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Engaging Ethnic Restaurants to Improve Community Nutrition Environments: A Qualitative Study with Hispanic Caribbean Restaurants in New York City

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ABSTRACT

This study used interviews with New York City Hispanic Caribbean (HC) restaurant owners, managers, and cooks/chefs (n=19) to examine perceptions concerning the healthfulness of the HC diet and diet-related disparities in the HC community, and document factors potentially influencing their engagement in community nutrition interventions. The interviews revealed high awareness of diet-related issues. Respondents had mixed notions concerning their role in improving community food environments, noting important barriers for collaboration to consider in future interventions. The study underscores the important role of ethnic restaurants, providing information to facilitate engagement with this largely untapped sector in immigrant/ethnic communities in the US.

KEYWORDS

Restaurants; Hispanic Americans; health promotion; obesity/prevention & control; qualitative research

Introduction

The success of nutrition interventions seeking to improve individual eating behaviors is best ensured in food environments that support healthy food choices (Malambo et al. 2016; Story et al. 2008). Interventions to improve local food environments have mostly focused on the retail sector, including increasing healthy food availability through farmer's markets, supermarkets, and corner stores (Adam and Jensen 2016; Gittelsohn, Rowan, and Gadhoke 2012; Penney et al. 2015). While these approaches aim to improve the foods prepared and consumed at home, eating out is increasingly common in today's society, accounting for 43.1% of food spending among American households (ERS 2017).

Restaurants are part of community food environments, influencing local food availability and access (Malambo et al. 2016; Martinez-Donate et al. 2016). They can serve as vehicles of culinary innovation diffusion by

exposing patrons to new ingredients and preparations, and potentially changing social norms to motivate healthful eating practices and the foods cooked at home (Barbas 2003; Berris and Sutton 2007). Public health interventions and policies targeting restaurants have sought to improve food choices through efforts to restrict choice (ex. trans-fat ban law) or guide choice through pricing schemes, point of sale promotion of healthy options, and providing information (ex. menu labeling) (Hillier-Brown et al. 2017). Most of these efforts have targeted large, corporate restaurants (i.e. chain-based establishments, such as McDonald's) (Espino et al. 2015). A few studies have targeted smaller (non-corporate) restaurants, demonstrating success at increasing the consumption of healthier options, through point-of-purchase promotion of healthy options and increasing the availability of healthier options (Espino et al. 2015). However, these efforts tend to exclude ethnic and immigrant-run eateries (Hillier-Brown et al. 2017; Espino et al. 2015). Ethnic restaurants are important institutions in immigrant communities, as sites for social interactions and venues for economic opportunity (Berris and Sutton 2007; Delgado 1996, 1998; Ray 2014).

This study focused on Hispanic Caribbean (HC) restaurants. This designation is applied to establishments serving Dominican, Cuban and/or Puerto Rican cuisines, representing the geographical, insular region referred to as the Spanish or Hispanic Caribbean, a designation that reflects their common Spanish colonial heritage. The focus is motivated by the group's high prevalence of diet-related health conditions, including cardiovascular disease, obesity, and Type 2 Diabetes, compared to non-Hispanics whites and even within Hispanics groups (Arguelles et al. 2015; Gonzalez et al. 2016; Schneiderman et al. 2014). Staples of the Hispanic Caribbean diet are rice, beans, and meat, traditionally pork, along with the salience of fried foods and large portion sizes (Fuster 2017), which is distinct from the corn-based, and more vegetable-focused traditional eating pattern of Mexican American communities, the target on most US-based research and intervention targeting Hispanic health (Gerchow et al. 2014).

The present study had the following objectives: (1) Examine HC restaurant stakeholders' attitudes concerning the healthfulness of the HC diet, diet-related health disparities in the HC community, and their perceived role in tackling these issues; and (2) Document factors potentially influencing the stakeholder's decision to participate in future community nutrition interventions. As a group, Hispanics spend a higher share of their annual expenditure on foods away from home (Foster 2017) and rely on restaurants for meals on the go and for family meals (Yohn, Denise 2014). Therefore, engaging community restaurants in food and nutrition research and understanding their perspectives can help improve dietary intake and outcomes in the community through changes to the local food environment (Story et al. 2008; Espino et al. 2015; Nevarez et al. 2013).

