# School Food Policies

A KNOWLEDGE SYNTHESIS ON THE IMPLEMENTATION PROCESS

ABSTRACT



### AUTHOR

**Gérald Baril**, Ph. D. Unité Habitudes de vie Direction du développement des individus et des communautés Institut national de santé publique du Québec

#### **Coordinated by**

Johanne Laguë, M.D., M. Sc., FRCPC, Chef d'unité scientifique Unité Habitudes de vie Direction du développement des individus et des communautés Institut national de santé publique du Québec

#### Translation

#### Susan Ostrovsky

This document is available in its full electronic form (PDF) on the Website of the Institut national de santé publique du Québec at: www.inspq.qc.ca.

Reproduction for private studies or research is authorized by virtue of article 29 of the Copyright Act. Any other use must be authorized by the Government of Québec who hold exclusive rights of intellectual property on this document. This authorization may be obtained by submitting a request to the Guichet central of the Service de la gestion des droits d'auteur, Publications du Québec, using an on-line form available at: www.droitauteur.gouv.qc.ca/autorisation.php, or my sending an email to: droit.auteur@cspq.gouv.qc.ca.

The data contained in the document may be referred to on condition that the source is mentioned.

LEGAL DEPOSIT 4<sup>rd</sup> QUARTER 2008 BIBLIOTHEQUE ET ARCHIVES NATIONALES DU QUEBEC LIBRARY AND ARCHIVES CANADA ISBN: 978-2-550-53860-8 (FRENCH PDF VERSION) ISBN: 978-2-550-54436-4 (PDF) © Gouvernement du Québec (2008)

# **School Food Policies**

# A KNOWLEDGE SYNTHESIS ON THE IMPLEMENTATION PROCESS

## To Find Out More

The Institut Website contains the complete version of the report titled, Les politiques alimentaires en milieu scolaire. Une synthèse de connaissances sur le processus d'implantation (Baril, 2008) (School Food Policies. A Knowledge Synthesis on the Implementation Process) as well as another Institut publication referred to in the synthesis, titled, L'implantation des politiques alimentaires en milieu scolaire au Québec. Une étude exploratoire auprès d'acteurs de la Montérégie (Jenouvrier, Baril et Mongeau, 2007) (Implementation of Food Policies in Québec Schools. An Exploratory Study of Stakeholders in the Montérégie).

www.inspq.qc.ca

This abstract offers highlights of a knowledge synthesis on the implementation process for policies, programs or measures favourable to healthy eating in the schools. The data reported concerns schools at the elementary and secondary levels. The synthesis reveals a portrait of the favourable factors and obstacles to implementing school food policies, as well as describing a systematic approach to maximize the chances of success of this implementation. This knowledge will be useful to any individual or organization who wishes to contribute to the success of the Québec Framework Policy on Healthy Eating and Active Living, *Going the healthy route at school* (Québec, 2007).

## A Knowledge Synthesis from Numerous Sources

This synthesis documents experiences of implementing policies, programs or measures to promote healthy eating in the schools in socio-economic and cultural contexts comparable to the situation in Canada. This data has been made accessible so that this knowledge can be applied within the Québec context.

In this case, the term, implementing, refers to the adoption of local policies by school boards and private schools, as well as the process by which each school community applies the policy and introduces measures adapted to its specific situation.

To define the scope of the study, the synthesis seeks to answer the following questions:

- Are school food policies effective in countering problems related to weight and in promoting the health of young people?
- What is a school food policy? What distinguishes it from programs, measures and other interventions that promote healthy eating and lifestyles? How does the food policy operate in regard to other interventions?
- What should be the content of a food policy in schools?
- What are the favourable factors and obstacles to implementing the policy on the socio-economic, cultural, political and organizational levels?
- What approach should be adopted locally to maximize the success of a policy implemented to promote healthy eating in the schools?

To answer these questions, the synthesis has drawn from several sources of additional data:

A survey of synthesis and systematic reviews of the efficiency of food policies;

A survey of scientific articles on the conditions for the success of policies, programs and dietary measures in schools and, particularly, the favourable factors and obstacles to their implementation;

A consultation among the players concerned by school food policies in Québec;

A continuous scientific intelligence process.

