

Determinants of Food Choice, Dietary Intake

Environmental determinants of eating behaviour: Impact of the community food environment

T. McBrien¹, D. Guillette¹, N. Lapos¹, S. Fitzpatrick¹
¹Region of Peel – Public Health, Mississauga, ON

Purpose: To establish an interactive mapping tool that provides a point in time assessment of community level food access and availability across the Region of Peel.

Process: Local restaurant and food retail outlet data was obtained through the public health inspection database and re-categorized by outlet type to evaluate geographic access and availability at varying levels of geography.

Systematic Approach Used: All food retail outlets were systematically categorized using clear outlet definitions and a categorization algorithm. Access was measured using proximity to outlet types using a pedestrian street network. Availability was measured using density (absolute number) of retail outlet types and relative density (proportion of outlet types to others). Community measures used population weighted centroids, while school measures captured outlets within 800 metres of any school access point.

Conclusions: The Region of Peel has a large number and proportion of food retail outlets primarily associated with the sale of highly processed, less healthy options (e.g., fast food restaurants and convenience stores) that are easily accessible (i.e., within walking distance of residential areas and schools). This type of food environment undermines healthy eating according to Canada's Dietary Guidelines by encouraging the frequent consumption of foods and beverages that are highly processed and likely to contribute excess sodium, free sugars and / or saturated fat to the diet.

Recommendations: Data from this tool supplements local population health surveillance data and research evidence to build institutional, public and political support for creating healthy community food environments.

Significance to the Field of Dietetics: This tool will help dietitians better understand the local context in which residents are making food choices. With this awareness, dietitians are well positioned to advocate for healthy public policies including land use and transportation policies that influence the location, type and accessibility of food outlets in the community.