



Module 11: Food

Part 1: Public Health & Environmental Approaches to Obesity Prevention

So thank you for inviting me to speak to you today. I'm going to be talking a little bit about food access. And I work for the Food Trust in Philadelphia. My name is Allison Karpyn and I'm the director of research and evaluation.

The Food Trust has an interesting history. We were founded in 1992 and we really came out of the farmers market in downtown Philadelphia called the Redding Terminal Market which is an indoor market that houses a number of farmers and food stands and at the time the market was in disrepair. Folks were considering whether or not we needed to continue to have those kinds of outlets in the city. And so what we did was, actually our founder Dwayne Perry did was work to sort of revitalize the market. And through that process we really realized that more people in more communities across Philadelphia really needed access to healthy food. From that revitalization effort what we ended up sort of taking on was a number of new farmers markets. And the farmers markets were really geared toward communities who would be coming to the terminal but not be able to get there as easily.

And so our first farmers market was founded at Taskar Homes in 1992 which was a low income housing development. And from there we realized that the farmers markets were a great solution for many communities who were living without access to easy, affordable, nutritious food, but that the farm season is very limited in Pennsylvania of course because we have winter.

So what came of that was a big question mark as to where the supermarkets had gone. The question posed a number of times by community members. They really wanted to know what could be done to begin to bring these super markets back. And so in response we started to think carefully about what it would take to bring super market operators back. And today we have the supermarket campaign and the Pennsylvania Fresh Food Financing Initiative which I will talk about in a moment.

We also continue to do other work. So the school nutrition education programs that the Food Trust run are through a valuable resource called Snap Ed. And that is providing nutrition education to kids in schools, providing nutrition education actually beyond the school environment also into libraries in communities. But really a big program area for us is the school and youth based nutrition education.



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Another major arm of our work is the healthy corner store initiative. Today the Food Trust runs the largest healthy corner store effort in the country. About 650 stores are apart of that effort and we'll talk a little bit more about that in a few minutes as well. And then we house the farm to school regional coordinator so the farm to school movement is a broad national movement that has lead regions in each area of the country. And so the region for Pennsylvania and New Jersey and West Virginia Delaware and Maryland are also part of that region is housed at the Food Trust. And then we do consulting and research on our programs as well. So that's who we are.

So part one is of our conversation today is going to be about public health and the environmental approaches to obesity prevention. So what is food access in the US? Well what we know is from the United States Department of Agriculture and actually the economic research service have recently produced a report looking at how close Americans are to the nearest grocery store and from that they concluded that about 30 million Americans do indeed live more than a mile from a grocery store and therefore are essentially in need of closer access to healthy, affordable food.

At the same time we see the overweight and obesity epidemic in the US is increasing. And so at this point we realize that about two-thirds of adults and one third of children are overweight or obese. And of course the reason why this matters is because obesity is a major indicator for other diseases such as heart disease, stroke, type two diabetes, cancers, and other morbidities that are both costly in terms of our economy but also costly in terms of the loss of productivity and quality of life.

So now the Institute of Medicine has estimated that the cost of obesity is around \$190 billion last year. So when we talk about obesity we often talk about consumption. And what we know about overweight and how to prevent it is that it's about the calories that come in and the calories that go out. So if we look at the calories that are coming in, what we see is that Americans are eating a lot of French fries and a lot of pizza, a lot of sweetened foods. They consume about 53 gallons, about a gallon a week of soda. We have also a sodium over consumption about 47% more than what's recommended for sodium. And as we look at fruit and vegetable consumption, this chart is in pounds which is a little deceptive because I think a grapefruit weighs more than a candy bar but with that said a lot of our consumption is coming from French fries for example in the vegetable chart and from corn which are not the ideal green leafy vegetables or orange vegetables that I know the UFCA is encouraging.