## The Framework Policy Going the Healthy Route at School

In Québec, close to one-quarter of youth from 2 to 17 years are overweight. Schools can play a key role in countering problems related to weight. In addition to preventing obesity and certain chronic diseases, healthy eating habits and regular physical activity in schools promotes the health and well-being of children in general, as well as their ability to concentrate in the classroom and learn. The school must therefore see that the messages transmitted are coherent in the classroom as well as in the total environment, which is why it is important to offer students conditions that promote healthy eating habits and physical activity.

In general, the environment in Québec schools does not encourage students to adopt healthy eating habits. Although positive elements have been reported here and there, studies show a degree of stagnation in the situation, particularly in secondary schools. Recent government actions, supported by a wide public awareness, lead us to envisage improvements in several aspects of the school food environment. In September 2007, the *ministère de l'Éducation, du Loisir et du Sport*, adopted the policy, *Going the healthy route at school, Framework Policy on Healthy Eating and Active Living*, offering a notable advance in this respect.

## The School Food Environment

Knowing that the obesity is mainly caused by environmental factors that result in an energy imbalance in the population, we must act on these factors to counter the problem. In the schools, this means that, today, we must introduce measures that are most likely to change the environment in each specific context, to promote an energy balance in our youth.

We have agreed to call all the material and non-material elements involved in food consumption in the school, the "school food environment". From a prevention and health promotion point of view, four dimensions of the food environment have been identified on which our actions must be focussed<sup>1</sup>:

- 1 The food offer (in all the forms present in the schools);
- **2** Physical structures (organization of facilities where students eat, time allowed for meals, noise level, etc.);
- 3 Advertising and promotional messages related to eating disseminated in the school;
- 4 School food policies.

School food policies regulate the eating environment in the school and, as such, can be designed to change this environment so that it is more favourable to the students' health.

<sup>1.</sup> These four dimensions correspond to the Cohen model (Cohen, Scribner and Farley, 2000), as applied in the school food environment in other studies in Québec (Jenouvrier, Baril and Mongeau, 2007; Beauchesne-Rondeau and Chaumette, 2004; Côté, Déry and Vanier, 2002).

# What is a School Food Policy?

A school food policy is a group of provisions set out in an official document, designed to improve the school eating environment to make it easier for students to adopt eating habits that promote health and, more generally, to promote health in the community.

A school food policy is a public policy that promotes health, a statement that expresses the decisions made by a competent authority to act on certain health determinants in the public interest.

When a school food policy is adopted by a provincial government, it creates a framework for the policies adopted at the local level. This is the case for the Québec policy, *Going the healthy route at school*, which proposes orientations for eating habits as well as physical activity.

In Québec, local policies are adopted by school boards and private schools. Public school institutions adopt a plan of action to guide the application of the policy in their school board. At the local level, based on specific knowledge of the situation, in the beginning, the food policy will combine measures, interventions, actions or programs, so as to attain the objectives set by the provincial policy and the specific objectives of each particular situation. The success of the policy will also be related to its intensity and duration as well as the diverse elements at play.

The policy provides a framework and support to the community and thereby reinforces its ability to act on the health determinants. In addition to generating direct action in the environment, the body (government, school board or school) that adopts a food policy issues a strong social message on the importance of healthy lifestyles for its community's health.

## Essential Components in a School Food Policy

### STATEMENT OF PRINCIPLE

- The principles and values that motivate the policy or plan of action.
- The situation to which the policy or plan of action wishes to respond.
- The general objectives.

## **2** A CALL TO THE COMMUNITY

- The school calls for the support of the extended school community (parents, organizations, businesses, etc.) in its endeavour to promote healthy eating habits.
- The school makes a commitment to inform the community of developments in the situation.

### GUIDELINES FOR EATING

- The nutritional value of the food.
- The sensory quality and conviviality of the eating environment.
- The food supply.
- The preparation of food in the school.
- Training of the food service staff.
- Information and advertising concerning healthy food offered in the school.

#### 4

5

3

## EDUCATIONAL PROGRAM ON FOOD AND NUTRITION

- Nutritional education in specific courses.
- Nutritional education in regular courses.
- Nutritional education in specific activities.
- Nutritional education in regular activities.

### IMPLEMENTATION METHODS

- The specific objectives of each aspect targeted by the policy or plan of action.
- The performance schedule.
- Sharing of responsibilities.
- Communications plan.
- Evaluation plan: follow-up and data collection methods, schedule, responsibilities.