Methods

The study examined HC restaurant stakeholders' perceptions and attitudes using a cross-sectional qualitative study design. Participants were recruited from restaurants serving HC cuisine, focusing on areas with a high concentration of Caribbean Hispanics in New York City. The criteria for participation included being an adult and self-identifying as an owner, manager, cook or chef at a restaurant serving Dominican, Cuban and/or Puerto Rican cuisine. Recruitment methods included oral invitations, through restaurant walk-ins and telephone calls, and through referral from community contacts and other restaurants (snowball approach). Walk-ins and cold calls were the least effective methods, where potential participants declined participation due to lack of time. Some initial contacts were also met with avoidance and mistrust, which may be potentially due to concerns about the researchers being linked with sanitation inspectors or even immigration officials. Therefore, we relied mostly on referrals from community contacts and participating restaurants.

The qualitative interview questions collected information regarding restaurant work, their perception of the HC diet and the health of the HC community, and their perceived role in community health (Table 1). The interview guide was informed by previous research studying traditional diet perceptions (Fuster 2017; Mares 2012), and in-depth qualitative studies involving ethnic restaurants (Barbas 2003; Mahadevan and Feldman 2011; Ray 2014). The questions were reviewed by the research team and tested in the field. The questionnaire was semi-structured, allowing the interviewer to adapt questions to responses received and probe further, as needed. The interviewers were bilingual researchers of HC-descent, trained in qualitative interviewing techniques. The interviews took place between August 2016 and May 2017, and lasted between 20 minutes and an hour (average: 22 minutes). Upon the completion of each interview, the interviewers completed an interview review form that collected informal observations of the restaurant (including clientele and general ambiance), notes on the interview process, and an initial review of the main emerging findings from the interview. The review form and periodic research team meetings were used to monitor the interview process and verify the data saturation point, which was confirmed after 19 interviews where interviews failed to elicit new information (Creswell 1998). Study procedures were approved by the City University of New York Institutional Review Board. Verbal informed consent was obtained from all subjects.

The interviews were audio-recorded and manually transcribed verbatim by the interviewers and analyzed in their original language (English, Spanish or both). The interviews were analyzed for themes and patterns,

Table 1. Interview guide themes and related questions.

Theme	Questions
Work in restaurant	(1) Tell me about your work <ul style="list-style-type: none"> (a) What motivated you to work in restaurants? (b) How is a typical day for you? (c) How would you describe your clientele? (2) How would you describe the food served at [<i>name of location</i>]? (3) How do you plan your menu/food offerings/cooking? What are some influencing factors? (4) In your experience, what are some difficulties affecting [<i>Cuban/Puerto Rican/Dominican</i>] restaurants?
Perceptions of HC diet and community health	5. How would you describe the cuisines from the Hispanic Caribbean? 6. How would you describe the Caribbean diet in terms of its healthfulness? 7. Thinking about the Hispanic Caribbean community in New York City, how would you describe the current health situation of the community? <ul style="list-style-type: none"> (a) What are the main nutrition/health issues you have observed? (b) What are some barriers to healthy eating and healthy lifestyles in this population?
Role in HC community health	8. Do you think local food businesses, like this one, have a role in addressing the nutrition and health issues on the population? 9. If you were asked to make your menu “healthier”, what changes would you be willing to make? What changes would you not be willing to make? 10. Do you have any experiences working with nutritionists or health organizations in community nutrition programs?

in an ongoing, iterative process (Creswell 1998). Initial analysis took place during data collection, through periodic research team meetings and examinations of the interview review form. Interview transcripts were analyzed using a content analysis approach, where data were organized and summarized through the development of codes (Harris et al. 2009; Hsieh and Shannon 2005). Each transcript was initially coded by two separate researchers, using an open coding approach. Coding pairs met to discuss and unify a list of codes, which was further discussed with the research team. The resulting codebook was applied to the transcripts with the assistance of Atlas.ti 8.0 to facilitate the organization and extraction of representative excerpts for each code. Validity and reliability of emerging results were verified throughout the data collection and analysis process. This included the ongoing analysis of field notes, triangulation of results during team meetings, and confirmation of results with the existing, relevant literature (Creswell 1998).

