



OPEN ACCESS

EDITED BY
Terry Huang,
City University of New York, United States

REVIEWED BY
Fabio Parasecoli,
New York University, United States
Joan A. Vaccaro,
Florida International University, United States

*CORRESPONDENCE
Melissa Fuster
✉ mfuster@tulane.edu

SPECIALTY SECTION
This article was submitted to
Public Health and Nutrition,
a section of the journal
Frontiers in Public Health

RECEIVED 30 September 2022

ACCEPTED 16 January 2023

PUBLISHED 02 February 2023

CITATION
Fuster M (2023) Furthering nutrition equity
through innovative and empathetic
collaborations with the restaurant sector:
Examples from Latin American restaurants.
Front. Public Health 11:1058859.
doi: 10.3389/fpubh.2023.1058859

COPYRIGHT
© 2023 Fuster. This is an open-access article
distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The use,
distribution or reproduction in other forums is
permitted, provided the original author(s) and
the copyright owner(s) are credited and that
the original publication in this journal is cited, in
accordance with accepted academic practice.
No use, distribution or reproduction is
permitted which does not comply with these
terms.

Furthering nutrition equity through innovative and empathetic collaborations with the restaurant sector: Examples from Latin American restaurants

Melissa Fuster*

School of Public Health and Tropical Medicine, Tulane University, New Orleans, LA, United States

KEYWORDS

diet, food environment, Hispanic (demographic), restaurant, health equity, human centered design, community nutrition

Introduction

Dietary factors are one of the leading causes of preventable death and disability (1). Successful dietary interventions to address this problem can only be successful when food environments support healthy food choices (2, 3). Current efforts to improve local food environments have focused on markets to positively influence at-home food consumption, but there is an increased interest in restaurants as sites for intervention and regulation (4, 5). The focus on restaurants responds to shifts in consumption patterns, where an increased proportion of our food spending has been shifting to foods away from home. In the United States, data from 2021 show that the consumption of foods prepared away from home accounts for 55% of food spending among American households, with restaurant meals occurring at least weekly for two-thirds of adults in the United States (6, 7).

Research addressing foods away from home has highlighted the unhealthy aspects of restaurant offerings (8, 9). In particular, increased consumption of meals from fast-food restaurants has resulted in greater intakes of saturated fat and sodium (10). Public health initiatives and policies to improve food choices at restaurants have included efforts to restrict choice (ex. trans-fat ban law) or guide choice through pricing schemes, point of sale promotion of healthy options, and providing nutrition information, among others (11). Most of these efforts have targeted chain-based, fast-food restaurants. Emerging research in small, non-chain restaurants demonstrates interventions can be successful at increasing the consumption of healthier options, through point-of-purchase promotion of healthy dishes and increasing the availability of healthier options (12). While these efforts are important, there has to be a shift in how food businesses are approached from places of perceived primarily as sites for unhealthy eating to places with the potential for motivating healthful dietary changes. This shift may result in a true partnership with restaurants, with the potential to enhance social opportunities for healthier eating, contending against social norms and perceptions where healthier choices are viewed as restrictive, bland, or plainly not enjoyable (13). These perceptions are an important, yet overlooked barrier, to healthy eating behaviors. Diners prioritize taste and indulgence when dining out and the use of healthy designations actually dissuades customers from ordering these items (13). Labeling food as healthy decreases perceived satiety and influence the perception that healthy items are less filling (14, 15).