## Effectiveness of Food Policies in the Schools

An obesogenic environment is the sum of influences that the surroundings, opportunities or conditions of life have on promoting obesity in individuals or populations. (Swinburn, Egger and Raza, 1999). Many scientific reports tend to indicate that policies in the schools offer a promising strategy to make the school environment less obesogenic and more favourable to health. Recommendations made by experts favour pursuing and expanding interventions in the schools, developing multi-dimensional interventions in which the students' healthy choices will be promoted by educational and environmental measures supported by the commitment of the players concerned and the consequent policies.

International experience shows that various programs, measures and policies have enabled school environments to be modified to encourage youth to adopt more healthy lifestyles. In certain cases, weight losses or reductions in body mass indexes have been noted in the target population following an intervention and, in no cases, have effects been observed that are contrary to the intervention objectives.

School food policies are designed to make it possible for the community to work together to change the eating environment in the school. It is also recognized that they are an indispensable tool in encouraging the health, well-being and success of young people.



# Favourable Factors and Obstacles to Implementation

A survey of scientific articles has provided an inventory of the most significant favourable factors and obstacles to implementing programs, measures or policies to promote healthy eating in the schools. These factors have been compiled and divided into two categories: **1**. socio-economic, cultural and political factors and **2**. organizational factors.

#### TABLE '

## PRINCIPAL FAVOURABLE FACTORS AND OBSTACLES TO IMPLEMENTING PROGRAMS OR POLICIES TO PROMOTE HEALTHY EATING HABITS IN THE SCHOOLS

#### FAVOURABLE FACTORS

SOCIO-ECONOMIC, CULTURAL AND POLITICAL

Adoption of public policies

#### ORGANIZATIONAL

An overall, integrated approach Mobilization of the various players Consensus building among the players Training of the administration and staff Links with the family and community

#### OBSTACLES

SOCIO-ECONOMIC, CULTURAL AND POLITICAL

Trends concerning young people's preferences Practices of the agri-food industry Educational priorities

#### ORGANIZATIONAL

Financial constraints The weight of the staff's duties Training of the administration and the staff Weak mobilization of the various players Resistance of the parents to participate Little control over the situation outside the school

## Socio-economic, Cultural and Political Factors

Socio-economic, cultural and political elements related to the overall social environment are usually considered as obstacles. Among these, relative trends in young people's food preferences are clearly identified as being the most important; however, it should be noted that youth are very easily influenced by their environment and that this can play against as well as in favour of health promotion interventions. In regard to the agri-food industry's practices, we must particularly point to the omnipresence and easy availability of food products with little nutritional value, making it too easy to choose these foods.

On the political level, the most important obstacle identified concerns the main orientations in the field of education which do not make health a real priority. On the other hand, when such policies exist, in the column of favourable factors, they are instrumental in introducing successful interventions, particularly when these policies are designed and implemented by national, regional and local levels of government working together.

## **Organizational Factors**

The category of organizational factors receives the largest number of mentions in the documentation surveyed. It should be noted that these factors will have direct impacts on local action.

In terms of the obstacles, financial constraints take first place. These constraints concern insufficient funding to ensure improvements in the food environment and the risk of loss of revenues incurred by withdrawing certain products or replacing them with healthier products. The extent of the school staff's duties results in a lack of time to participate in health promotion actions in the school. Training of the school administration and staff in general is often considered inadequate in regard to health issues in the schools. The weak mobilization of the players is particularly related to the lack of associating these players with the intervention from the very beginning of its design. The parents' resistance to participate is an obstacle that requires particular information and awareness raising activities. In general, the schools' lack of control over the situation on a wider scale poses an obstacle that is difficult to overcome.

Among the favourable factors, those most often cited are the mobilization of the various players concerned, links with the family and community, and consensus building between the players. These factors are generally associated with the adoption of an overall, integration approach to promoting health in the schools. Training the administration and staff, that is reinforcing health promotion skills, in particular diet and physical activity, is also recognized as a favourable factor.

## Conditions for Successful Implementation

The summary of favourable factors and obstacles to implementing measures or policies to improve the school food environment provides indications on leverage tools liable to produce the desired results.

On the socio-economic and cultural level, young people's food preferences and choices are conditioned by an environment that features food products that are liable to contribute to weight gain. Experience shows that, at the school level, the environment can be changed to promote the development of young people's preferences for a healthier diet. In this regard, it is extremely important to obtain the students' participation in transforming their school environment. An intervention in the school environment alone will not prevent problems related to weight among children and adolescents, but the school remains an orbital point for promoting health among young people.

