

Why Is the Study of Food Environments Still Relevant?

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Abstract

Food environments are the point of intersection where people engage with the food system. As such, they are a key consideration for food policy and governance in countries across the world. This collection of articles draws upon research conducted in a range of countries and predominantly, but not exclusively, urban settings. Research presented here expands on the way food environments have traditionally been explored in academic studies since the 1990s, introducing novel methodologies for assessment and incorporating the digital food environment, as well as food aid resources. Contemporary research must contend with the theoretical challenge of conceptualizing food environments in relation to wider social forces and changes. The more practical challenge is to inform improvements to neighbourhood food environments whilst avoiding the associated propensity to further perpetuate fragmented and short-term responses to food inequalities.

Keywords

digital food environment; food aid; food environment; food policy; food system

1. Introduction

The rise in obesity prevalence in recent decades has increased interest in the food environment as a possible causal factor, given its potential to shape dietary behaviours (McKinnon et al., 2009). In fact, food environments likely contribute to the increasing epidemic of non-communicable diseases over and above individual factors such as knowledge, skills, and motivation (Story et al., 2008).

The metaphor and study of “food deserts” is one idea that gained traction due to the compelling imagery and simplicity of the phrase—an area in which healthy food is sparse, providing a relatively uncritical starting point for much of the food environment research which followed. A food desert is hypothesised as a location, often in relatively deprived urban areas, where healthy food is practically unobtainable due to cost or an absence of retail food outlets (Macintyre et al., 2008). The underlying logic for public health practitioners is that a lack of access to healthy affordable food in an area would lead to poorer population diet, and by extension, diet-related health. Food deserts research has, ultimately, spawned a range of metaphoric typologies of food environments (Tonumaie’a et al., 2021). This has included food oases and mirages (Short et al., 2007), food swamps (Bridle-Fitzpatrick, 2015), food havens (Tonumaie’a et al., 2021), and food apartheid (de Souza, 2024).

2. Theoretical Developments and Practical Challenges

Research on food environments, to date, rarely analyses food environments in relation to wider and deeper transformative dynamics (Cifuentes & Sonnino, 2024). Given the social and political dimensions of food environments, it is now tacitly accepted that they overlap and intertwine. As inequality and social divisions widen, attention has rightly been given to conceptualizing food environments (or even foodscapes and foodways) as relational spaces that can be specific to particular groups. This considers not only the physical food environment, but the social norms, disadvantage, governance, economic constraints, and values that shape how different groups are able to interact with it. Thus, researchers have defined and explored child and adolescent food environments (Rozas & Busse, 2022), those of older adults (Dickinson et al., 2022), poverty foodscapes (Sedelmeier, 2023), socio-economic class-based foodscapes (Cervigni et al., 2022), and immigrant foodways (Allison, 2020). Taken collectively, the overall effect is that of a series of multi-layered food environments that may both overlap in physical settings and intersect around identities and vulnerabilities. While these developments are theoretically challenging, a return to the dietary public health concerns that drive food environments research reminds us that complexity (and sometimes even perceived complexity) can hinder organised policy efforts to improve food environments (Majowicz et al., 2016). Goodman (2016) provides a note of caution, appealing to scholars to temper, or at least match, explorations of ontology and theory with critical and practical concerns around inequality and food justice (Goodman, 2016). And so, this thematic issue deals not only with conceptualizations of the food environment, but also the more pragmatic topics of definition and measurement.

Multiple current global crises—such as the pandemic, climate change, and military conflicts—bring devastating cumulative impacts and have been described as a state of global polycrisis (Lawrence et al., 2024). The food system has been implicated as being both negatively impacted by polycrisis *and* a contributing factor in its emergence (Assadourian, 2025). Food environments are the point of intersection where people engage with the food system. They are rapidly changing in terms of rising food insecurity and obesity, and worsening health and environmental outcomes (Goh et al., 2024). Despite this, the realization of global goals to transform food systems is hampered by market priorities, a lack of accountability and oversight, and an absence of platforms for multisector partnerships (Reeve et al., 2024). In the meantime, generating evidence and intervening at the regional and local levels remain the most immediate ways to address the challenges posed by food system failures. A cohesive research agenda is needed to facilitate food environment research and inform action in settings across the globe (Turner et al., 2018). It is in this spirit that the current thematic issue invites new contributions to the debates.