Restaurants as agents for dietary change

Restaurants are an important part of community food environments, affecting local food availability and access (3, 16). Restaurants can serve as vehicles to spread culinary innovations by exposing clients to new ingredients and modes of preparations, with the potential to change perceptions and social norms around eating and cooking—changes that can have a ripple effect on foods eaten at home (17, 18). The culinary sector is increasingly involved in initiatives to motivate healthful eating practices as demonstrated in the “Menus for Change” report produced by the Culinary Institutes of America, which guides how to provide healthier and more sustainable meals (19). Other examples are found among an increasing number of restaurants, such as Alice Waters’ Chez Panisse restaurant, Chef Dan Barber’s sustainable approach to cuisine, and Chef Jamie Oliver’s attention to healthy meals for school children (20, 21). These chefs are promoting menu innovations to bring environmental consciousness to their customers, addressing fashion, health, environmental sustainability, and deliciousness as convergent rather than contradictory values. While these new trends bend toward more healthy and environmentally sustainable offerings, these innovations have largely failed to trickle down to restaurants serving communities experiencing the largest burden of disease from diet-related conditions, as in the case of Hispanic/Latin communities. Latin American restaurants (LARs) are an increasingly important sector. According to the National Restaurant Association, 80% of consumers eat at a restaurant serving ethnic cuisine at least once a month (22). Within these, there are over 120,000 LARs in the United States, most of which are independently owned. Mexican restaurants alone make up 8% of all US restaurants (23, 24).

Cuisines in Latin America and the Caribbean are undergoing a transformation where local restaurants are playing a role in creating new, desirable perceptions of their localities and cuisines, bringing locally grown foods to consumers. Research has mostly documented these transitions in México and Perú (25, 26), but similar trends are also found across the region. Innovations include showcasing fruits and vegetables in a new light, appealing to the origin of the product and sensorial qualities, and highlighting healthy dishes without focusing on health. Restaurant menus are elevating fruits and vegetables to a new light, communicating the importance of fresh, local foods. We can also see the emergence of vegetable-forward dishes, where plant-based components take precedence over animal-sourced products. This is important in Latin/Hispanic diets, as the consumption of meat has been tied to socioeconomic status, given the higher quality of animal protein. In many global contexts, meat is eaten only on a special occasion, with cheaper meats, such as chicken, eaten more frequently in lower socioeconomic strata (27). Trends are changing, where menus were more varied in offerings, not focusing on beef and pork and presenting more plant-forward menus, catering to an increased interest in this type of offering among higher socioeconomic strata (28). We can also find innovative ways to promote potentially healthful dishes, such as framing these within the historic context, and seeking to re-center them as part of the national culinary imaginary. This shows that chefs in Latin America are innovating local and native ingredients to produce more visually pleasing and tasteful dishes. This approach can facilitate healthier eating and better health

outcomes if disseminated outside the elite markets that most of these restaurants attract. The dissemination of these practices requires a shift in thinking among public health researchers and practitioners, to view restaurants in a new light, innovating how we approach and view the sector.

The Latin American Restaurants in Action (LARIa) project is an example of the shift. Through this project, I have sought to disseminate emerging healthy eating promoting innovations to restaurants serving Latin/Hispanic communities in the United States. The LARIa Project is a pilot initiative funded by the National Institutes of Health, motivated by a recognition that community ethnic restaurants, as in the case of those serving Latin American cuisines, are crucial, yet untapped sites for healthy eating promotion interventions (11, 12). These restaurants are important institutions in immigrant communities. Aside from serving as a site to reconnect with heritage cultures through cuisines, these restaurants also serve as sites for social interactions and venues for economic opportunity, while also promoting cross-cultural exchanges (18, 29–31).

The project was launched in the summer of 2020, amid the COVID-19 pandemic (32). Working with a multidisciplinary team, we conducted listening sessions with Latin restaurant owners and staff to learn about their ongoing experiences and needs, as well as their opinions and previous engagement to promote healthier choices (33). The participants in these sessions shared a variety of experiences, from restaurants that sought to actively create healthier dishes to those resistant to change, amid perceptions of client demand and notions of cuisine authenticity. From these sessions, we engaged two restaurants in the intensive process of co-designing tailored innovations to promote healthier choices, *via* the application of human-centered design (HCD). HCD required our approach to be taken constructively and experimentally, rooted in the needs and context of the end user, in this case, the restaurants and consumers, to develop bottom-up solutions with built-in buy-in (34). We used traditional public health research methods, such as interviews and environmental assessment, but also engaged in activities to increase our understanding of the contexts we aimed to change *via* immersion activities, placing ourselves in the shoes of key stakeholders (e.g., customers and owners) to gain a deeper understanding of the constraints behind the consumption and provision of healthier choices in these establishments. We collaborated with a designer to facilitate workshops with partner restaurants that resulted in finding a common ground concerning problem definition and potential solutions to test in the field before full implementation. Following this methodology, we successfully worked with two restaurants, resulting in tailored innovations that addressed restaurant-defined problems that increased healthy offerings and promoted existing offerings using messaging that appealed to taste and the historical roots of these offerings, respectively (35, 36). Efforts like these have the potential to make healthier choices not only available and accessible but also desirable.