On the political front, the usually low level of priority assigned to health in national education orientations seems to be changing (in the United States as elsewhere, and particularly in Québec with the policy, *Going the healthy route at school*). When a more consequential position is assigned to health promotion, particularly through the adoption of plans of action or policies, we must build upon these orientations, apply them locally and pursue their development.

On the organizational level, a strong recommendation has been made to adopt an overall, integration approach to health promotion in the schools. Such an approach is being developed in many schools in Québec, referred to as *Healthy Schools*<sup>2</sup>.

The studies surveyed definitely indicate an increasingly marked trend to favour multi-dimensional interventions, combining environmental change with educational measures to encourage youth to adopt healthy lifestyles. The conclusions and recommendations in this regard are additional arguments to adopt and implement school food policies.

<sup>2.</sup> This approach (Martin et Arcand, 2005), was officially adopted in Québec through a complementarity agreement concluded between the *ministère de l'Éducation, du Loisir et du Sport* and the *ministère de la Santé et des Services sociaux* (Québec, 2003). By offering support and tools, encouraging links between healthy eating and active living and other health topics in the schools, *Healthy Schools* seeks to harmonize interventions to ensure young people's educational success, health and well-being.

# An Approach to Ensure Successful Implementation

Food policies in the schools are generally identified as one of the main factors which encourage students to adopt healthy eating habits. Nevertheless, the best policy can definitely not produce sustainable results without being part of an implementation process adapted to each context.

Because their implementation is part of the promotion of a healthy diet in the very fabric of school life, food policies have the potential to generate sustainable change. Once again, this implementation must be taken charge of by each school community. To this end, it is necessary for the influential players in the community to mobilize, acting as initiators of change and introducing formal methods to enable the main players concerned to work together to design and apply the food policy.

International experience in this area leads to conclude that each school community must adopt a systematic approach to maximize the chance of successful implementation. Such an approach includes five essential elements:



Such an approach must be privileged because it structures the application process of the change in a manner that involves the community. This approach also favours a close relation between the provincial approach and the local approach, since it takes into account existing policies and knowledge of best practices. In addition, the evaluation included in the approach not only favours improvement of the local action in time, but also the dissemination of the information and generalization of success.

Table 2 (page 10 and 11) illustrates the essential components of an initiative to promote successful implementation of a healthy eating and active living policy. The content of the table is adapted to the situation in Québec. The right-hand column illustrates certain aspects of the *Healthy Schools* approach, in which the school coordinates all its actions on behalf of the youth's health and counts on its strengths to become an environment that promotes healthy eating and a healthy lifestyle. In the event a school chooses to implement its food policy within the scope of the *Healthy Schools* approach, it can benefit from expert support and work tools that have already been developed.

```
TABLE 2
```

## TABLE 2: AN APPROACH TO MAXIMIZE THE CHANCES OF SUCCESSFUL IMPLEMENTATIONOF A HEALTHY EATING AND ACTIVE LIVING POLICY IN THE SCHOOLS

