



Health
Canada

Santé
Canada

*Your health and
safety... our priority.*

*Votre santé et votre
sécurité... notre priorité.*

Healthy Eating After School



Integrating healthy eating into after-school
physical activity initiatives



Canada 

Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. *We assess the safety of drugs and many consumer products, help improve the safety of food, and provide information to Canadians to help them make healthy decisions. We provide health services to First Nations people and to Inuit communities. We work with the provinces to ensure our health care system serves the needs of Canadians.*

Published by authority of the Minister of Health.

Healthy Eating After School—Integrating healthy eating into after-school physical activity initiatives

is available on the Internet at the following address:

www.healthcanada.gc.ca/children-healthy-eating

Également disponible en français sous le titre :

La saine alimentation après l'école : Intégration de la saine alimentation dans les initiatives d'activité physique offertes après l'école

This publication can be made available on request in a variety of alternative formats.

For further information, please contact:

Publications
Health Canada
Ottawa, Ontario K1A 0K9
Tel.: 613-954-5995
Fax: 613-941-5366
Email: info@hc-sc.gc.ca

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health, 2012

This publication may be reproduced without permission provided the source is fully acknowledged.

Cat.: H164-153/2012E-PDF
ISBN: 978-1-100-20964-7

Contents

Acknowledgements	2
Summary	3
1. Introduction	5
2. The case for integrating healthy eating into after-school physical activity initiatives	7
Why is healthy eating important for children and adolescents?	7
What are children and adolescents eating after school?	7
What are the connections among eating, sedentary behaviour, and health?	8
The benefits of programs during the after-school time period	8
3. The impact of healthy eating in after-school programs	9
Outcomes	10
Lessons learned	10
4. Case studies	11
Newfoundland and Labrador: Eat Great and Participate	12
Ontario: Ontario After-School Program	16
Ohio: Just for Kids! After School Teen Mentoring Healthy Eating and Physical Activity Program	20
California: Healthy Behaviors Initiative	23
5. Key program components	27
6. Resources	29
Appendix I	31
Federal, provincial, and territorial (F/P/T) background: Milestones supporting the development and enhancement of health promoting programs in the after-school time period	31
Appendix II	33
Methodology for literature synthesis	33
Appendix III	35
Additional case studies	35
References	41

Acknowledgements

This paper was prepared for the Office of Nutrition Policy and Promotion, Health Canada, in collaboration with a working group of the Federal, Provincial, Territorial Group on Nutrition. The Yukon Territorial Government, the Ontario Ministry of Tourism, Culture and Sport, and the Saskatchewan Ministry of Health were represented on the working group.

Health Canada and members of the working group helped to create the broad vision for the report and provided input and feedback throughout the project.

Key informants

The following people took part in telephone interviews and reviewed the case studies within which their programs are described. They shared essential information that will inform future work in Canada.

- Glendora Boland and Jill MacEachern, Eat Great and Participate, Departments of Tourism, Recreation and Culture and Health and Community Services, Government of Newfoundland and Labrador
- Donna Howard, Ontario After-School Program, Ministry of Tourism, Culture and Sport, Government of Ontario
- Laureen Smith, Just for Kids! After-School Teen Mentoring Healthy Eating and Physical Activity Program, College of Nursing, Ohio State University
- Chantal Pomerleau, Club 310, Lowertown Community Resource Centre, Ottawa, Ontario

Summary

There is global and national concern about rising rates of obesity, as well as patterns of healthy eating, food skills, and levels of physical activity, among children and youth. Many view the after-school time period as an opportunity to enhance physical activity. Some after-school programs seek to contribute to broad health outcomes for Canadian children by blending objectives related to recreation and physical activity, education and learning, and nutrition, health and wellness.

This report is a synthesis of published and unpublished literature from Canada and abroad, along with insights collected from key informants whose initiatives, including programs, are already underway. Its purpose is to share with governments and other stakeholders working at all levels, the key learnings from a literature review and key informant interviews on how to integrate healthy eating and food skills into after-school physical activity initiatives. Both the evidence and lessons learned could be considered when integrating healthy eating into other after-school initiatives.

The challenge

Evidence supports a relationship between healthy eating patterns during childhood and:

- optimal health, growth and cognitive development;
- academic performance; and
- prevention of chronic diseases later in life, including overweight and obesity.