Results

Sample description

The study included 19 restaurants. Most of the restaurants were Dominican and sit-down style, with waiter service (Table 2), located in primarily HC areas of NYC (such as the Bronx and Washington Heights). Respondents described the clientele as middle class and of mixed ethnic backgrounds, including Puerto Ricans and Dominicans, and other ethnic groups, such as blacks, Mexicans, and white Americans. Only three (one Cuban and two Puerto Rican restaurants) were located outside of traditional enclave areas.

Respondents (one per restaurant) included restaurant owners, managers, and cooks/chefs, with some having more than one role in the restaurant (Table 2). Most of the respondents were men ($n = 13$), born in the Hispanic Caribbean ($n = 16$). When asked why they moved to the United States, most of them cited wanting to seek a better life as motivation. Education was low, with most having completed high school or less. Only a few ($n = 3$) had formal culinary training. The estimated years of experience in restaurants ranged from three to 42 years (mean = 17.9 years). When asked what motivated them to work in the restaurant business, the most common responses were having a passion for food and following a family tradition. Those with family in the business ($n = 9$), discussed how the connection

Table 2. Sample characteristics ($n = 19$).

Restaurant Characteristics n(%)	
Type of restaurant	
• Waiter service/sit-down	12 (63%)
• Counter-style/take-out	5 (26%)
• Other (food truck/catering)	2 (11%)
Cuisine:	
• Dominican	13 (68%)
• Puerto Rican	5 (26%)
• Cuban	1 (5%)
Respondent Characteristics n(%)	
Gender (% male)	13 (68%)
Age (mean, min-max)	44.3 (24–80)
HC background	
• Dominican	15 (79%)
• Puerto Rican	4 (21%)
Nativity (% HC-born)	16 (84%)
Highest level of education attained	
• Less than high school	7 (37%)
• High school diploma or equivalent	5 (26%)
• Some college or higher	7 (37%)
% with formal culinary training	3 (16%)
Role in restaurant	
• Owner	4 (21%)
• Chef/cook & owner	5 (25%)
• Manager	5 (26%)
• Chef/cook & manager	1 (5%)
• Cook/chef	4 (21%)
Years of restaurant experience (mean, min-max)	17.9 (3–42)

provided an easier entry in the business, especially when first arriving in the United States. A third motivation to engage in restaurant work was “*la necesidad*” (the need for work), cited by three respondents (one cook and two managers).

Healthfulness of Hispanic Caribbean diets and the community

Respondents enthusiastically praised the HC cuisine as “the best,” alluding its home-made quality, as “grandmother’s cuisine.” When asked to evaluate the healthfulness of HC diets, most of the respondents addressed the question by listing foods they considered healthy or unhealthy, unprompted. Out of the 14 respondents that sought to categorize foods in such manner, they all focused on unhealthy aspects. Mentions of unhealthy foods included nutrient references, such as “carbs” and fat, as well as sources of these nutrients, including white rice, bread, fried foods, and pork rind (“chicharrón”). Some also mentioned the use of salt and strong condiments. The following two excerpts exemplify the descriptions of HC diets as unhealthy.