GENERAL OBJECTIVE OF EACH STEP	SPECIFIC OBJECTIVES, STRATEGIES AND ACTIONS
1 MOBILIZATION	
Form an action committee, a team responsible for the initiative.	<ul> <li>The impact of the action committee will be greater if its members are motivated and able to mobilize their environment.</li> <li>The committee must be representative of the school community and include persons from the following groups:</li> <li>School administration</li> <li>Teachers (particularly in physical education)</li> <li>Support staff</li> <li>Supervisors (after-school, lunchroom, etc.)</li> <li>Parents</li> <li>Students</li> <li>Food service</li> <li>Health professionals</li> <li>Other partners from the community</li> </ul>
2 ANALYSIS	
Draw up a portrait of the situation; describe the food environment and the physical activity in the school.	<ul> <li>Gather information on the food and physical activity policies at the provincial level, in the school board and the institution.</li> <li>Consult the school community on the situation and dietary and physical activity needs.</li> <li>Make sure you use means that will gather the students' point of view.</li> <li>Document the situation through observations (food and physical activity offered, organization of the food service facilities, position of food and physical activity in the Québec Education Program, activities, etc.). Obtain the participation of persons with the necessary qualifications to complete the situation portrait.</li> <li>Take into account knowledge on best practices in promoting health in the schools.</li> </ul>
3 DESIGN AND PLANNING	
Draw up a plan of action to implement the policy.	<ul> <li>The plan of action targets improving the school environment by mobilizing the school community around a joint project.</li> <li>The plan of action essentially includes the following elements:</li> <li>The reasons for acting and general objectives.</li> <li>The objectives to be attained concerning the dietary and physical activity environment (nutritional quality, offer of physical activity, organization of the facilities, prices, training of the staff, information and advertising, etc.).</li> <li>The objectives to be attained concerning the educational activities concerning food and physical activity, in and outside the classroom.</li> <li>A statement of measurable objectives for each aspect targeted by the policy, a performance schedule, distribution of responsibilities, communications plan and an evaluation plan.</li> </ul>
4 IMPLEMENTATION	
Introduce the plan of action and the measures and activities which result from it.	Implementation of the policy is taken charge of by the school administration, together with the action committee. Start-up requires partnerships and technical assistance, particularly from specialists in nutrition and physical activity. Communications and marketing (particularly focussing on youth) play a key role in all stages of implementation of the policy.
5 EVALUATION	
Regular monitoring and assessment of the actions resulting from the policy	The committee gathers data during performance of the plan of action so as to be able to regularly evaluate developments in the situation. A critical regard of the activities allows the initiative to be improved in a long-term process.

#### ADVANTAGES OF AN OVERALL, INTEGRATED APPROACH SUCH AS THE HEALTHY SCHOOLS INITIATIVE

Healthy eating and active living habits can be the first objective in the approach to adopt the *Healthy Schools* initiative.

The Policy on Healthy Eating and Active Living is part of the school's educational project.

Application of the policy can be led by the school health committee, or by the committee responsible for the *Healthy Schools* initiative already in place in the school.

The supporters of the *Healthy Schools* approach in an institution are accompanied by health and education professionals. They also have many other tools to facilitate their task.

In an institution that is implementing the *Healthy Schools* initiative, a resource person from the health network can offer recommendations made by experts and relevant information on the topic of food in the schools.

A situation analysis tool, developed as part of the *Healthy Schools* initiative, together with the ministère de l'Éducation, du Loisir et du Sport, covers various elements related to health, well-being and success. It would be a good idea to include this tool with the information to be gathered to implement the healthy eating and active living policy.

The *Healthy Schools* approach is based on best practices and designed to help the school incorporate lessons learned on the international level in its regular activities and practices.

In an institution that is implementing the *Healthy Schools* approach, interventions favourable to healthy lifestyles are planned, taking into account the actions already in place and recommendations made by specialists. The actions are recorded in the school success plan, which serves as a plan of action. Each school is seen as an environment with its own potential and pace.

The various stages in a healthy eating and active living policy are integrated in the *Healthy Schools* approach through: educational activities among the students; support activities among parents; regulations, standards and actions on the school environment (ex.: cafeteria menu, organization of the facilities); as well as through links and partnerships with the community (ex.: community garden, municipal park). All these elements are integrated in the school success plan to improve it.

The improved school success plan is put into practice. This success plan can include actions to be taken in relation to implementing the healthy eating and active living policy. Actions planned can be placed under the responsibility of the students, parents, school staff, or partners from the community. The plan is coordinated with the other health promotion activities.

Guides trained to support and guide the environments in introducing the *Healthy Schools* approach can provide support in formulating measurable objectives that will facilitate the follow-up. This can help the environment to regard its actions in a critical light.

Note: This table was finalized with the participation of the INSPQ *Healthy Schools* team and members of the scientific committee in the workshop: *La politique alimentaire dans le projet éducatif d'une École en santé* (annual public health days 2007, theme day *Pour un enracinement des saines habitudes de vie*, Montreal, November 20, www.inspq.qc.ca/jasp). Its content is mainly based on the following written sources: (Leblanc and Gadbois, 2007; WHO, 2006; Martin and Arcand, 2005; CDC, 1996).

# A Long-term Process

Considered as a whole, healthy eating, physical activity and all the other aspects related to health in the schools will enable a more judicious use of resources and mutually reinforce the various dimensions of health promotion in such a way that the durability of the interventions and their in-depth impact will be increased. However, an overall approach in no way means neglecting the specificity of each dimension of the intervention. Whether we are dealing with obesity, violence, sexuality or any other problem related to the health of young people, it is important to take into account the characteristics of each of these dimensions in designing and implementing interventions.

