

# Modifying the Built Environment to Promote Healthy Eating Among Youth

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This summary presents a range of possible options for municipalities seeking to modify built environment in order to limit exposure to junk food and improve access to nutritious foods, thus helping to promote healthy eating. A variety of strategies are reviewed and illustrated with initiatives that have recently been implemented in the United States and Quebec. These strategies target the entire population, particularly young people.

## CHANGES IN FOOD ENVIRONMENT AFFECT YOUNG PEOPLE'S EATING HABITS

The fast-food industry is booming. In Quebec, fast-food restaurants have shown the highest growth in terms of number of establishments<sup>1</sup>. Urban planning has encouraged the construction of neighbourhoods with low mixed usages development, making it more difficult for people to access supermarkets and fresh produce. Also, people are preparing fewer meals at home. All of these factors promote a higher caloric intake of foods that are often lacking in nutritional value. According to the results of the 2004 *Canadian Community Health Survey – Nutrition Focus*, between 39% and 57% of Quebec youth aged 4 to 18 years consumed foods prepared outside their home on a given reference day, depending on their age group, and between 11% and 28% ate foods from a fast-food restaurant<sup>2</sup>.

Scientific literature shows that the retail food environment influences eating habits of residents<sup>3</sup>. For example, the presence of supermarkets in residential neighbourhoods has been associated with better eating habits among local residents<sup>4</sup>. Likewise, improved access to supermarkets around schools has been linked to a lower body mass index (BMI) among teenagers attending the schools, while the presence of convenience stores in these environments has been linked to a higher BMI and overweight<sup>5</sup>.

Disadvantaged neighbourhoods are particularly exposed to junk food. Across the United States, low-income neighbourhoods have fewer supermarkets where residents can buy fresh produce at an affordable price<sup>6</sup>. Fast-food restaurants, on the other hand, are more numerous in these neighbourhoods than in higher-income neighbourhoods<sup>7-12</sup>.

## **POLICIES AND REGULATIONS: A NEW ARSENAL TO INCREASE ACCESS TO HEALTHY FOODS IN RESIDENTIAL NEIGHBOURHOODS**

A more thorough understanding of the environmental factors that influence eating habits has led experts<sup>13-14</sup> and major health organizations such as the World Health Organization and, in the United States, the Institute of Medicine, the Surgeon General and the Centers for Disease Control and Prevention, to declare that interventions aimed at countering the rise in childhood obesity must be focused on policies and the food environment<sup>15-17</sup>. In its report on the prevention of childhood obesity, the Institute of Medicine concluded that these were the most promising strategies. Options include banning, limiting and restricting negative factors and promoting supportive factors.

### **LIMIT OR RESTRICT: FAST-FOOD RESTAURANTS AND CONVENIENCE STORES IN SCHOOL ZONES**

The town of Concord, in Massachusetts, has banned fast-food outlets and restaurants with drive-through service. The cities of Carlsbad, in California, and Newport, in Rhode Island, have also enacted zoning laws to ban this type of restaurant, although the purpose of the legislation in these cases was more to ease traffic congestion and enhance the city's aesthetic appeal than to get rid of junk food<sup>18</sup>. A ban on fast-food restaurants is sometimes limited to certain parts of the city, as is in the cities of Solvang and Davis in California<sup>19</sup>. Other cities, like Stockton, in California, and Seattle, in Oregon, have chosen to ban mobile vendors near schools and parks<sup>20</sup>, except for those selling fruits and vegetables.

*Simply limiting the number of fast-food restaurants can be an insufficient measure, because it does not guarantee the availability of healthy foods in the immediate environment.*

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## LIMIT OR RESTRICT: FAST-FOOD RESTAURANTS AND CONVENIENCE STORES IN SCHOOL ZONES (NEXT)

Municipalities must use means other than banning to ensure that residents have access to healthy foods in their neighbourhoods.

For instance, they can<sup>19, 21</sup>:

- regulate the number of fast-food restaurants by setting quotas;
- regulate the density of fast-food restaurants in a given area;
- establish minimum distances between fast-food restaurants and other institutional or residential uses—for example, by enacting a zoning law that prohibits fast-food restaurants within two kilometres of elementary and secondary schools;
- limit food advertising on billboards;
- facilitate the establishment of local grocery stores and public markets;
- develop bike paths and safe sidewalks to facilitate access to food retailers;
- develop the surroundings and parking facilities of food retailers to ensure the safety of pedestrians and cyclists, and ease of access for delivery trucks and cars.

*Local governments have often used land-use planning and zoning for public health purposes—for example, to protect air and water quality or to limit access to alcohol<sup>22-23</sup>.*

The above measures are beneficial to the entire population and are also likely to have an impact on youth. Recent initiatives in the United States have targeted youth in particular by limiting access to fast food around schools. The city of Phoenix, in Arizona, has banned mobile vendors within 600 feet of schools between 7 a.m. and 4:30 p.m. Detroit has banned fast-food restaurants within 500 feet of schools<sup>24</sup>. In 2007, San Francisco adopted a zoning regulation prohibiting mobile vendors from selling within 1,500 feet of public schools<sup>25</sup>.