The LARIa Project is just an example within growing efforts that seek to engage this sector (37–39). This previous work showcases best practices for engagement with the sector, including the importance of active engagement with restaurant owners, through personal, tailored approaches that incorporate members of the sector and community in the research team (39). Yet, this is contrary to the prevalent top-down regulatory approaches that impose stringent

standards continue to be at odds with the economic goal of restaurants, especially small, independently owned restaurants, where profit margins are slim and operational burdens are high (33). Moreover, these establishments are often embedded in communities where diet-related health inequities are prevalent, where owners and staff are also part of these communities, seeing and being affected by the same issues we seek to address (30). We need to engage the sector through transdisciplinary approaches that allow for innovations at different levels, seeking a deeper understanding of the restaurant context and the individuals embedded in these contexts.

Author contributions

MF conceptualized the article structure, wrote, and edited all aspects of the manuscript.

Funding

The research was supported by the NIH-National Heart, Lung, and Blood Institute (Award # K01HL147882). The funders had no role in the design, analysis, or writing of this article.

References

1. Afshin A, Sur PJ, Fay KA, Cornaby L, Ferrara G, Salama JS, et al. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. (2019) 393:1958–72. doi: 10.1016/S0140-6736(19)30041-8
2. Story M, Kaphingst KM, Robinson-O'Brien R, Glanz K. Creating healthy food and eating environments: policy and environmental approaches. *Annu Rev Public Health*. (2008) 29:253–72. doi: 10.1146/annurev.publhealth.29.020907.090926
3. Malambo P, Kengne AP, De Villiers A, Lambert EV, Puaone T. Built environment, selected risk factors and major cardiovascular disease outcomes: a systematic review. *PLoS ONE*. (2016) 11:e0166846. doi: 10.1371/journal.pone.0166846
4. Penney TL, Brown HE, Maguire ER, Kuhn I, Monsivais P. Local food environment interventions to improve healthy food choice in adults: a systematic review and realist synthesis protocol. *BMJ Open*. (2015) 5:e007161. doi: 10.1136/bmjopen-2014-007161
5. Gittelsohn J, Rowan M, Gadhoke P. Interventions in small food stores to change the food environment, improve diet, and reduce risk of chronic disease. *Prev Chronic Dis*. (2012) 9:110015. doi: 10.5888/pcd9.110015
6. ERS. 2021 U.S. food-away-from-home spending 10 percent higher than pre-pandemic levels 2022. Available online at: <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail?chartId=58364#:~:text=Food%2Daway%2Dfrom%2Dhome%20spending%20accounted%20for%2055%20percent,COVID%2D19%20pandemic%20share%20levels> (accessed September 25, 2022).
7. Kraak VI, Englund T, Misyak S, Serrano EL, A. novel marketing mix and choice architecture framework to nudge restaurant customers toward healthy food environments to reduce obesity in the United States. *Obes Rev*. (2017) 18:852–68. doi: 10.1111/obr.12553
8. Jiao J, Moudon AV, Kim SY, Hurvitz PM, Drewnowski A. Health implications of adults' eating at and living near fast food or quick service restaurants. *Nutr Diabetes*. (2015) 5:e171. doi: 10.1038/nutd.2015.18
9. Chum A, O'Campo P. Cross-sectional associations between residential environmental exposures and cardiovascular diseases. *BMC Public Health*. (2015) 15:438. doi: 10.1186/s12889-015-1788-0
10. An R. Fast-food and full-service restaurant consumption and daily energy and nutrient intakes in US adults. *Eur J Clin Nutr*. (2015) 70:97. doi: 10.1038/ejcn.2015.104
11. Hillier-Brown F, Summerbell C, Moore H, Routen A, Lake A, Adams J, et al. The impact of interventions to promote healthier ready-to-eat meals (to eat in, to take away or to be delivered) sold by specific food outlets open to the general public: a systematic review. *Obesity Reviews*. (2017) 18:227–46. doi: 10.1111/obr.12479

