screening each and every person who comes through the clinic to do that. But that doesn't mean that when food insecurity is uncovered in the course of a clinical encounter, it's not important to do something about it. Individual clinicians certainly should do that, and it doesn't mean that we shouldn't focus on making healthy diets affordable and available to all people, even outside of the clinical counter.

Monica E. Peek, MD, MPH, MSc:

Excellent. Thank you so much for that power-packed primer on food insecurity and health and social determinants of health. One of the things that I know that you've done a lot of research on is the impact of food insecurity on health. So for example, diabetes, and that's one of the areas that I study and we both as primary care physicians treat a lot of people with diabetes. And so we know that people who are food insecure and have diabetes are more likely to present to the hospital with hypoglycemia as well as hyperglycemia and just have a more difficult time controlling their diabetes because a lot of times people are eating sort of in a feast or famine mode depending on when and where and how often they're getting money. And so that affects the regulation and their ability to regulate their blood sugar in an even level. And so can you talk a little bit more just about some of the kinds of research that we know about the impact of food insecurity on chronic diseases and health?

Seth A. Berkowitz, MD, MPH:

Yes, so I think this is a great example and diabetes is a very useful test case for understanding this, although I think what we've learned about the connection between food insecurity and diabetes is really applicable to many other conditions as well. But just as you say, food insecurity probably not only contributes to developing diabetes in the first place because the constrained dietary options that are available to people are often the least healthful dietary options. So in general, less healthful foods are cheaper on a per calorie basis than more healthful foods. You can think about how much a hundred calories of soda costs versus a hundred calories of broccoli or something like that. But also if you develop diabetes, then it really undermines management to a great extent. We think of the core principles of diabetes management are one, dietary change, and food insecurity clearly makes that harmful because of the lack of resources. And two, medication management, but food insecurity affects that as well.

Just as you said, it probably increases the risk of hypoglycemia because of inconsistent access to food interacting with the medications we use to monitor or to prevent complications from diabetes. It increases the risk of hyperglycemia because of the constrained nutritional options that people face. It probably contributes to cost related medication under use because people are often facing trade-offs. They may be trying to decide whether they're going to put food on the table or fill their prescription. And if you're taking care of a family, putting food on the table is probably going to win. And so there really are a lot of harms that are done there. And extending on from the example of diabetes, you can think of very similar things playing out for blood pressure control, for chronic kidney disease, for chronic liver disease, congestive heart failure, many things that are diet sensitive and require medications to mitigate the long-term consequences of food insecurity puts people in difficult positions there.

What we've learned is that interventions to address this probably can be helpful. And so the key I think is to make healthy food resources affordable to people. There are different ways to do that. You can provide food directly, things like food pantry programs or medically tailored groceries or deliveries of prepared foods to people's home. Or you can provide resources for people to buy healthy foods, whether that's cash or a subsidy that allows people to buy more fruits and vegetables or something like that. And so there are a number of options that are available now to help mitigate some of these consequences.

Monica E. Peek, MD, MPH, MSc:

Yes. Excellent. And I'm going to thank you for providing a lot of the research that has supported a lot of this work. One of the things that I found that's been really interesting as an outgrowth of the "Food is Medicine" sort of movement is there has been a lot of support for local farmers, particularly farmers of color that are attached to or sort of affiliated with a lot of the academic medical centers because a lot of them are located in low-income communities of color. And so there has been a renewed interest in making connections with the community-based organizations that are focused on food, that are also focused on marginalized communities and sort of lifting those up. And so that has been, I think an additional, I won't say unintended consequence, but a consequence of this area that has ripple effects as far as increasing the economic vitality of the community and other things that can help support people in their daily lives that also sort of mitigates some of the economic insecurity that drives food insecurity.

And so when you had talked before about food insecurity sort of sitting within the larger context of structural racism and other kinds of barriers, I wondered if you could talk a little bit, sort of peel back some of these layers of what the real-world experience is of all of these organizations, the Farm Bill, the historic racism around some of these issues as we're trying to pull together an ecosystem that is working for our patients, but do so in a way that's also lifting up communities. Do you have any sort of thoughts or feelings about that?

Seth A. Berkowitz, MD, MPH:

Yes, no, I think these are all really great points and I completely agree that I think this is a situation where there can really be a win-win in the sense of both improving patient's health and health for specific individuals, but also at the same time, the way that we do that can really support communities more broadly and try to shift some of these more structural issues that are causing people to experience food insecurity and causing people to experience poor health in the first place. Just as you say, I think racism and other forms of oppression, one of the key ways that they operate as sort of extractive ideologies. The history of racism in US was rooted in labor relations and economic exploitation. And I mean even though the specific system of slavery has ended, one thing that's been is that racism is consistently deployed to the economic advantage of some individuals and the economic disadvantage of other individuals. And so I don't think it's possible to have a meaningful discussion about those effects without mentioning the sort of extractive role that some of this plays.