[The HC diet is] horrible! The worse. I think that it is totally unhealthy. [...] We get fat. No one takes care of the food. It is greasy and we like the salt. – Manager, Dominican sit-down restaurant

I don’t think it’s healthy at all. We have a lot of carbs. A lot!. Everything [is] fried stuff. I don’t think it’s healthy because to be honest we never grew up so much with vegetables and salad. It’s mostly rice, beans, meat, *pernil* [pork], you know, a lot of good food, but honestly, it’s not healthy. – Manager, Puerto Rican (PR) counter-style restaurant

Only eight mentioned positive or healthy aspects of the diet, including the general allusions to fruits and vegetables, and specific examples, such as bananas, avocado, yucca and the consumption of “green” juices (prepared from vegetables). A few used the term “diet” foods, as a synonym to healthy alternatives,

If they don’t want to eat fat, they can eat yucca, banana – as diet [food] for them. Egg and avocado can serve as diet [food]. – Cook, Dominican sit-down restaurant

Two mentioned the consumption of steamed and grilled (“a la plancha”) dishes (respectively) as examples of healthy offerings, in contrast to fried foods.

Beyond mentions of specific foods, some respondents underscored the importance of moderation. For example, one Puerto Rican cook noted how any diet could be unhealthy if consumed in large quantities.

Only two respondents said that the cuisine was healthy, but only in comparison to “junk foods” eaten in the United States:

The foods that we eat are healthier. For example, this country is based on *comida chatarra* [junk food], like burgers, pizza, hot dogs. That is not healthy! It makes you fat. I think the rice, beans, and meat are healthy. – Manager, PR counter-style restaurant

Most respondents recognized the salience of health issues in the HC community, notably obesity, high blood pressure, diabetes, high cholesterol, heart conditions, and cancer. Only three respondents did not recognize diet-related conditions, even when asked directly. Some linked the poor health outcomes to economic factors:

Maybe [because] our community may not have as much money, they tend to be not healthy. – Owner/cook, PR sit-down restaurant.

The respondent above linked this to observations of seeing a lot of people using walkers and being obese in his community.

Others connected the health issues and the poor eating habits to culture:

Well, first of all, it's just the culture, a lot of people prefer not to eat a salad instead of all the rice. It's always the carbs, always. [...] It's easier and it's cheaper to make a bowl of rice, beans, and a meat to just buy a salad because it's so expensive. – Manager, PR counter-style restaurant

Others pointed to the role of personal responsibility,

I don't think the food is harmful. What is harmful is issues with the person. Because if you cannot eat bread because it harms you, do not eat bread! – Manager and cook, Dominican sit-down restaurant

This view influenced whether respondents perceived restaurants had a role to improve community health, as discussed next.

Role of restaurants in community health

Respondents emphasized the importance of their restaurants as in the community, as vehicles to meet the demand for cultural foods in the communities they were located. Food was recognized as an important, remaining connection to “home” and culture,

Sometimes the food is the only thing left from your country. It's like, “oh, at this moment I need to eat a *mangú* or fried cheese”. And that is what people look for [in restaurants] because maybe that is the only moment you feel [as if you are] in your land again. – Manager, Dominican sit-down restaurant

When asked directly if they saw they had a role to play to improve the health of the surrounding HC community, close to half plainly said yes. They listed healthy practices already in place, including cooking with “natural seasonings” and with less salt and fat. Some connected these practices with a desire to meet the diversity of preference and needs of the patrons:

We're a business so we have to make our clients happy, whatever they want to eat. Because of that, we also have options for everybody. Instead of frying things we'll have steamed, you know. We have brown rice too. We have salad because we know that

a lot of people, you know, it'll help [health] issues. So [if] they have high [blood] pressure, high cholesterol, we'll have options.—Manager, PR counter-style restaurant

Additional to existing healthy practices, the respondents listed additional potential improvements to current offerings. These included increasing vegetable and steamed (non-fried) offerings, diminishing fried foods, and offering natural fruit juices. Mentions of potential improvements did not include changing portion sizes (an important issue due to the large portions usually served in these restaurants) or the desire to provide nutrition information to customers (a common intervention done at restaurants).

Respondents that did not see restaurants had a role to improve community health explained this view in light of the importance of revenue. They expressed the need to serve authentic versions of the traditional dishes, which, as noted above, were mostly seen as unhealthy. The need to preserve these recipes was also underscored by those willing to make healthful changes. That is, while willing to make additions and tweaks to the menu, they would not change the way they prepared traditional staples, such as the traditional rice and meat-based dishes (Figure 1).

