Questions and Answers

What are your recommendations for broader monitoring of the food environment over time on a macro-level? Specifically, if a health department is trying to create an indicator for food environments over time across geographic areas.

I would recommend thinking about which sectors you want to be working with over time (e.g., schools, hospitals, supermarkets) and then matching your measures to that. When thinking at the macro-level, there are still micro level constituents underneath. You won’t be able to collect detailed data on the whole food environment, it is just too vast, so you should think about what measures you really want to focus on (e.g., sugary drinks, sodium, water access) and develop indicators that can span a variety of different sectors. The great thing about using direct observation is that you can use the same measure across a variety of settings, which can help you directly compare data across sectors. Additionally, you can train your data collectors to ensure you are getting high quality data that is collected systematically over time, rather than relying on self-report.

How do you deal with high turnover rates when trying to create changes in the beverage environment, specifically as it concerns keeping healthier beverages at eye level? Oftentimes, the high turnover rate can change the food and beverage environment changes that you agree to with the vendor, especially when you don’t own the vending machine.

One strategy is to do a quick self-audit at the beginning of the week. It only takes about five minutes and you can assign the task to an employee, or even an intern, who would be responsible for checking that beverages are arranged in the way agreed to with the vendor. If you find it’s not stocked properly, you can call the vendor to give them feedback – once they’ve heard from you a few times they may start to stock the machines properly on their own. This is of course dependent on how much control you have – if you own a contract with a vendor, then self-audits can be an appropriate solution, but it might be more difficult in a corner store or supermarket setting if you aren’t in control of what is placed in the coolers. A plan-o-gram can also be helpful - a plan-o-gram is a diagram of how the cooler should be stocked, which can be taped to the cooler to make sure no matter who is stocking them, they are stocked in the way that they are intended to be.

How can you do a lab nutritional analysis of food and beverages with limited resources?

Direct lab estimates of nutrients can be very resource intensive. For the purpose of program evaluation, nutrition analysis is typically done using existing information from package labels, websites, menus, and nutrient databases, like the USDA Standard Reference. In some instances, it may be valuable to get direct estimates for certain nutrients (e.g., sodium) in a subsample of foods and compare them to your rough
estimates. However, in general, direct lab analysis is probably not the best use of evaluation resources since other methods using existing data can provide valid estimates of nutritional content.

How do you classify a beverage, like V8, when evaluating healthy beverages? While it may be low on sugars, it is high in sodium.

The REACH project uses criteria developed by the Boston Public Health Commission, which classifies beverages as red, yellow, or green, primarily based on sugar content, and not on sodium. V8 is one of the few beverages that is high in sodium, and there are similar debates around milk and whether fat content should be considered. In terms of beverages, the primary focus has been on sugar mainly to keep the message simple for consumers and because most of the evidence on beverages shows that sugar is the main driver of poor long-term health outcomes.

Would you exclude yogurt that has added sugar from consideration as a “healthy food” in vending assessment schemes?

For yogurt, the distinction is usually with regard to fat and/or added sugar content. Since added sugars are not included on the nutrition facts label (at least, not yet!) there are a few ways you might choose to distinguish between yogurts with added sugars. You could exclude items with any added sweeteners in the ingredients list (e.g., juice concentrates, high fructose corn syrup, honey) or you could establish a reasonable cutoff for total sugars to account for the naturally occurring milk sugar (e.g., 30 g sugar/8 oz yogurt).

What suggestions or resources would you have for someone conducting a regional food system assessment?

A good resource is the United States Department of Agriculture Food Access Research Atlas. This interactive atlas provides food access data for populations within a census tract, which can be organized by different measures and indicators of supermarket accessibility. The USDA Food Environment Atlas provides a wider set of statistics on food choices, health and well-being, and community characteristics.

Additional Resources

Obesity Evaluation Toolkit and Webinar (Produced by Institute of Medicine):


If you are interested in learning more about the Harvard Prevention Resource Center direct observational assessment tools (primarily used for assessing cafeterias, vending machines, and water access), please contact Alyssa Moran at Alyssa.Moran@gmail.com.