A key aspect of "Food is Medicine" is providing people with resources for healthy food, but there are a lot of different ways to do that. And I think we really do have an opportunity here to pick ways of doing that that may have additional impacts. Not only do they get those healthy food resources to people, whether with a food subsidy so people can purchase from neighborhood retailers or directly providing food and the programs could purchase from local food systems, local farmers and community organizations that are providing food in the community.

But I think that what we know is that there can be what's sometimes called an economics and multiplier effect where by increasing dollars spent in a particular community, even if those are initially on healthy food, that can have add-on ramifications. And so the money that is initially spent and does in fact provide better health outcomes through providing healthy food may in turn be used to also provide better housing conditions or also invest in transportation infrastructure in the area and lots of other things that can have spillover benefits as well. So I really do think there can be sort of a virtuous cycle where the resources that are initially coming in to support health through one pathway, the sort of food pathway, can wind up supporting health through multiple pathways.

Monica E. Peek, MD, MPH, MSc:

Great. Thank you so much. All right, so we're going to move on to our second portion of the program. And so our goal is that after this CMEO Snack, you can implement actionable strategies for the multidisciplinary care team to integrate “Food is Medicine” into your practice. And so again, Seth, I'll have you take it away.

Seth A. Berkowitz, MD, MPH:

Great, thanks. So I wanted to talk now about some of the innovations in “Food is Medicine” policies. This is really a very active area. There are a lot of groups that are interested in doing more about this, and we're starting to see support from some really large organizations that are trying to make this possible. The Department of Health and Human Services has recently made available a “Food is Medicine” virtual toolkit that really provides a lot of tools for communities to design and implement “Food is Medicine” interventions from measurement to best practices and implementation to reviewing the evidence about where these programs are most effective and what kind of intervention is most effective when. So I think that's a really useful tool.

That initiative through Department of Health and Human Services is one of the things that came out of the recent White House Hunger Conference. So in the fall of 2022, for the first time in about 50 years, the White House actually held a conference on and nutrition and health in the US. And that led to a number of initiatives both at the governmental level of which the new toolkit is one, but also commitments by organizations, private organizations and state and local governments to provide more support for “Food is Medicine” type programs. And really sort of centered around a goal as part of the Healthy People's 2030 program to reduce food insecurity and its effect on diet and improve the rates of chronic disease in the US by 2030. And so that's been really important I think in sort of focusing a lot of efforts on this topic.

And that has also led to a lot of innovation in health insurance design that has allowed for “Food is Medicine” programs to be covered benefits akin to other services like physical therapy or home nursing or things like that that expand the scope of what traditional healthcare is. It's not just what happens in a doctor's office or within a hospital, but really may allow for collaborations between the healthcare system and community organizations in order to make food more available. This has occurred both in state Medicaid programs often through 1115 waiver programs. We'll talk a little bit more about that. It's happened through Medicare Advantage plans, which can offer supplemental benefits to their members, and even some employer sponsored and marketplace-based insurance programs are now offering “Food is Medicine” programs as additional benefits and services to their members. So I think there's really a lot of growth in this area right now. Currently, the focus is on I think diabetes, chronic cardio metabolic conditions, the area where the evidence is greatest, but I anticipate that there'll be growth as we learn more about other clinical situations in which these programs are useful.

I mentioned Medicaid has sort of been a real driver of this and I think the 1115 waiver program has been a really important part of the development of “Food is Medicine.” Many people listening to this talk probably already know, but in case not, the overall goal of the 1115 waiver program allows states to experiment with insurance designs that serve as pilots or demonstrations likely to improve the goals of the Medicaid program, which is to improve health for low-income individuals. And so this has allowed states to thoughtfully test a lot of new programs and initiatives in the “Food is Medicine” space. And I think there are something like over 10 states that have currently approved waivers that involve a “Food is Medicine” component. I know there are a number of others that are submitted and awaiting approval. There's really been a lot of growth here. In recent years in Oregon and Arkansas and Massachusetts, California, North Carolina, a number of states have implemented “Food is Medicine” programs.