When we think about obesity prevention in America. I find this chart from the Institute of Medicine is very useful in order to help to wrap your brain around all the moving pieces that we have to work within in order to start to make headway on this epidemic. So at the top of this chart you'll see some of the facts that I've already shared with you. How many children and adults are obese and the cost of obesity, but as we move down what you'll see is that the priority areas that the Institute of Medicine are focusing on include physical activity, so we're talking about bike lanes, places for



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people to play and then food and beverages. We've had a lot of conversation in this country about portion sizes. How portion sizes have changed or how they should change. How big is your container of French fries? How big is your plate physically and how that influences what you're eating?

Marketing is obviously also another big part of the conversation right now. What's appropriate in terms of marketing to children? How even is marketing happening in terms of what kind of information you're getting from your supermarket or from your corner store both healthy and unhealthy marketing.

As we move up to the other side of the slide now you can see that health care and the workplace is also major a priority. We're seeing more and more breast feeding programs being initiated in the workplace. We're seeing cafeterias in the work place starting to change, efforts to have the workplace encourage physical activity breaks or even alternative methods of working at your desk where people might be standing in order to be able to move more, take the stairs efforts.

In schools for a long time we've recognized now that schools maybe an ideal place to help kids understand both how to eat well and also to change the environment since they're in school for so many hours a day to encourage healthier behavior. So everything from physical activity to the cafeteria are priorities in schools.

And then when we talk about our community what we see is really a mix and a goal that people across the board will be able to have marketing that encourages them to eat better, have activity opportunities that encourage them to play and run and walk more, community plans that incorporate healthy opportunities for living and working. And then the supermarket and corner store which will provide access to affordable nutritious foods where they live or work.

So really where we fit in this system is more in that supermarket element. The CDC has come out with recommendations in 2009 looking at a number of different strategies. There's 24 total. What's highlighted here is really those related to food access, so improving the geographic availability of super markets, providing incentives to food retailers, and to improve the availability of mechanisms for purchasing foods from farms so these efforts to sort of aggregate food and be able to distribute it.

The Institute of Medicine has also issued strategies for obesity and prevention. We saw that big chart. We know that they have this framework in place that's looking at physical activity, the food environment, looking at how we can



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expand the role of health care providers and also making schools a focal point. The American Heart Association has also supported this idea of healthy food access being an important element in the fight against obesity. They have articulated the importance of creating a healthy food environment among other strategies.

Healthy People 2020 has set forward a few goals and these are really part of the focus of our conversation today. So the Healthy People 2020 as you know sets goals every ten years for what we would like to see happen in America and two key goals are to increase the number of states that have state level policies that incentivize food retail outlets to provide foods that are encouraged by the dietary guidelines for Americans and also to increase the proportion of Americans who actually have access to that food retail that sells a variety of foods. And these are mirrored incidentally in a new effort that the American Heart Association has put forward to promote healthy policies. These are echoed there as well.

So what are the learning objectives for this module? We would really like to see at the end that folks have an understanding of the connections between the built environment and health. At least a better understanding. We're going to talk briefly about current recommendations and practices and think about how progress has been made in the field to provide more access to affordable, nutritious food. And we'll do that in part by examining current research on food access strategies and also through describing the process of engaging stake holders and stimulating policy changes.

So as we talk about food access, it's important to think about what goes into our food system. So many of us are familiar with eating. That's an easy place to start and when you back out of eating you come to preparation and then you buy the food and the retailer. And that retailer gets the food from the distributor and the distributor gets the food from the processor who in turn gets it from the producer. So what we recognize is that really this is a cycle upon which we can intervene at any level. And largely where we are focusing is the retailer but of course it has influence across the spectrum.

As we kind of expand this in to looking at what a community based food system means, there we start to look at what the outcomes are for intervening on the food system in the center circle. So on the exterior circle what we seek to achieve is really community and social vitality. We want to see individuals and communities being more healthy. Looking at job creation which has been an important part of the retail components of what we've been doing. Economic development certainly, so as a super market goes into a corridor we see that not only is that supermarket offering jobs but often times the whole corridor is revitalized with new retail.

Thinking carefully about our environment and how what we're doing on the producing and processing arm of things not to mention really the retailing arm of things when we think about refrigeration which is a major part of retail, how that



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is interacting with our environment. And then thinking more about how our farms are maintained and what it means to keep a local food system are often also part of the conversation; so preserving our farms.