Acknowledgments

The author wishes to thank her team of collaborators and mentors for their contributions to the activities associated with the LARiA Project, particularly members of the research team: Shelby Hipol, Rosa Abreu, Cara Conaboy, and Lourdes Castro Mortillaro. Additional support provided by Michelle Rodriguez, Tamara Alam, and Fabien Ca.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

12. Valdivia Espino JN, Guerrero N, Rhoads N, Simon N-J, Escaron AL, Meinen A. Community-based restaurant interventions to promote healthy eating: a systematic review. *Prev Chronic Dis*. (2015) 12:E78. doi: 10.5888/pcd12.140455
13. Turnwald BP, Jurafsky D, Conner A, Crum AJ. Reading between the menu lines: Are restaurants' descriptions of "healthy" foods unappealing? *Health Psychol*. (2017) 36:1034–7. doi: 10.1037/hea0000501
14. Finkelstein SR, Fishbach A. When healthy food makes you hungry. *J Consumer Res*. (2010) 37:357–67. doi: 10.1086/652248
15. Raghunathan R, Naylor RW, Hoyer WD. The unhealthy = tasty intuition and its effects on taste inferences, enjoyment, and choice of food products. *J Mark*. (2006) 70:170–84. doi: 10.1509/jmkg.70.4.170
16. Martinez-Donate AP, Espino JV, Meinen A, Escaron AL, Roubal A, Nieto J, et al. Neighborhood disparities in the restaurant food environment. *WJM*. (2016) 115:251–8.
17. Barbas S. "I'll take chop suey": restaurants as agents of culinary and cultural change. *J Pop Cult*. (2003) 36:669. doi: 10.1111/1540-5931.00040
18. Berris D, Sutton D. Restaurants, ideal postmodern institutions. In: Berris D, Sutton D, editors. *The Restaurants Book: Ethnographies of Where We Eat*. New York: Berg (2007). p. 1–16. doi: 10.5040/9781350044913_0006
19. *Menus of Change: The business of healthy, sustainable, delicious food choices: Culinary Institutes of America and the Harvard TH Chan School of Public Health*. (2023). Available online at: <http://www.menusofchange.org/> (accessed February 1, 2021).
20. Engel M. *Chef Dan Barber is a man on a mission: FRED HUTCH NEWS SERVICE*;= (2016). Available online at: <https://www.fredhutch.org/en/news/center-news/2016/05/chef-dan-barber-man-on-a-mission.html> (accessed July 29, 2022).
21. Spence D. Jamie's school dinners. *BMJ*. (2005) 330:678. doi: 10.1136/bmj.330.7492.678
22. Wolf B. *Some Latin Love: Cuisine from South and Central America and the Caribbean Provides Plentiful Menu Opportunities*. Chapel Hill, NC: QSR Magazine. (2015).
23. CHD Expert. *2018 Mexican Restaurant Industry Trends Report*. Chicago, IL (2018).
24. Demeyer J. *Latin American Cuisine: A Look at the South & Central American/Caribbean Menu Type*. (2015). Available online at: <https://www.chd-expert.com/latin-american-cuisine-a-look-at-the-south-central-american-caribbean-menu-type/> (accessed November 1, 2022).