Barriers to making healthful changes included concerns over revenue and costs, as well as kitchen constraints. Revenue was the main concern, including the notion that customers do not visit restaurants seeking healthy offerings,

I would add a salad bar, natural juices, and smoothies. But people don't come for that. People come looking for what we offer. [...] In this neighborhood there are [other] options and if someone wants [healthy] options, they go next door because they specialize in that area. It is not in our food. Our food is not the healthiest. [...] We try to lower the salt, but if eliminate it completely, [clients will complain]. It's



Figure 1. Sample offering from a HC restaurant, including (from top left) beans, white rice, roasted chicken, avocado, and mofongo (fried plantains, mashed with pork rind, garlic, and oil) served with iceberg lettuce and tomato salad. (Source: Author).

like taking hot sauce away from a Mexican – they will complain. – Manager, Dominican sit-down restaurant

Revenue concerns were more pressing among restaurants based on unhealthy offerings, as the case of the “cuchifritos” or fried food establishments common in HC neighborhoods in NYC (Figure 2).

Others worried that changes in cooking or seasoning would result in unfavorable changes in flavor, affecting the bottom line of the business. Additionally, one owner noted the cost of using natural ingredients (for example, fresh garlic instead of powdered) as being “over a thousand dollars a week,” motivating many other restaurants to use processed, powdered seasoning instead. Kitchen constraints were mentioned less. This included the restaurant’s physical capacity to prepare healthier offerings, such as having small kitchens and scarce storage space.

For example, oven baked things are really good for you, and fried is not so great, but that’s just what we have for our space and for our menu.” – Manager, Cuban sit-down restaurant

The barriers to improving the restaurant offerings are further compounded when considering the array of issues these restaurants face in their work and communities. The interviews documented the demanding nature of foodservice work, requiring hectic, long workdays, further complicated by the stressful nature of the job and industry. Stress came from dealing with customers and staff, and other issues affecting HC restaurants. The most common one was rising costs ($n = 10$), including the cost of rent, food, and utilities. Rent was the most significant, tied to neighborhood gentrification. Other issues included lack of staff culinary training and professionalism, competition and neighborhood restaurant saturation, and city regulations



Figure 2. Display window of quick service restaurant selling a variety of pastelillos (turnovers) and other fried foods (Source: Author).

(sanitation inspectors). One last issue mentioned was a lack of knowledge about HC cuisine in the US, linked to restaurants not advertising the cuisine enough to the general (non-Hispanic) public.

Almost all of the respondents lacked experience collaborating in community health initiatives. An exception was one interviewee that took a healthy cooking class to learn how to cook avoiding salt and processed seasonings, such as high sodium dehydrated, packaged spice powders. When asked about their interest in such collaborations, only one interviewee (a manager in a Dominican sit-down restaurant) plainly said no, explaining, “Nothing will change our system.” Most said they would be willing to collaborate with such initiatives. One of them further emphasized,

We are part of the community. We are a family restaurant. We love our clients because our clients are our family because they live and we work here, and you know, we want to have everybody happy and healthy. – Manager, PR counter-style restaurant.

However, when probed further, they noted time would be a strong barrier to engaging in these collaborations.

Discussion

Restaurants are an important source of food for Hispanics in the United States (Foster 2017; Yohn, Denise 2014). While food environment interventions have focused on increasing the availability of healthy food through supermarket and corner store interventions, such efforts do not account for the rising proportion of foods consumed away from home, in restaurants. Public health and food policy efforts are increasingly recognizing the role of these establishments, incorporating mostly corporate (or chain-based) restaurants in efforts to diminish sodium intake, eliminate the consumption of trans-fat, and the provision of caloric information in restaurant menus. These efforts have proven effective in improving the food offerings in restaurants, motivating the reformulation of recipes (such as the reduction of trans-fat use) and the elimination of higher calorie food items (Bleich et al. 2018; Gorski and Roberto 2015). However, these interventions leave out community-based restaurants (Espino et al. 2015). Intervention studies document the potential of these institutions as sites for health promotion, including the advertising of healthier choices, recipe reformulation, and changing portion size offerings (Ayala et al. 2016; Espino et al. 2015; Nevarez et al. 2013; Chen et al. 2011). This study contributes to such growing body of research, by focusing on a segment of community restaurants mostly left unaddressed in current efforts.

