Programs to improve diets may miss a cultural ingredient

Looking beyond grocery stores and nutrition guidelines

BY ELAINE MEYER

the2x2project.org

2x2.ph/culture-diet

In the U.S., low-income, ethnic minorities are more likely to be obese and thus at risk for a variety of chronic illnesses compared to white Americans. While public health efforts often focus on promoting healthier diets and improving access to grocery stores, they may miss their mark if they do not address a key ingredient: culture.

That is a takeaway from two studies of Hispanic women conducted by faculty at Columbia Mailman School of Public Health's Department of Epidemiology and collaborators. The research—one released this January in the Journal of the Academy of Nutrition and Dietetics and another that was recently highlighted in Latino USA—suggests public health efforts to improve diets can benefit from understanding cultural preferences.

"It's odd, if you read the entire literature on this topic, there are almost no studies where people just sat down with immigrant families and asked them what they want or what they believe is healthy food," says Dr. Andrew Rundle, associate professor of epidemiology at Mailman and co-director of the Obesity Prevention Initiative at Columbia.

Farmers' markets and slaughterhouses

For many years, Dr. Rundle has investigated issues of food accessibility in lower income minority neighborhoods in New York City, studying how availability of healthy food is related to obesity and other health measures. While it is a widespread belief in food policy circles that living in "food deserts" that lack grocery stores turns many ethnic minorities to a diet high in fat and processed foods, few studies have documented where lower income minority groups shop.

That was the goal of Dr. Rundle and his collaborator, Dr. Yoosun Park, an associate dean and professor at Smith College School of Social Work. (The two are also married). Dr. Park, who specializes in qualitative—research that analyzes the content of interviews—spoke with 28 immigrant Hispanic women to find out how where they shop to maintain a healthy diet.

"The big finding from that work was that the women really didn't trust supermarkets," says Dr. Rundle. The women placed a high value on freshness and locally sourced food and "didn't like the idea that there was food being chopped or frozen weeks ago, trucked across the country, that it sat in a freezer cabinet," Dr. Rundle adds. "They actually think food in the supermarket doesn't taste very good—that it's kind of bland and empty."

The women instead prefer farmers' markets, slaughterhouses, CSAs ("community

Cook for your Life participants with Chef Ela Guidon (second from left)

IMAGE: ANA CORINA AYCINENA/COLUMBIA UNIVERSITY MAILMAN SCHOOL OF PUBLIC HEALTH DEPARTMENT OF EPIDEMIOLOGY

In the U.S., the participants are 'constrained by the food environments in which they now live.'

supported agriculture" programs) and other "alternative food distribution systems," says Dr. Rundle, "in many ways because these were the systems they were used to in their home countries."

Further analyzing survey data from 345 Hispanic women, Dr. Rundle and his team found that those who lived nearer to farmers' markets consumed more produce than those who didn't and that living near a grocery store was not associated with increased produce consumption.

The study suggests that the hurdle for improving this population's diet is not in getting them to like eating fresh, healthy foods but in increasing access to the local, organic food sources that in the U.S. are typically more available—because of cost and location—to wealthier Americans. As the study notes, in the U.S., the participants are "constrained by the food environments in which they now live."

"What they are really talking about is local food, organic, locavore," says Dr. Rundle. "They said, you know what it's more expensive to buy food in the farmers' market, but the food is so much better."

Beyond the doctor's office and into the kitchen

The idea that food choice is shaped by cultural preferences was also the basis of a study of Hispanic women led by Dr. Heather Greenlee, an assistant professor of epidemiology at Columbia's Mailman School who investigates whether lifestyle behaviors can improve cancer outcomes.

Although Hispanic women are at greater than average risk of cancer, with low physical activity rates, poor access to quality healthcare, and high rates of obesity, they are the subject of very few cancer studies, says Dr. Greenlee. "This is a unique population in which to conduct these kinds of trials. Most behavioral breast cancer studies are among well educated white women," she says.

It is recommended that women with breast cancer eat a diet high in fruits and vegetables, but research has found that providing dietary recommendations alone does not lead to sustained changes in what people eat. Lower income groups are particularly less likely to follow nutrition guidelines.

Dr. Greenlee's interest was piqued when she came across a program designed to help women adhere to the recommendations. The program, run by a New York City-based nonprofit, Cook for Your Life, helps breast cancer survivors learn how to cook healthy and tasty food during treatment, tailoring classes to reflect the cultural background of participants.