Growing evidence suggests that children and youth in Canada may be making unhealthy food choices that are inconsistent with national dietary guidance, thus increasing risks to their nutritional health. This includes eating energy-dense, nutrient-poor foods. A growing body of evidence supports a link between sedentary behaviour, such as watching television, and the consumption of these foods. The combination of these behaviours increases the risk that more energy is being consumed than expended. This in turn contributes to overweight and obesity. The after-school time period is a high-risk time for these behaviours.

The evidence

Incorporating healthy eating and physical activity into after-school programs is often cited as a way to contribute to broader obesity prevention efforts. Taking action that is multifaceted and comprehensive is key. This includes engaging parents and building community capacity to enhance programs and policies that support healthy eating and physical activity for children and youth.

The literature review and case studies outlined the following list of evidence-supported components of effective integrated healthy eating and physical activity programs in the after-school time period:

Collaboration: Most successful programs are a collaborative effort involving government and non-government organizations, and local sectors and communities.

Documentation: Programs have a written vision, realistic goals, and action plans (including outcome-linked activities). There is a plan to measure and manage outcomes.

Integration: Healthy eating principles and practices are embedded into the after-school program. The sponsoring organization creates an environment that encourages children to learn about and enjoy healthy eating.

Objectives and outcomes: Programs have healthy eating objectives and outcomes that align with the length and intensity of the program. They reinforce existing curriculum guidelines or policies. The activities have a stated theoretical basis, or at least are based on a set of assumptions that are relevant to the community.

Interactivity: Programs include fun, hands-on, easy-to-implement healthy eating activities, with a skills focus. They build self-confidence, knowledge, and skills. They include all children and youth who want to take part.

Informed staff: Staff and volunteers are trained in healthy eating and food safety and are competent to deliver the program.

Adequate funding: Programs that provide snacks have enough funds to provide nutritious foods. They have the facilities and equipment to ensure food safety and maintain food quality.

Involvement: Programs involve and engage parents. They have established relationships with schools, community members, and groups. They offer leadership opportunities for participating children and youth.

Standards: Programs that provide food or beverages ensure that they are consistent with national nutrition guidance and provincial and territorial school food policies and/or guidelines. Learning materials that promote healthy eating are evidence-based.



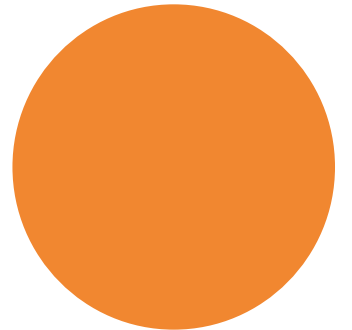
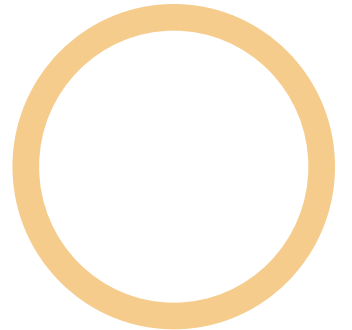
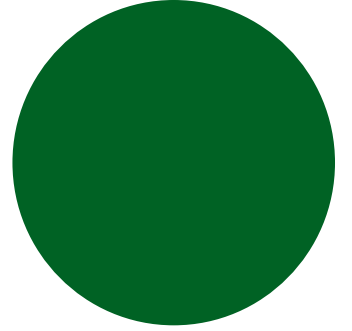
1. Introduction

There is global and national concern about rising rates of obesity, as well as patterns of healthy eating, food skills, and levels of physical activity, among children and youth. In Canada, there is growing support among governments and other stakeholders for supporting physical activities for children and youth in the after-school time period. As a result, new opportunities for programs with a physical activity focus in the after-school time period have emerged. Where after-school programs already exist, there is support to blend physical activity and healthy eating objectives. Information recently collected from Canadian after-school physical activity programs confirms support for after-school programs that blend:

- recreation and physical activity;
- education and learning; and
- nutrition, health, and wellness strategies.¹

Programs that include these elements can help to improve health for children and youth. Appendix I outlines federal, provincial, and territorial milestones supporting the development and enhancement of health promoting programs in the after-school time period.

The purpose of this report is to share with governments and other stakeholders working at all levels, the key learnings from a literature review and key informant interviews on how to support the integration of healthy eating and food skills into after-school physical activity initiatives. The report synthesizes the current evidence on integrating healthy eating into existing physical activity initiatives. It profiles four promising after-school initiatives as case studies. It is based on a search of published and unpublished literature.



2. The case for integrating healthy eating into after-school physical activity initiatives

Why is healthy eating important for children and adolescents?

