

LOCAL RESOURCES AND HEALTH

Overview of knowledge synthesis

Parks, roads, supermarkets, apartment buildings and community centers shape our everyday lives. The quality and quantity of these local resources vary depending on the living environment. Is there a connection between urban populations' access to these resources and their health and well-being?

To answer this question, we conducted an in-depth study of the scholarly literature in four areas: sustainable mobility, food environment, housing and community life (see the study overview on page 4). This fact sheet provides a summary of our results on the food environment.



FOOD ENVIRONMENT

THE FOOD ENVIRONMENT is defined by physical, social, economic, cultural and political factors that govern the accessibility, availability and adequacy of food available in a neighborhood, such as geographic access to food and consumers' experiences in food stores¹.

We obtained results for the following resources: food stores offering healthy foods, supermarkets, groceries, convenience stores, fast food restaurants, other restaurants, food environment index (to describe the mix of stores), nutritional quality of food available, food prices, and perceived opportunities for healthy and unhealthy food purchases. Associations were found between these resources and healthy weight and healthy eating.

However, no results emerged regarding access to less conventional food resources such as urban agriculture, short distribution channels that cut down on intermediaries between producers and consumers (e.g., farmers' markets), or community resources related to food security. Nor were associations found for health variables related to diabetes, cardiovascular or respiratory diseases, traumas, cancer, depression, tobacco use, physical activity, perceived physical and mental health, and well-being.

HIGHLIGHTS

As you can see from the center pages, the geographic accessibility of certain types of food stores is, by far, the most frequently studied food environment related resource.

Half of the results arising from the high and moderate quality syntheses are inconsistent, a fact that greatly complicates their analysis. However, the syntheses on healthy weight are higher in quality than those on healthy eating. In this context, it is only possible to tease out certain trends.

Access to supermarkets tends to be associated with healthy weight. Conversely, access to fast food restaurants tends to be associated with unhealthy weight. The same is true of access to convenience stores, which tends to be unfavorably associated with both healthy weight and healthy eating, especially for children. The existence of an "unfavorable trend" association between perceived opportunities for unhealthy food purchases and healthy eating is, for the moment, inconclusive.

Most of these 21 knowledge syntheses are based on American studies and a few Canadian studies. They cover 157 relevant original studies, most of which adopt a cross-sectional design that precludes the establishment of causal links. Most of the excluded syntheses were not in fact knowledge syntheses, or did not present their methodology.



¹An academic article is under development.

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FOOD ENVIRONMENT

HEALTH VARIABLES

HEALTHY WEIGHT

FOOD ENVIRONMENT RELATED RESOURCES



FOOD STORES OFFERING HEALTHY FOODS (ALL TYPES)



SUPERMARKETS



GROCERIES



CONVENIENCE STORES



FAST FOOD RESTAURANTS



RESTAURANTS (OTHER TYPES)



FOOD ENVIRONMENT INDEX



AVAILABILITY OF HEALTHY FOODS



HOW TO READ THIS?

This dot represents an inconsistent association, between the availability of healthy foods and healthy weight in adults, drawn from a high quality systematic review.

FOOD PRICES (PERCEIVED OR MEASURED)

PERCEIVED OPPORTUNITIES FOR HEALTHY FOOD PURCHASES

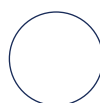
PERCEIVED OPPORTUNITIES FOR UNHEALTHY FOOD PURCHASES

Each dot corresponds to an association between a resource and a health variable.

Low quality reviews are excluded.

Empty space: no results available.