25. Castillo-Villar FR. Destination image restoration through local gastronomy: the rise of Baja Med cuisine in Tijuana. *Int J Cult Tour.* (2020) 14:507–23. doi: 10.1108/IJCTHR-03-2019-0054
26. Matta R. Recipes for crossing boundaries: Peruvian fusion. In: *Cooking Technology Transformations in Culinary Practice in Mexico and Latin America*. New York, NY: Bloomsbury Academic (2016). p. 139–52. doi: 10.5040/9781474234719.ch-010
27. Vranken L, Avermaete T, Petalios D, Mathijs E. Curbing global meat consumption: Emerging evidence of a second nutrition transition. *Environ Sci Policy.* (2014) 39:95–106. doi: 10.1016/j.envsci.2014.02.009
28. Leahy E, Lyons S, Tol R. *Determinants of Vegetarianism and Partial Vegetarianism in the United Kingdom*. Dublin: The Economic and Social Research Institute (ESRI) (2010).
29. Delgado M. Puerto Rican food establishments as social service organizations: results of an asset assessment. *Journal of Community Practice.* (1996) 3:57–77. doi: 10.1300/J125v03n02_04
30. Fuster M, Guerrero K, Elbel B, Ray K, Huang TTK. Engaging ethnic restaurants to improve community nutrition environments: a qualitative study with hispanic caribbean restaurants in New York City. *Ecol Food Nutr.* (2020) 2020:1–17. doi: 10.1080/03670244.2020.1717481
31. Ray K. The immigrant restaurateur and the american city: taste, toil, and the politics of inhabitation. *Soc Res.* (2014) 81:373–96. doi: 10.1353/sor.2014.0025
32. Fuster M. Community health research, restaurants, and adjusting amid uncertainty. *Gastronomica.* (2020) 20:28–9. doi: 10.1525/gfc.2020.20.3.28
33. Fuster M, Abreu-Runkle R, Handley MA, Rose D, Rodriguez MA, Dimond EG, et al. Promoting healthy eating in Latin American restaurants: a qualitative survey of views held by owners and staff. *BMC Public Health.* (2022) 22:843. doi: 10.1186/s12889-022-13294-7
34. Matheson GO, Pacione C, Shultz RK, Klügl M. Leveraging human-centered design in chronic disease prevention. *Am J Prev Med.* (2015) 48:472–9. doi: 10.1016/j.amepre.2014.10.014
35. Dimond EG. Que Chevere: innovative seasonal veggie adaptations to Puerto Rican cuisine. In: *LARiA Project Blog.* (2022). Available online at: <https://lariaproject.com/2022/08/16/que-chevere-innovative-seasonal-veggie-adaptations-to-puerto-rican-cuisine/> (accessed January 23, 2023).
36. Dimond EG. La Lonchería: highlighting nutritious foods in contemporary Mexican cuisine. In: *LARiA Project Blog.* (2022). Available online at: <https://lariaproject.com/2022/09/08/la-loncheria-highlighting-nutritious-foods-in-contemporary-mexican-cuisine/> (accessed January 23, 2023).
37. Chen R, Carrillo M, Kapp J, Cheadle A, Angulo A, Chrisman N, et al. Partnering with REACH to create a “diabetes-friendly” restaurant: a restaurant owner’s experience. *Prog Community Health Partnersh.* (2011) 5:307–12. doi: 10.1353/cpr.2011.0035
38. Nevarez CR, Lafleur MS, Schwarte LU, Rodin B, de Silva P, Samuels SE. Salud Tiene Sabor: a model for healthier restaurants in a Latino community. *Am J Prev Med.* (2013) 44:017. doi: 10.1016/j.amepre.2012.11.017
39. Poirier L, Flores L, Rivera I, St Pierre C, Wolfson J, Fuster M, et al. Feasibility of collaborating with independent Latino-owned restaurants to increase sales of a healthy combo meal. *J Public Health Res.* (2021) 11:2. doi: 10.4081/jphr.2021.2659