Developing and maintaining a healthy pattern of eating during childhood supports health, growth, and cognitive development.² Healthy eating patterns during childhood are associated with reduced risk of chronic diseases and obesity later in life. Evidence suggests that eating habits developed during early childhood are sustained into adolescence and adulthood. However, the transition from childhood to adolescence has been identified as a time when eating habits are vulnerable to change.² This is largely a result of influences beyond the family.

What are children and adolescents eating after school?

A growing body of literature suggests that children and adolescents in Canada may be making unhealthy food choices. This leads to eating patterns inconsistent with national dietary guidance and increased risk for reduced nutritional health.³

Data from the Canadian Community Health Survey (CCHS), Cycle 2.2, Nutrition (2004),⁴ showed that:

- Snacks accounted for 27% of daily calories for children and adolescents.
- Among Canadians aged four or older, 41% of snack calories came from foods that are not within one of the four food groups in Canada's Food Guide.
- For children and adolescents aged 4–18, just over 22% of all calories came from foods outside of Canada's Food Guide.

During the after-school time period, the data showed that:

- Sixty-five percent of children and adolescents aged 4–18 ate after-school snacks.⁵ This figure was significantly higher among young children (70% of 4–8 year olds compared to 55% of 14–18 year olds).
- The snacks provided, on average, about 300 kcal. This represents 13% of daily energy intake in children and adolescents.

It was also observed that a high intake of after-school snacks was associated with higher daily energy intake. Although fruits were among the most frequently reported snacks, about half of the snacks were foods generally low in nutrients and high in energy. Sweets, sugar-sweetened beverages, and cookies were part of this list.

There were no differences in after-school snack choices among children and adolescents with different body mass index categories.⁵

The data suggests that there is room for improvement in after-school snack choices. Such changes could contribute to an overall healthier pattern of eating.



What are the connections among eating, sedentary behaviour, and health?

Time spent watching television is the greatest source of sedentary behaviour among American children, other than sleep.⁶ There is an association among screen time, less healthy eating patterns, and weight.⁷ The hypothesis is that this is the combined result of expending less energy or replacing expended energy, often through the mindless consumption of energy-dense, nutrient-poor foods. Sedentary behaviour, specifically eating while watching television, has been associated with poor nutrition. An increased risk of overweight has been found among several child and youth study populations.⁷⁻⁹

The benefits of programs during the after-school time period

After-school programs are receiving increasing attention as settings for health promotion programs. After-school programs include child care centres, schools, recreation centres, and other community settings. The reasons for this interest include:

- growing concerns about childhood obesity;
- the time limitations of school curriculum; and
- concerns that unhealthy and high-risk behaviours during the after-school time period have an impact on social, emotional and academic health.¹⁰

Most after-school programs share these characteristics:

- They take place during a time of day when children are likely to be sedentary and snacking if not given other opportunities.^{6-9,11}
- They provide snacks (and meals in some cases).
- They provide opportunities to develop food skills and can influence eating habits and patterns.
- They liaise with parents, who make critical nutrition and physical activity decisions for their children.
- They offer a safe and supportive environment.
- They are led by caring adults who can act as positive role models, thereby influencing the health behaviours of children.^{10,11}

Incorporating the promotion of healthy eating and physical activity into programming is often cited as a way in which after-school programs can contribute to obesity prevention efforts. This is done through interactive, activity-based knowledge and skill development. Actions should be multifaceted and comprehensive. In Canada, applying the Comprehensive School Health approach has great potential to contribute to child health in both the short and long-term. Engaging parents, building individual, family and community capacity, and taking action to make and influence policy changes that support healthy eating and enhance physical activity environments for children and youth is fundamental.¹¹⁻¹³

3. The impact of healthy eating in after-school programs

Details of the method used to complete the literature search and synthesis to inform this section can be found in Appendix II. By searching indexed data bases, 30 references were identified that focus on the impact of healthy eating interventions in the after-school time period. Twelve of these were particularly relevant. These inform the remainder of this report.¹⁴⁻²⁵

Most of the literature included in this synthesis integrated healthy eating and physical activity within the after-school time period. There were a range of program goals, such as:

- increasing fruit and vegetable consumption and physical activity;
- evaluating after-school programs as healthy eating environments; and
- preventing obesity using capacity-building and community-based approaches.

Most programs were designed to address concerns about physical inactivity, sedentary behaviour, unhealthy eating habits, and childhood obesity. All of the programs that incorporated healthy eating and physical activity seemed to have done so from the outset.

