Commentary

Food environment and vulnerable populations: challenges and opportunities for policy

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The goal of food environment policy is to improve dietary intake at a population level, and to thereby improve overall population health. However, the potential for differential impacts of food environment policies and interventions among different segments of the population has seldom been explored.

Socioeconomic position shapes individuals' exposures and vulnerability to both positive and adverse environmental conditions. Given the importance of the food environment in shaping dietary intake, and the role of diet in health, it is therefore possible that health inequities may be at least partially attributable to greater exposures to, and/or heightened vulnerability to the effects of unhealthy food environments among socioeconomically disadvantaged groups. A better understanding of differential exposures and vulnerability to unhealthy food environments among low-income or otherwise vulnerable populations can inform interventions that assist disadvantaged groups to attain their full health potential. This October special issue weaves together five articles that address aspects of health and social inequity from a food environment perspective, with an overall goal of understanding how matters related to food environments, policy and health equity intersect.

Two articles in this special issue describe challenges related to food environment policy making, and the need to enact coherent and comprehensive policy that engages with multiple dimensions of food environments to enhance food security. A novel paper by Burnett and colleagues highlights persistent problems related to the federal government's response to food insecurity in Canada's North.1 Specifically, data showing that more than half of communities examined did not have a grocery store that competed with the North West Company suggests that limited competition in the food retail sector may be compounding issues related to food insecurity in remote communities. Moreover, responses to a survey among inhabitants of these communities suggested that the poor quality, higher prices and limited availability of healthful perishable foods may drive purchasing of processed, packaged items which have a tendency to be less healthful. In this way, the authors demonstrate that the failure of policy to engage more broadly beyond providing of food subsidies to address drivers of high prices (i.e. limited competition in the retail food sector) and food quality, has important dietary implications for those living in Canada's northern communities.

The article by Speed et al. introduces an additional challenge with respect to policy making related to the need to consider interactions among different policies or policy components to minimize unintended negative consequences.2 For instance, policies that promote greater consumption of fresh produce may inadvertently compromise food safety due to the potential for microbial contamination. This article breaks down the concerns of a group of stakeholders within food safety and community food security in British Columbia, and importantly, identified a shared goal of increasing the provision of high quality, safe foods to support an overall healthier food environment for those experiencing food insecurity. Thus, while food environment policy should be broad and comprehensive, the challenge is to ensure that policies also consider the dynamic interplay among various dimensions of food environments to maintain coherence and ensure policies do not act at cross-purposes.

The next three articles focus specifically on physical access to healthful food in retail food environments, and provide potential solutions to commonly encountered challenges. Geographic access to food stores providing more healthful food choices is one of the most widely explored aspects of food environments, particularly with respect to disparities in physical food access between high and low income areas. The attention paid to retail environments is warranted, given that this is the point of procurement for the vast majority of food consumed by the general public.3 A notable challenge, however, remains in distinguishing 'healthier' and 'less healthy' food outlets, and whether it is even worthwhile to pursue policies in this area in light of this challenge.

The article by Minaker et al. uses sales data to examine the impact of a retail intervention in a corner store situated in a low-income neighbourhood in Toronto, a method used less often in retail intervention research.⁴ Corner stores tend to have poorer availability of healthy options, making them an important food environment in which to intervene, particularly in neighbourhoods with limited access to traditional, larger grocers.⁵ This preliminary study explored trends in corner store sales data before and after an intervention to increase the availability of fresh fruit and vegetables, and identified opportunities

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for retailers to profit from sales of healthier foods. Given that perceived low profitability of healthy items is a major barrier to increasing availability of healthy items, incorporating sales data into research methodologies may help overcome a major hurdle within the food retail sector. It is important to identify positive impacts of providing healthier options on profitability, as this can obviate the need for policy or intervention as food retailers will naturally provide the most profitable options.

Slater and colleagues examine the concept of food deserts, and the accessibility of larger grocery stores with a greater variety of healthy food products for low-income groups living in Winnipeg.6 The high proportion of low-income households, particularly in the urban core, suggests that many residents may be vulnerable to poor health, which can be exacerbated by limited access to healthier food retailers. The authors used relatively simple means to identify food deserts using routinely available data, in order to facilitate identification of these areas, providing data to inform policy decisions in support of more equitable access to healthy food.

Lastly, the status report from Mahendra and colleagues provides an update on efforts to establish universal indicators for characterizing access to different types of retail outlets in Ontario, with potential for scale up to other provinces or territories and nationally. As policies to improve food environments continue to evolve, these indicators can provide a framework for monitoring their impact, particularly as they relate to nutritionally vulnerable populations.

The articles within this issue contribute to our understanding of the current food environment, how it is experienced by vulnerable populations, and the challenges related to ensuring policies engage with the multiple dimensions of food environments in support of equitable population health impacts. They also identify opportunities through which policy might address some of the underlying drivers of dietary and health inequities. Health inequities are estimated to cost the Canadian health care system \$6.2 billion annually,8 and these articles serve as a reminder of the importance of applying a health equity lens to population-level food environment policies in Canada.

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