The examination of HC restaurant respondents’ perceptions concerning the healthfulness of HC diets revealed that these traditional diets are mostly

classified as unhealthy. The notion that the traditional HC diet is inherently unhealthy can be a barrier for making healthful changes, due to wanting to provide what they perceive as authentic dishes. This perception partially concurs with that found among HC community members in NYC, where respondents underscored the salience of fried foods and starches in the diet and lack of green salads, as unhealthy aspects of the diet (Fuster 2017). Qualitative studies with other immigrant communities have also documented how immigrants tend to see traditional aspects of their cuisine as unhealthy upon being exposed to nutrition messaging in the US (Bleich et al. 2017; Bruemmer et al. 2012; Elbel et al. 2013; Jay et al. 2014; Kaplan, Ahmed, and Musah 2015; Otten et al. 2014; Vadiveloo, Dixon, and Elbel 2011). This may relate to what Azar et al. termed the “festival food syndrome” where special occasion foods, often energy-dense, take greater precedence among immigrant communities, at the expense of every day, potentially healthier dishes (Azar et al. 2013). Restaurants may select to highlight “festival foods” in their menu, as a way to satisfy the gastronomic nostalgia of certain clients and showcase the dishes perceived as most authentic from the traditional cuisine for a more general clientele. At the same time, in doing so, they may be inadvertently encouraging the importance of high energy-dense foods as key dishes in diets, contributing to the dissemination of these foods as the everyday norm in these communities – as opposed to being a special occasion or holiday dishes back in their heritage countries.

Restaurant respondents recognized health issues in the community, based on observations and perceptions that many of the fellow members of the Hispanic Caribbean community suffered from obesity, diabetes and other cardiovascular risk factors (high blood pressure and cholesterol). However, recognition may not lead to action. There were mixed responses concerning whether respondents saw they had a role in addressing these diet-related conditions in the community. This perception can be explained by the importance placed on the client’s personal responsibility for their own food choices, as many said they already offered healthy options for those who wanted to buy them. Moreover, some respondents also expressed that their clients may not be interested in eating healthy in their restaurants in the first place.

The study documented some changes the respondents may be willing to make to improve the offerings in HC restaurants. These included potentially diminishing the use of salt in cooking and the provision of more salads, and more vegetable-based and non-fried dishes. Respondents did not mention other commonly implemented improvements, such as adjusting portion sizes, promoting already available healthful offerings, or providing nutritional information in menus. Portion sizes in HC restaurants are often large. Therefore, addressing portion sizes in HC restaurants may be an important strategy for a future intervention. The lack of mention by HC restaurant respondents in this study may be explained by the lack of

awareness of the importance of portion control, or by cultural notions that Latinos consume large portions of certain foods, such as rice. Research investigating chef and owner perceptions on portion sizes reveals that portions are influenced by food cost, food presentation, and customer expectations. While respondents in these past studies agreed that large portion sizes were a problem for weight control, responses were mixed regarding the role of the restaurant in controlling portions. Similar to the findings of this current study, this past research also documented the importance placed on customer's responsibility to control how much was consumed (Condrasky et al. 2007; Gase et al. 2014).