Given that these initiatives targeting food environment are very recent, it is still too early to gauge their effectiveness. However, a recognized US nutrition expert has noted that such measures must be combined with much broader policies aimed at promoting healthy eating among youth beyond school environments<sup>26</sup>. For instance, the government should adopt agricultural policies to reduce the cost of healthy foods.

## SUPPORT: FOOD RETAILERS, PUBLIC MARKETS, COMMUNITY GARDENS, URBAN AGRICULTURE

Regulations (particularly zoning regulations) can be used to attract or ensure ongoing presence of retailers offering healthy foods. Several cities offer financial incentives (tax credits, grant and loan programs) **to encourage:**

- the sale of healthy foods at existing supermarkets and small food retailers;
- the establishment of local public markets that are well-suited to the local environment<sup>27</sup>;
- the establishment of supermarkets in underserved areas<sup>16, 25, 28</sup>;
- the continued presence of major grocery chains, particularly in underserved areas;
- access to food retailers through improved public transportation and better lighting and safety of sidewalks and bike paths<sup>16</sup>;
- the labelling of chain restaurant menus with calorie information (in the United States, these types of regulations have been passed in New York City and Seattle<sup>29</sup>);
- access to healthy foods in public buildings (arenas, city hall, sports centres, etc.); this policy has been adopted by several cities in Quebec, including Belœil and Mont Saint-Hilaire.

### Some examples

- San Francisco has simplified its permit-granting procedures for food retailers. This small change means that when a local food retailer closes, moves or declares bankruptcy, residents will not be left in the lurch for long periods<sup>25</sup>.
- Philadelphia witnessed a supermarket exodus and was classed as one of the worst-served cities during the 1990s. To counter this problem, in 2004, the State of Pennsylvania created the Fresh Food Financing Initiative, which provides loans and grants for the development of supermarkets in underserved areas, in order to improve residents' health and restore economic vitality<sup>30</sup>. In four years, close to \$40 million has been spent on opening 32 food retailers, including 16 in Philadelphia.
- San Francisco recently passed an ordinance aimed at developing farmers' markets throughout the city by authorizing markets to be located on public land. The ordinance also includes measures to support the establishment of markets in underserved areas<sup>25</sup>. The city of Sacramento, also in California, adopted an ordinance allowing homeowners to grow fruits and vegetables in their front yard. Finally, the city of Escondido adopted a zoning amendment to make vacant land available for community gardens<sup>31</sup>. Research has shown that people who grow their own vegetables eat more and share them with friends and family<sup>32</sup>.

Concretely, municipalities can encourage urban agriculture in a variety of ways<sup>33</sup>, for example, by:

- making urban agriculture a key component of land use planning and food policies;
- creating, promoting and funding community garden programs and organizations devoted to urban agriculture. In Montreal, for example, the *Table de développement social Centre-Sud* advocates the creation of new community and collective gardens in residential areas in order to provide better access to fresh produce<sup>34-35</sup>.
- establishing procedures to amend zoning regulations and permits in order to facilitate urban agriculture.

## PUBLIC HEALTH ORGANIZATIONS AND NGOs ARGUE IN FAVOUR OF POLICIES AND REGULATIONS PROMOTING A HEALTHY FOOD ENVIRONMENT



Aware of the impact of the built environment on lifestyle habits, Quebec's Public Health Institute (Institut national de santé publique) submitted a brief to the consultation committee on the draft Bill for Sustainable Regional and Local Land-Use Planning Act<sup>36</sup>. The health institute recommended strengthening the role of municipalities in the promotion of healthy lifestyles, noting the possibility of using urban planning legislation to this end.

The Quebec Coalition on Weight-Related Problems and the Montréal Urban Ecology Centre also submitted a brief on the draft Bill. They encouraged municipalities to limit the presence of convenience stores and fast-food restaurants in school zones<sup>37</sup>. The Coalition reported that, according to the results of a survey it had commissioned from the firm SOM, 76% of the Quebec population was in favour of using zoning to ban the development of new fast-food restaurants around schools.

*The organization Vivre en Ville has expressed reservations about restricting the number of convenience stores around schools, as this could limit mixed-use development. Convenience stores are sometimes the only food retailers in the neighbourhood. The organization rather proposes measures aimed at encouraging convenience stores to sell healthier foods<sup>38</sup>.*

In 2009, Quebec's Public Health Institute (INSQ) published a study that examined how elements related to food retailers and restaurants in municipal zoning regulations could be used to create a built environment conducive to healthy eating habits. The study was based on a random representative sample of 41 municipalities in Quebec<sup>39</sup>. Although zoning regulations are currently not designed with this purpose in mind, they could be used to regulate food offerings, either by authorizing or restricting commercial food uses in several zones. Two additional instruments in **zoning regulations** are:

- **Conditional uses**, which allow new uses on certain conditions;
- **Quota systems**, which set parameters for new uses (e.g., density or distance)<sup>39-40</sup>. For example, in Montreal's Sainte-Marie neighbourhood, where 76% of food retailers are convenience stores, the organization *Au Coup de pousse Centre-Sud* recommends amending zoning and municipal regulations in order to ensure that a fixed percentage (or kilometre ratio) be reserved for retailers providing staple goods (bakeries, fruit stores, grocery stores, etc.).