And I know something about the results in North Carolina where I am, and we've seen really positive benefits both in terms of improving health and improving patient experience, and also seeing changes in healthcare utilization and healthcare spending that are likely related to these programs as well. So I think that's been a really useful source of innovation in the “Food is Medicine” world. And I think a lot of what we learned will be applicable not just to Medicaid, but also to other types of insurance.

I also want to talk about some other developments in “Food is Medicine.” So there's a really innovative program that is done as part through the Indian Health Service. It's a produce prescription pilot program. And so that has started off small, was well-tested, was refined, and is now because of the positive results seen really expanded to provide a lot of benefits in native communities. In 2023, the NIH has put a lot of emphasis into understanding how hunger and diet-related disease and food and nutrition insecurity affect health. And so there's a good amount of research now ongoing about this and I think we're going to learn a lot about this in the upcoming years. And then also the Administration for Community Living has put out information that's really specific for interventions in older individuals who are a population that commonly experiences the health consequences of food insecurity as well. And there are a number of additional initiatives going on through a number of philanthropic and medical organizations as well. And so I think we're really seeing a lot of growth in these programs right now.

One of the things that always comes up when you're talking about “Food is Medicine” interventions is what is the value of these interventions? And people often mean that in a financial sense. I think it's important to distinguish sometimes what I talk about, about values-based care along with value-based care that not only do we need to pay attention to what our healthcare dollars are being spent on and what we're seeing as outcomes from that, but we also need to think about what we want for our patients. And certainly, I think access to healthy food is sort of a core need that all human beings have and so is well within the values of a healthcare system that is trying to promote health for everyone. But it's also important to think about the dollars and cents to some extent.

To this point though, I think it's important to keep in mind that the outcomes we're really interested in are improved health and that if there are situations with decreased healthcare spending, which I think does occur and there are a number of studies that support this, that is sort of the consequence of improving health, but the goal of the programs is not as sort of a cost-containment program, but is to improve people's health so they don't need expensive healthcare services in the same extent. So I think we shouldn't focus too much on viewing “Food is Medicine” as sort of a solution to the perceptions of excess healthcare spending in the US, but rather

see it as a way to improve health for people who are experiencing diet-related illness and then anticipate that that will in turn result in reduced healthcare spending just as people get healthier.

For this reason, I think it can be important to think about communities and patients who may be particularly in need of these types of services that "Food is Medicine" programs are going to offer and then find ways to connect people with community and healthcare resources to do that. However, in doing so, it's important to make sure that there's a financing mechanism in place for this. So the idea that there are lots of organizations out there with unspent budget and untapped demand that are just hoping for an influx of patients is probably a myth. Maybe it happens in some places, but that's not likely what's going on. Really, a lot of these community organizations are doing heroic work under very difficult circumstances and there are certainly more patients that they would be interested in serving. But to do that, we need to make sure that the financing is in place as well.

That ideally takes the form of covered benefits. And again, there are some examples where that happens, but in this sort of more nascent period, I think using things like grants and other more temporary funding mechanisms to fill in gaps is important as the revenue streams are sort of coming together.

I next want to talk about just the multiple groups that are involved in "Food is Medicine" programs. One of the things that I think is really exciting about "Food is Medicine" programs is that it's not the purview of any one specific discipline or type of individual. I think we want a multidisciplinary approach here. The patient is always at the center. Food is a highly personal thing. There are a lot of food preferences. It's highly bound up in culture and upbringing. And so there's no chance of having sort of a one-size-fits-all approach that's going to work. And so these things really need to take into clear consideration the preferences of the patients involved.

And then I think there are also multiple members of a clinical care team that have a role to play here, includes certainly a physician or a primary care doctor or other primary care provider like an MP or a PA, but also can include pharmacists, can include dieticians, can include social workers. And then I think there are also advocacy groups and the community-based organizations themselves that all need to be as part of a network. And so it really needs to be sort of a flat or sort of horizontal organization structure, not a hierarchy where folks in the healthcare system are telling everyone else what to do, but really a collaboration to have the best outcome.

Monica E. Peek, MD, MPH, MSc:

Exactly. That's a great, I think, landing point because so much of we talk about as primary care physicians is team-based care. And I think I talk about it so much more than I see it. I would expect that there would be team-based care everywhere as much as it has been in journals and we see the results of it and people are always mentioning it, but we have not seen the reality of true team-based care to the degree that it needs to be. And this is just another great example. It's not a chronic disease, but it is a chronic issue for people that sort of is intermingled with a chronic disease. And there's a role, like you said, for everyone. There's a reason that putting something around food on a prescription is powerful for patients, for physicians to be involved in that network, but not to have it all on the physician's responsibility because there are time constraints and there are other things and there are other people that have more skills and have different things to offer that may be more salient to that patient's experience.