Some HC restaurant respondents mentioned the healthful aspects of their current menu offerings. However, they did not recount efforts implemented, if any, to promote the dishes they considered as healthy, nor a desire to provide nutrition information in their menus. This finding underscores a potential disconnection between current interventions implemented in restaurants and what restaurant owners may see as feasible and sustainable healthy changes in their establishments. Additionally, previous research has documented the need for nutrition training for chefs and cooks, even among those formally trained (Condrasky et al. 2007; Ma et al. 2014; Palmer and Leontos 1995). In this study, almost all of the respondents lacked formal culinary training and high levels of education. This may have prevented the respondents from listing other potential improvements to their current restaurant offerings, including the promotion of already offered potentially healthy dishes.

The interviews with HC restaurant stakeholders document the important functions of these establishments in immigrant communities, beyond the provision of food. These include satiating gastronomic and cultural nostalgia, serving as social support institutions, and being a source for livelihood (Barbas 2003; Berris and Sutton 2007; Hernandez 2007; Ray 2016). At the same time, work in restaurants is one of toil and stress, making partnerships with these establishments particularly challenging. HC restaurants in NYC face rising cost from rent, food, and utilities, neighborhood competition, and reduction in clientele, which may dissuade owners from taking on big changes in their menus and business models. At the same time, these issues may be leveraged as a motivation for change. For example, many of the establishments included in this study are located in areas undergoing gentrification. Neighborhoods with a concentration of Puerto Ricans and Dominicans in NYC are seeing the influx of white, affluent newcomers, often resulting in rent hikes and gradual community displacement (Freudenberg et al. 2016; Hernandez, Sezgin, and Marrara 2018). This can serve as a motivator for change, to adapt to the changing market by modifying recipes and portions. Nonetheless, motivating restaurants to make sustainable healthful changes will necessitate the documentation of clients' demand for healthier offerings, and what those desired offerings could be.

The present study's strengths lie in the inclusion of a population that is seldom incorporated in public health and nutrition research, as in the case of immigrant and ethnic restaurant respondents. The study incorporated bilingual research assistants of HC-descent, with firsthand knowledge of the cuisine, facilitating the building of rapport between the interviewer and the respondents. Simultaneously, the study had limitations. While interviewers were instructed to not underscore nutrition during the initial recruitment and introduction to the study, respondents may have been influenced by a desire to give socially appropriate responses, particularly when asked about their role in community health and their willingness to collaborate with nutrition interventions in the future. Additionally, the study did not verify claims concerning the healthfulness of the restaurant offerings.

Further research can address these limitations by conducting quantitative assessments of the nutrition environments in restaurants. This next step can help identify healthful practices already in place, and those that could be targeted for change. Future research can also seek to better understand the factors affecting the supply and demand for healthier food offerings in small community restaurants, located in ethnic communities. The present study serves as a starting point for such future work. Future studies can focus on systematic assessments of the capabilities, opportunities and motivations affecting the provision and consumption of healthy foods in community restaurants, incorporating the perspectives of other stakeholders – for instance, customers and wait-staff. Research with customers may provide the evidence needed to motivate restaurant owners to modify offerings. The wait staff needs to be assessed as they serve as the link between the food offered and the customers. If healthful options are offered on the menu, but the wait staff does not encourage or highlight these offerings, the customer may not order these dishes in the first place.

Conclusion

Noncommunicable, diet-related conditions continue to be a concern, disproportionately affecting Hispanic communities in the US. The persistence of these issues calls for new approaches, moving from the prevalent individual focus to a social-ecological approach where individual food choices are contextualized in the local environment in which they take place. Furthermore, such interventions need to engage the importance of foods away from home, and the potential role of small, non-chain restaurants in these efforts. The results of this study show that while this is a tall order to achieve, it is not an impossible task. Just as individuals are counseled to make small changes, a similar approach can be taken with these establishments. This can include meeting restaurants where they are, seeking to highlight current healthful offerings, and making smaller changes to existing ones. The economic, cultural and social contribution of these businesses can be

leveraged, framing nutrition interventions as promoting changes that can also benefit the health of their “bottom-line.” That is, while the nutritional aspect of the food served is of concern, interventions designed to improve them must be designed in collaboration with the sector, coming up with ways that appeal to the businesses economic wellbeing, while positively affecting the surrounding community.

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