When we think about how then the environment influences obesity, we certainly have a lot of moving parts. And relatively early on this kind of framework was proposed and we'll go through a couple of frameworks now. Looking at all of the different elements that contribute to energy intake and elements that comprise energy expenditure opportunities. And what where we find through deserts here is kind of right in the middle. And again we're recognizing that the food desert and food retail and food access is one part of a broad set of strategies that will be needed to influence obesity.

So we use the term food desert which can be a relatively controversial term. Food desert to folks who live in the desert may not be a derogatory thing, however they're referred to in many places across America and in fact on the train today we heard people referring to food deserts. That really is referring to this idea that low income communities where a substantial percent of residents have low access to affordable and nutritious food is really what a food desert is. It is not unique to any one type of community so you can have a food desert in a rural or an urban or a tribal community. And actually many tribal communities do come up as food deserts.

As I mentioned earlier that 30 million figure the USDA and The Economic Research Service have produced maps articulating where food deserts are across America and you can find it at this URL and you can easily search your location to see whether or not you are living in or near a food desert.

So one of the questions that I often get as we think about food deserts and the environment is really why this approach. So for a long time and honestly still today when we think about obesity prevention. Many folks think about what they see on TV or hear about in the news which often is strategies closer to diets. So how come we're not just putting people on diets if we want to have people lose weight. And this chart really describes the reason why.

So what we recognize is that through the research the strongest correlates we have to obesity are really on that very bottom ledge of the largest frame bottom of the pyramid. And so we know that having a family that is struggling with poverty, who may be a lower level of education who may not have secure and stable housing and generally is facing inequities in society is going to be much more likely to be obese than someone who isn't. However we also recognize that solving the poverty problem in America is probably a long term and broad, complicated challenge. So short of that, we kind of step up a level and say what is really the role of public health to broadly support the health of Americans. And where we come into is this idea of changing the context.



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How do we help support Americans in a way that makes the healthy choice, the easy choice making the default decisions healthy and supporting that sort of easy access to affordable nutritious food, so that they may not even realize that they're saving calories each time they make a decision and the decision in many ways is made for them at least in an easy access way.

And then as you go up the pyramid, you'll see that there continues to be a recognition for the role of clinical interventions and counseling and education but you're certainly going to have a smaller impact in terms of the number of people you can reach through those modalities with the same resources.

The ecological framework is one that we often use in public health and you may be familiar with but this particular model thinks about how the individual is nested within a context of their relationships with others. The interpersonal piece and how those relationships and they sit within institutions or organizations. You might think of your work place or perhaps even a hospital system. And then how those organizations are nested within a community. We talk about community planning. How far do you have to walk? We live in Philadelphia where there is a very walkable community but many cities across the US have a lot more difficulty getting from place to place by food. And then of course the public policy is that either detract or support from that easy access.

So as we kind of step out from this framework thinking about obesity prevention we acknowledge that individual factors do play a role. People have beliefs, and values, and habits. They may even have biologically determined preferences for taste. Hunger. I know lots of little kids who can't wait to get their hands on sugary foods and at the same time kids who won't touch a bar of chocolate if their life depended on it and there just seems to be these biologically determined preferences.

We also see that at the interpersonal level people have specific experiences with shopping for example. We hear all the time that certain stores have different options or maybe even treat me differently than others. You have preferences for food. You have relationships with food. Food people often have events where they always bring the same food. Right? What's a birthday party without a birthday cake?

Institutional and organizational examples include those making healthy options available and many institutions now are setting policies so that you have only healthy items available during meetings. We're seeing vending requirements going into place so that that institutional organizational role is being changed to promote health.



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At the community level, we're really focused on the built environment. That's increasing access both to healthy food and also to physical activity opportunities, talking about jobs and economic growth, and how the norms in the community might change. And at the public policy level then we're thinking about how the policies can influence all these other levels in order to maximize the health impact.