QUALITY OF REVIEWS



High quality, n = 3
AMSTAR scores between 8 and 11



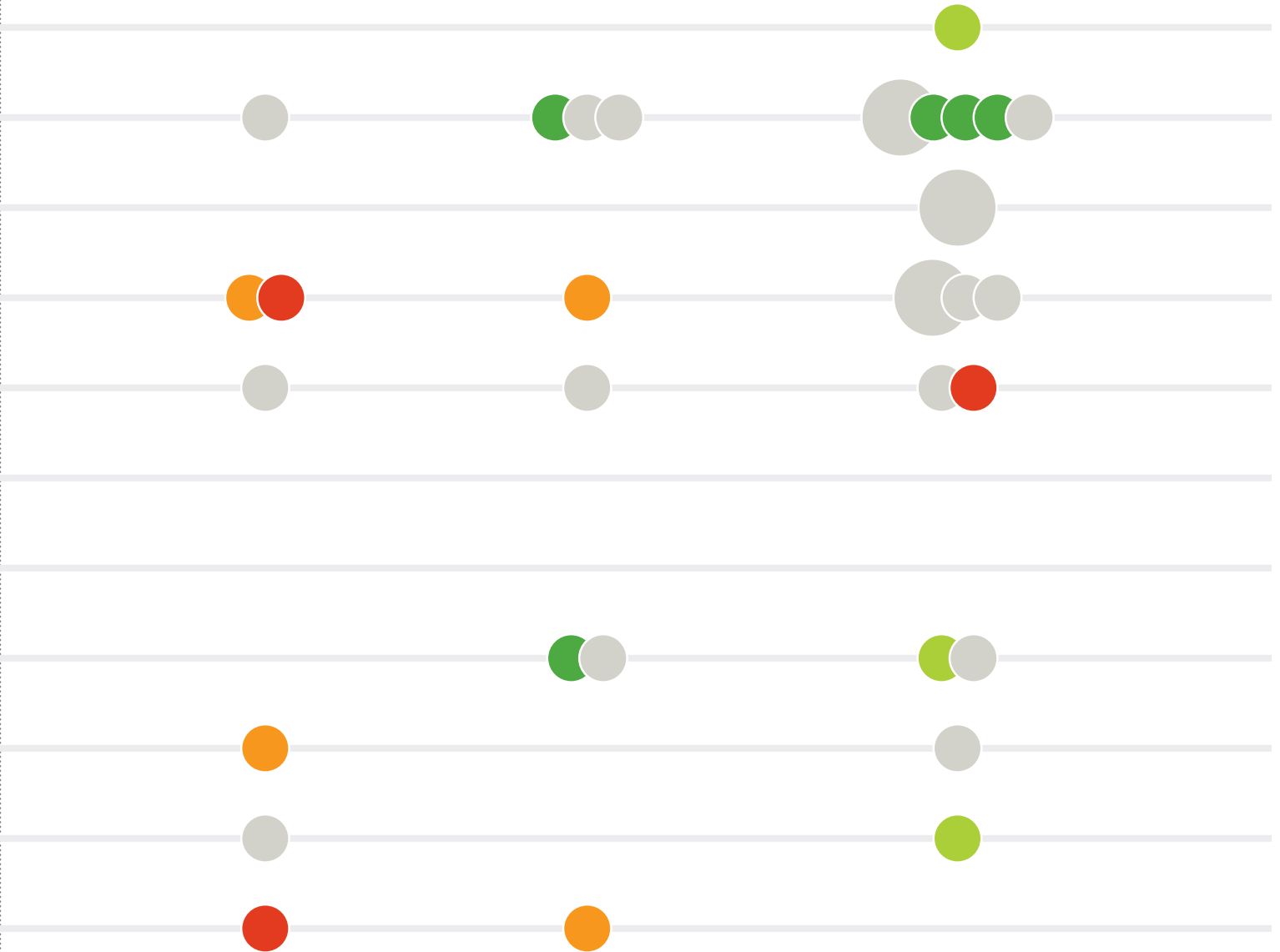
Moderate quality, n = 11
AMSTAR scores between 4 and 7

ASSOCIATIONS BETWEEN HEALTH AND THE PRESENCE OF LOCAL RESOURCES RELATED TO THE FOOD ENVIRONMENT

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Mercille, G., Braën, C.,
Perez, E., Boyer, G., Rehany, É.,
Potvin, L., 2017

HEALTHY EATING



TYPES OF ASSOCIATION

- Clearly favorable
- Favorable trend
- Unfavorable trend
- Clearly unfavorable
- Inconsistent

POPULATION GROUPS



Children and teenagers

Adults

General population

OUR METHODOLOGY AT A GLANCE

The overarching purpose of this study is to provide a **rigorous update of the scholarly knowledge** on associations between characteristics of the food environment, community life, material housing conditions, sustainable mobility, and the physical and mental health of urban populations.

The results here presented are based on an umbrella review, i.e., a rigorous analysis² of scholarly works that have synthesized original studies on one of the four areas concerned. The analyzed reviews had to deal with general populations residing in urban neighborhoods of OECD countries; be published in English, French or Spanish between 2008 and 2016; and specify their methodology.

A literature search strategy was applied to 11 databases (6 to 10 per area: Sociological Abstracts, Embase, Medline, etc.) and supplemented with research in the grey literature and the reference lists of the included articles. Review selection and data extraction were performed by two independent reviewers. To assess the quality of methodology in the included syntheses (high, moderate or low), the AMSTAR tool³ was used.

The present study excluded knowledge syntheses on the health effects of participation in an intervention within the areas concerned, as well as syntheses on associations between the resources and special needs populations or patient types.



- **Supporting local authorities commitment** to develop, adopt and implement public policies promoting access to healthy food for all citizens (tools, arguments and guidance).
- Incorporating **measures to limit access to unhealthy food sources**, especially close to schools (convenience stores and fast food restaurants), into governmental land-use guidelines.
- **Supporting participatory action research** in order to document:
 - the quality of foodscapes;
 - food prices;
 - developments in and the evaluation of the effects of alternative approaches to healthy eating for all citizens (e.g., short distribution circuits and urban agriculture);
 - associations between food environment related resources and other health variables (e.g., social cohesion).
- In this area as in the others, **demonstrating caution in the use of “evidence-based data,”** given the number of low and moderate quality reviews and the disparities encountered between different definitions of concepts and measures.

* Our thanks go to the 30 or so stakeholders and managers from the municipal system, health network, and community sector who took part in a workshop on April 19, 2018 to help guide the content for this section.

REFERENCES

- 1 Rideout K, Mah CL, Minaker L. 2015. Food environments: an introduction for public health practice. National Collaborating Centre for Environmental Health.
- 2 The detailed protocol is available here: BRAËN, C., PEREZ, E., DESLAURIERS, V., MERCILLE, G., PERREAULT, K., BILODEAU, A., REHANY, É., POTVIN, L. 2016. Local resources favorable to health: an umbrella review. University of York, Centre for Reviews and Dissemination. Prospero reference no. CRD42016051609. https://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016051609
- 3 The standardized AMSTAR (A Measurement Tool to Assess Systematic Reviews) : <https://amstar.ca/index.php>

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