Like other researchers,^{12, 26-28} it was found that the interventions identified, and the research methods used to evaluate them, differed in many ways, making them difficult to analyze as a group. For example, they differed in:

Focus: Some focussed more on individuals and some more on policy, and the extent to which healthy eating was integrated into the program.

Settings: Settings included elementary schools and community-based after-school programs.

Populations: Populations included elementary school students (predominantly those in grade three and over), after-school program staff, and parents of students. Several studies focused on specific population groups, including those living on a low income, inner city urban, rural, girls, and African Americans.

Research design: Research designs included quasi-experimental randomized control, case control, and included communities, programs, schools, or students.

Duration: Program length ranged from 8–20 weeks. The healthy eating component was most often delivered once weekly. Interventions that focused on broader policy and environmental change were generally implemented and assessed over several years.

Measurement and assessment tools: Healthy eating measures and tools used to assess desired outcomes included 24-hour recall (unassisted and assisted), food frequency questionnaires, observation and data collection forms to record snack options, and questionnaires to assess nutrition knowledge, attitudes, and behavioural intentions. Despite differences in the intensity and duration of the programs, the most common outcome assessed was change in measured height, weight and Body Mass Index (BMI) (z score, mean, standard deviation).

Approach: There were structured, interactive, and demonstration approaches. Programs varied in intensity (amount of time), frequency (times per week), and overall duration.

Role of researchers: Researchers had a range of roles, including measurement and assessment, training and capacity building, and training and supporting program staff, volunteers, teachers, or teen mentors.

Outcomes

Changes in healthy eating-related outcomes occurred in most of the programs. However, statistically significant changes were not common. Researchers attributed this to factors such as:

- insufficient sample size;
- programs having short duration and moderate intensity;
- relatively high levels of nutrition-related knowledge at the outset of programs; and
- the need for broader policy and environmental supports.

Despite the limitations and moderately favourable outcomes, most of the researchers concluded that the results were promising and justified continuing or adapting the program or using it to inform future initiatives. This conclusion is consistent with a recent analysis of physical activity programs during the after-school time period.²⁸

Lessons learned

The following lessons learned for integrating healthy eating components into after-school programs have been compiled for consideration within the Canadian context:

- provide or encourage healthy snacks and beverages, at a minimum, consistent with national nutrition guidance and provincial and territorial school food policies and/or guidelines;
- be fun, hands-on, informal, and easy to implement, with a behavioural skills focus on cooking and food skills, including games, demonstrations, and snack preparation;
- be delivered by trained program staff who value the program and feel competent to deliver the program;
- incorporate home communication and parent involvement; and
- be evaluated based on realistic outcomes that are aligned with the length and intensity of the intervention, as well as its underlying theories.

4. Case studies

In this section four promising integrated healthy eating and physical activity after-school initiatives, including programs are presented. Two are Canadian and two are international. Additional case studies are included in Appendix III. Selection was guided by:

- the literature review;
- criteria used to inform the identification of case studies for the report, *Improving Cooking and Food Preparation Skills: A Profile of Promising Practices in Canada and Abroad*;²⁹
- the U.S. *National AfterSchool Association Standards for Healthy Eating and Physical Activity in Out-Of-School Time Programs*;³⁰ and
- the Healthy Behaviors Initiative report, *Changing Lives, Saving Lives: A Step-By-Step Guide to Developing Exemplary Practices in Healthy Eating, Physical Activity and Food Security in After-School Programs*.³¹

Information for the case studies was gathered through program documentation and structured telephone interviews with key informants. The interview techniques included discussion prompts related to:

- leadership;
- partnerships and collaboration (government, non-government, and community);
- evaluation and quality programming; and
- supportive policies and cooperative systems.¹

Newfoundland and Labrador: Eat Great and Participate

Eat Great and Participate supports the sport, recreation, and community sector in building capacity to achieve the healthy eating vision for children and youth. Now in its third year, Eat Great and Participate originated from the partnership, support, and momentum of the provincial Healthy Students, Healthy Schools initiative. A key component of that initiative is provincial school food guidelines.

Extending the guidelines into the sport, recreation, and community sector was a logical next step. Direction was provided by an interdepartmental advisory committee, the Healthy Living Messages Group. The group included representatives from the departments of Tourism, Culture and Recreation, Health and Community Services, Education, Municipal Affairs and Human Resources, and Labour and Employment. The framework and accompanying resources for Eat Great and Participate were developed in collaboration with interested stakeholders from across the province. Several resources from other Canadian jurisdictions were adapted for use within the province and new, innovative resources and tools were developed in response to community needs. All resources developed by and currently recommended through Eat Great and Participate will be appropriate with some minor adaptations for the recently funded After-School Physical Activity Pilot Program. This program will be funded by the Department of Tourism, Culture and Recreation to integrate the goals of Eat Great and Participate.