Dr. Greenlee contacted Cook for Your Life founder Ann Ogden Gaffney—a breast cancer survivor herself—to partner on a study of a program for Latina breast cancer survivors.

Dr. Greenlee's team collected data from 35 participants in the program, comparing their progress to a group of 35 women who were read one brief description of the standard dietary recommendations for cancer survivors. Many were first-generation immigrants from Spanish-speaking Latin American countries who live in communities with poor access to quality grocery stores.

Conducted on Saturday mornings over a three-month period, a Cook for Your Life team made up of a chef and a nutritionist taught the women to cook Latin-inspired recipes using traditional spices and healthy ingredients, sometimes working in produce that seemed foreign to the group, like kale and Brussels sprouts. The program also familiarized the women with local markets and grocery stores that sold fresh foods and helped tailor the shopping trips to the women's budgets.

A typical Saturday morning might be spent at Washington Heights' Green Market choosing fresh produce, or at a teaching kitchen at the Columbia Teachers' College campus learning how to cook healthier versions of some popular Hispanic fare—for example, baking plantains instead of frying them, or using brown rice in lieu of white rice. "Once they get into coming to the classes and they love it, they just come rain or shine," says Ogden.

After six months the women in Cook for Your Life had increased the amount of fruits and vegetables by over 2.5 servings a day, though there was not a statistically significant decrease in the amount of fat consumed. Although the study was not specifically designed to monitor weight loss, the women in the Cook for Your Life program lost 2.5 percent of their body

Cook for your Life participants with Chef Ela Guidon (second from right)

IMAGE: ANA CORINA AYCINENA/COLUMBIA UNIVERSITY MAILMAN SCHOOL OF PUBLIC HEALTH DEPARTMENT OF EPIDEMIOLOGY

weight, compared to women in the control group who gained 3.8 percent.

At a Cook for Your Life session in March 2012 at Little Apple, a Washington Heights restaurant that specializes in healthy Dominican fare, the women spoke enthusiastically about how they had started substituting olive oil for corn oil and congratulated each other on weight loss. A participant said her new eating habits had inspired her daughter to eat less frequently at Wendy's and McDonald's. The family now seeks out grocery stores and markets for food rather than bodegas and fast food restaurants, even if those establishments are not as close to their home. "It's like how we eat in our home countries," a participant said.A wheelchair-bound breast cancer survivor shared some happy news to the group: she had just found out she was cancer free. She had also lost 10 pounds in the previous 6 months. Ela Guidon, the program's chef, teared up at these items of news.

"When you see what they are going through," said Guidon. "We are so encouraged by their commitment to changing how they eat."

Like Dr. Rundle's study, Dr. Greenlee's suggests that the impediment for her population is not necessarily living in a food desert. She points out that Washington Heights, where many of the women live, has lots of fruit and vegetables, including several green markets and outdoor produce stands. "You just have to know where to go and what you can afford. We showed our study participants that they can afford to buy healthy foods in their own neighborhoods."

Policy implications

Results from both studies have larger implications for policy and medical research and practice. Currently, the departments of agriculture in New York and New Jersey have programs to help farmers grow foods for ethnic and immigrant populations in New York City, which could be expanded. There also could be the possibility to expand New York's "health bucks" program, which gives people using EBT—also known as food stamps—additional dollars for shopping at participating farmers' markets.

Meanwhile, policies New York City's Fresh Initiative, which incentivize grocery stores to move into low-income neighborhoods, might be missing the mark. Unlike Whole Foods and other supermarkets that cater to wealthier New Yorkers, those that move into low-income and immigrant neighborhoods tend to sell food that the people in Dr. Rundle's study perceived as of low quality.

Dr. Greenlee says her study demonstrates why it is important to conduct more research into minorities and lower-income groups. "If we can demonstrate that behavior change interventions can work in vulnerable populations, I think it's easier to extrapolate our findings to non-vulnerable populations. Whereas if we conduct our research in non-vulnerable populations, it's very difficult to extrapolate our findings to vulnerable populations.

"We hear clinicians say, 'nobody changes their diet, you can't do it,'" she adds. "I think we've shown that assumption to be wrong. We can be successful. We can design interventions that are testable in underserved populations, and there's a lot of work to do here."