3. Structure of the Thematic Issue

A concern with health and social inequalities is at the core of food environment research, with food aid outlets and organizations a seemingly irreversible feature of contemporary urban food environments (Thompson et al., 2019). In this vein, Luger and van der Meij (2025) undertake a theoretically informed examination of the complexities of food insecurity in Amsterdam Noord, proposing a model of infrastructural violence. Food banks occupy complex positions as institutions that aim to mitigate the impacts of social and economic disadvantage but, ultimately, are implicated in their reproduction (Luger & van der Meij, 2025). García and Lambert (2025) provide an alternate take on infrastructure. Their work in Santiago, Chile, shifts the focus from infrastructures as drivers of food insecurity to social infrastructures that actively resist food insecurity (García & Lambert, 2025). Dickinson (2025) then moves us on to consider how changes to food environments affect particular groups, especially the elderly. She observes that the transformative dynamics of Covid cemented the expectation that the food aid system, rather than the state, is responsible for trying to tackle food insecurity (Dickinson, 2025).

Following these critical contributions on food insecurity, Barry et al. (2025) bring the readers' attention to the ongoing challenge of managing food environments and the need to give greater consideration to "place" in food systems policies (Sonnino & Milbourne, 2022). The challenges of managing food environments extend to measurement, which is problematic because without measurement the scale of any inequity in access—to healthy food, to food aid—is unknown (Smith & Thompson, 2022). In this vein, Gómez-Escoda and Moncusí (2025) present a novel quantitative approach to studying pedestrian movement and measuring proximity related to fresh food markets in urban food environments in Barcelona, Spain. The articles on food environment management finish with an account of co-creating healthy and sustainable food system interventions in local food-system labs in African cities. The authors demonstrate how food environments change and evolve at a micro-level, a topic often overlooked in the literature more broadly (Vermue et al., 2025).

One of the most striking recent macro-developments in food environments research is the transformative process of digitalisation (Cifuentes & Sonnino, 2024). Underpinned by qualitative fieldwork in Norway, Granheim et al. (2025) introduce the digital food environment and reflect on emerging issues for transforming governance and power asymmetries. Farhangi et al. (2025) then pick out a specific component of digitalisation, digital food platforms, which are challenging conventional planning and regulatory frameworks and changing urban infrastructure in Sweden. Evidently, developments in the digital food environment have consequences for physical and material food infrastructure and practice (Farhangi et al., 2025). Dark kitchens, as non-customer-facing establishments where meals are mass-prepared and sold exclusively online (da Cunha et al., 2024), can be seen as the ultimate urban manifestation of virtual food practices. Keeble et al.'s (2025) research on meal delivery platforms in Flanders, Belgium, explains how these sites are potential venues for poor food safety practices, and problematic for urban planning and governance across countries.

The final set of articles takes us from physical/digital dichotomies to rural/urban ones. In an increasingly globalized and interconnected food system, can urban food environments still only be found in urban areas? Neri (2025) opens the debate by introducing the notion of "urban foods" (typically processed foods) that proliferate beyond the urban built environment. Her fieldwork in rural Bhutan examines how urban foods

make their way into rural contexts and rural lives (Neri, 2025). Simón-Rojo et al. (2025) address rural/urban relations in the alternate directionality: starting with the premise that rural areas feed urban ones, often to their own detriment. The article models food supply capacity at the local level to theorize how the burden of urban food demand might impact upon local production (Simón-Rojo et al., 2025). Urbanicity and the associated nutrition transition is a long-standing dietary public health concern (Bellows et al., 2024). In this thematic issue, our contributors go some way to addressing the lack of focus on the rural, rather than urban, side of the transition.

4. Conclusion

Food environments are, among other things, the material, embodied expression of wider social forces (Luger & van der Meij, 2025). Collectively, the articles in this thematic issue highlight some of the influential factors that are changing the way we think about and research food environments, namely: food insecurity, managing food environments, digitalization, and the blurring of rural and urban distinctions. The enduring challenge for many of those working in this field is to continue to take and create opportunities to improve local food environments and, at the same time, avoid the associated propensity of local approaches to further perpetuate the fragmented nature of contemporary responses to food system failure (Smith & Thompson, 2022; Thompson et al., 2025).

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Conflict of Interests

The authors declare no conflict of interests.

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