And so this is all-hands-on-deck for all problems. And so I think that as we've seen with many interventions, having multiple people surround the patient with their loving arms has the highest chance for success. And so I love that approach. The other thing that you mentioned that I think is really important is the funding aspect. And

so some of I think the ability, the flexibility that Medicaid has offered with these demonstration projects is the ability for people just to take the money and do stuff with it. Whereas with some of the value-based programs, the way the finances are set up, there just isn't the upfront funding to basically build the healthcare systems of the future.

And so the work that's required to try and get grant funding and to do all of this are things that people like you and me may do to start an intervention and then try and sustain it or pass it off to the healthcare system, but it's not really the strategy that healthcare systems need to be thinking about if we're really going to be trying to lift off so many programs that are going to be addressing these needs in the space of value-based care. And I had never actually heard someone say, our values-based care. And so I love that I'm going to adopt that. If you hear me saying it a lot, I'll try and remember to say "Seth Berkowitz told me about that."

So I think that part of the funding mechanism, and one of the things I've talked about a lot is that we have to, as part of this, have upfront funding, not just the micro streams of how we're reimbursing, but funding for basically building this new system is going to be really important. And then I'll just pause and say, is there any comments or feedback you want to say about any of that?

Seth A. Berkowitz, MD, MPH:

No, I think that's totally right. We've seen it in certain states. Again, North Carolina is the one I'm most familiar with, but have talked about this in some articles as well that I think there really does need to be some capacity-building funding, particularly for a lot of community-based organizations, but even within the healthcare system as well to get programs up and running. And then you need to think about, after the capacity has been built, what is the funding for ongoing program operations? And there's sort of different models for doing that that I think mirror a lot of the discussions about how to finance other aspects of healthcare that all have sort of pluses and minuses and some trade-offs.

A fee-for-service funding model I think actually works well for organizations in a lot of cases because they sort of know that there's a connection to the volume of services delivered. It's all going to be funded at a particular rate, and so they can figure out what their cost structure is. They're not taking on risk, the knock on fee for services that you can get overuse of services. And in healthcare, I think we've certainly seen that. Whether this happens in these circumstances, it's not clear to me. I think we probably have more of an issue of underuse right now than overuse, and so that might not be such a big deal.

Capitation can be useful because that's sort of a continuous stream of resources that might be used more flexibly. It's not tied to a specific service delivery, but there can be risk there that if the volume of services required exceeds the estimate that the capitation rate basically is, then there could be problems there. And then value-based payment I think also can be useful, particularly in the sense of tying service delivery to achievement of particular outcomes. But if those outcomes are influenced by other factors that are not directly modifiable by the program, which I think in complicated situations like this, it is, then we could wind up over penalizing these programs for things that weren't really under their control. So there are strengths and limitations to all the different approaches, but fundamentally I think you need to have some kind of well-thought-out plan that provides both for the capacity building and set up phase, but also the sort of ongoing program operation phase to make it sustainable.

Monica E. Peek, MD, MPH, MSc:

Yep, absolutely. Well, our time is about up. Thank you for just a wonderful conversation. I'm going to try and summarize this with our smart goals, and those are goals that are specific, measurable, attainable, relevant, and timely. And so that's what we want our audience to try and take away and to be able to apply some to their practice. So our first goal is to recognize patients in your clinical practice who may be experiencing food insecurity to increase the number of patients with chronic diet-related disorders with whom you discuss the benefits of a nutritional intervention, to think about partnering with other members of your healthcare team to adopt a "Food is Medicine" approach to healthcare. And then last, to connect patients with community resources to government programs or other "Food is Medicine" interventions.

And so this CMEO Snack, just a little snack, is one of a three-part series and we hope that you'll take advantage of all of the short and focused activities in this series. These activities and a wide variety of activities and resources on food insecurity are available on the CME Outfitters Diversity and Inclusion Hub for both healthcare providers and patients. To receive CME or CE credit for today's program, please complete the post-test and evaluation and you'll be able to download and print your certificate immediately upon completion. So thank you again for participating through the audience. Seth, thank you for being the wealth of information that you are and for joining me today. I really enjoyed our conversation.

Seth A. Berkowitz, MD, MPH:

Yes, thanks so much. I really enjoyed being on. Thanks to CME Outfitters for putting this together. And Monica, always great to talk and hopefully we can do this again sometime.

Monica E. Peek, MD, MPH, MSc:

Absolutely. Thank you everyone for joining us and have a wonderful day.