The association between the pleasure of eating well and health is a fundamental lever to ensure the changes desired in the food environment in the schools. Once again, there is a strong consensus in regard to international experience: the food offer, particularly when dealing with youth, must be healthy and attractive. In spite of notable progress made in several schools in Québec, it appears that, for most youth, particularly in secondary schools, the cafeteria meal marked "healthy" is considered insipid and boring. For this reason it is very important to ensure the participation of the students in each environment in designing and implementing measures to improve the situation. In addition, education and actions in the environment to associate pleasure and healthy foods is an area for fruitful discussions between students, between the school and the family, and between the school and the wider community.

Obesity and chronic diseases related to it, such as diabetes type 2, cardiovascular diseases and certain cancers represent a challenge to public health and for society in general. Our environment and lifestyles create an energy imbalance that results in a continuous increase in the prevalence of surplus weight gain and obesity in the population. Countering this trend will require changes in society, on the socio-economic and cultural levels as well as organizational changes that will make it possible and easier to adopt healthy lifestyles.

Since youth are also threatened by the serious consequences of being overweight, the urgency to act among them has become evident. Although the school is an excellent intervention environment to reach this population, it is, nevertheless, not a closed world. The family, the surrounding community and the wider social context must also evolve in order to allow continuous improvement of the food environment for youth and the greatest possible access to an active lifestyle. The objective to generate lasting change in the school environment requires that we consider the Framework Policy, *Going the healthy route at school*, as a starting point for a long-term process.

## References

Baril, G. (2008). Les politiques alimentaires en milieu scolaire. Une synthèse de connaissances sur le processus d'implantation. (Publication No 773). Institut national de santé publique du Québec.

Beauchesne-Rondeau, E. and P. Chaumette (2004). Situation environnementale de la nutrition dans les écoles de la région de la Capitale nationale. Québec, Direction régionale de santé publique, Agence de développement de réseaux locaux de services de santé et de services sociaux de la Capitale nationale.

CDC-Centers for Disease Control and Prevention (1996). "Guidelines for school health programs to promote lifelong healthy eating". MMWR-Morbidity and Mortality Weekly Report, 45, 1-33.

Cohen, D. A., R. A. Scribner and T. A. Farley (2000). "A structural model of health behavior: A pragmatic approach to explain and influence health behaviors at the population level". *Prev Med*, 30, 146-154.

Côté, G., V. Déry and L. Vanier (2002). État de situation de l'environnement alimentaire dans les écoles secondaires publiques de la région de Montréal. Montreal, Direction de santé publique, Régie régionale de la santé et des services sociaux de Montréal-Centre.

Jenouvrier, J., G. Baril and L. Mongeau (2007). L'implantation des politiques alimentaires en milieu scolaire au Québec. Une étude exploratoire auprès d'acteurs de la Montérégie. (Publication N° 644). Institut national de santé publique du Québec.

Leblanc, M.-P. and D. Gadbois (2007). *Une politique alimentaire : des outils de l'élaboration à l'application*. (Présentation PowerPoint à la Direction de santé publique de la Montérégie, Longueuil, le 6 février). Direction de santé publique de la Montérégie.

Martin, C. and L. Arcand (2005). *École en santé. Guide à l'intention du milieu scolaire et de ses partenaires.* Gouvernement du Québec, Ministère de l'Éducation, du Loisir et du Sport.

Québec-Ministère de l'Éducation, du Loisir et du Sport (2003). Deux réseaux, un objectif: le développement des jeunes. Entente de complémentarité des services entre le réseau de la santé et des services sociaux et le réseau de l'éducation. Gouvernement du Québec.

Québec-Ministère de l'Éducation, du Loisir et du Sport (2007). Pour un virage santé à l'école. Politique-cadre pour une saine alimentation et un mode de vie physiquement actif. Gouvernement du Québec.

Swinburn, B., G. Egger and F. Raza (1999). "Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity". *Prev Med*, 29, 563-570.

WHO-World Health Organization (2006). Food and nutrition policy for schools: A tool for the development of school nutrition programmes in the European Region. (Publication No EU/06/5073063). Copenhagen, World Health Organization, The Regional Office for Europe. www.**inspq**.qc.ca