In 2010, the National Collaborating Centre for Healthy Public Policy held a knowledge-sharing colloquium on public policies, stake-holders and obstacles related to built environment and the latter's impact on health and proximity of services, among other things<sup>41</sup>.

In its annual 2011 report, the Montérégie Department of Public Health called on municipalities to use means and levers at their disposal to promote healthy lifestyle habits<sup>42</sup>. In terms of food environment, the department proposed the following actions:

- Support the creation of community and collective gardens;
- Support the establishment of farmers' markets and mobile markets;
- Amend municipal regulations in order to limit the establishment of new fast-food restaurants near schools.

Among levers available to municipalities to improve the food environment, the Montérégie Department of Public Health noted the following:

- municipal family policy;
- urban development plan;
- the 0-5-30 Program;
- the Health Network for Quebec's Cities, Towns and Villages;
- sustainable development approaches;
- health impact assessments.

## QUEBEC MUNICIPALITIES ARE AWARE THAT RESIDENTS, PARTICULARLY YOUNG PEOPLE, REQUIRE ACCESS TO HEALTHY FOODS

In a survey conducted by the Montréal Department of Public Health, 86% of municipal decision-makers said they believed municipalities have a role to play in residents' lifestyle habits. In addition, two-thirds of respondents stated that municipalities have the means to influence residents' lifestyle choices<sup>43</sup>. The *Fédération québécoise des municipalités* has said it is open to implementing a zoning regulation banning the sale of junk food around high schools<sup>44</sup>.

As part of the government's "In Quebec, we love life" campaign, an Ambassadors' Tour travelled across the province to encourage elected municipal officials to step up their efforts to promote healthy lifestyles<sup>45</sup>. Mayors who signed the "Declaration of commitment to healthy lifestyle habits" were encouraged to offer residents environments promoting healthy eating and a physically active lifestyle. Actions specifically aimed at improving built environment included:

- facilitating the establishment of public markets selling local, seasonal produce;
- encouraging the establishment of food markets in new areas;
- setting up community gardens;
- organizing a campaign to promote public markets;
- promoting restaurants that signed on to the "*Fruits et légumes en vedette*" (spotlight on fruits and veggies) program.

In 2011, 178 Quebec municipalities and local communities made a commitment to their residents. In Montréal, ten municipalities provided their residents with services and facilities promoting healthy eating and a physically active lifestyle.

Already in 2005, Longueuil's social and community development plan recommended that the City take part in all initiatives aimed at getting rid of junk food, and that it use all the means at its disposal to promote access to healthy foods near schools<sup>46</sup>.

Between 2009 and 2011, action research on the food environment around schools was carried out in Baie-Saint-Paul, Lavaltrie and Gatineau. These municipalities examined the processes, obstacles and conditions required to change zoning regulations in order to keep fast-food restaurants away from schools<sup>47</sup>. In Baie-Saint-Paul, the Municipal Council chose to optimally manage food offerings through legislation based on conditional uses. In Lavaltrie, the project team opted to ban fast-food restaurants within 500 metres of schools, and to review the vested rights system. In Gatineau, the wide range of local realities led the team to focus on adapting regulations to different sectors.

# Conclusions

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- An increasing number of studies show that built environments exposing population to high-calorie, poor-quality foods play a role in weight gain. In some areas, fresh produce is rare while less nutritious foods are abundant.
- Major health organizations recommend that authorities focus on policies and food environment.
- A number of US cities have amended their zoning regulations to limit the availability of fast-food restaurants, especially around schools.
- There are many ways in which municipalities can improve food environment without simply resorting to banning. They can regulate food services in certain areas to restrict an undesirable use, or they can promote the implementation and continued operation of retailers selling healthy foods.
- Youth-targeted interventions are designed to limit or ban businesses selling poor-quality foods near schools.
- Quebec's public health authorities recommend that municipalities use the means and levers at their disposal to promote a healthier food environment.
- A growing number of elected officials believe that municipalities have a role to play in promoting healthy lifestyle habits, and are committed to making a difference.

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### **Research and editing**

Marie Demers, Ph.D., Research Associate  
CHUS, University of Sherbrooke

### **With the collaboration of**

Rotem Ayalon, Nutrition Advisor  
Lucie Lapierre, Ph.D., Main Advisor, Knowledge Transfer

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