Goals

The program has two goals:

1. Raise awareness about the importance of healthy eating and facilitate change for healthier food and beverage choices in recreation, sport, and community facilities and at community events.
2. Provide the tools and supports to build the community capacity needed to create an environment that supports healthy eating and healthy food and beverage choices.

Eat Great and Participate aims to turn sport, recreation, and community leaders into healthy eating champions!

Strategies

The program's strategies include:

- leadership and support from a Registered Dietitian for after-school recreation, sport, and community programs;
- development and distribution of resources and materials to promote the project;
- \$100 stipends to help promote healthy eating and provide healthy snacks for children and youth in the program; and
- presentations and training.

Activities

More than 100 initiatives have received support from Eat Great and Participate over the past two years, including the After-School Physical Activity Pilot Program. Eat Great and Participate has a coordinator, who is supported by regional Nutritionists. When the program begins, the co-ordinator's role will include:

- facilitating healthy eating sessions at the leadership training for successful after-school program applicants;
- ensuring that successful applicants sign a pledge to follow their school district's healthy eating policy;
- evaluating implementation of the pledge; and
- providing a stipend for healthy food and beverage choices at the pilot after-school programs.

Lessons learned

Eat Great and Participate has had great success over the past two+ years. Awareness across the province has continued to grow. Having a provincial coordinator who is a Registered Dietitian to provide expertise on healthy eating, has been identified as a key success factor for the program.

Making healthy eating fun has been a key learning for Eat Great and Participate. The culture of recreation, sport, and community life for children and youth is focused on fun and healthy eating messages and programs need to embrace this philosophy to be successfully integrated and achieve desired outcomes.

Taking time to identify champions within organizations and building strong relationships with programs and partners is also essential. Engaging key stakeholder groups at the provincial (advisory) and local (steering) levels from the outset has great benefit in terms of program profile, relevance, and uptake. For Eat Great and Participate, having steering committee co-chairs who are connected to the target organizations on both a personal and professional level has been a great asset. It facilitates close connections and the relevance and responsiveness of the program. Having a very active steering committee that is easily accessible to the project coordinator has been beneficial. Identifying better ways to engage youth in the program is a challenge and an opportunity to be explored. The physical challenges imposed by the geography of the province is also a challenge.

Healthy eating is a priority within many funded organizations and initiatives. This continues to be a challenge for Eat Great and Participate. The cost of healthy food and beverage choices can be a barrier. It is hoped that the continued promotion and support for the program will result in its natural integration within the sport, recreation, and community sectors. As with many other healthy eating initiatives, the availability of equipment and facilities (infrastructure) to support food-related knowledge and skill development can be limiting. Infrastructure funding would enhance program outcomes, as would funding for additional Dietitian positions to support program implementation.

Next steps

Eat Great and Participate aims to connect children with food through the development of a fun, interactive, skills-based component that involves parents. This would be accompanied by training and resources to support implementation. Healthy eating will become a component of the yearly evaluation of the After-School Physical Activity Pilot Program. The integration of healthy eating content into all post-secondary recreation and sport programs is a long-term goal of the program.

Advice to other communities

Eat Great and Participate is a program that can be adapted to other jurisdictions and populations of children and youth. Early collaboration with and involvement of the target organizations and the population should be a priority. This facilitates quick uptake and program success. Establishing and supporting a government-led advisory committee and a community-based steering committee in the first year of a program benefits program direction, buy-in, and uptake. Building on the successes of local initiatives by sharing stories has a contagious effect—foster communication. Program evaluations that support program continuation require information—track and document everything.

Participation Nation Healthy Eating Policy

Participation Nation is a program of School Sports Newfoundland and Labrador. It promotes active and healthy living in the provincial student body by organizing non-competitive sports events, which encourage participation and fun. The program's vision is for every student to have the opportunity to experience sport without the pressure of winning, but rather to enjoy the game itself and the reward that comes from participating. Participation Nation is funded through a federal/provincial/territorial bi-lateral agreement. It is implemented in schools as an extra-curricular after-school activity and requires a physical education teacher or teacher sponsor. In partnership with Eat Great and Participate, Participation Nation implemented a Healthy Eating Policy modeled after Newfoundland and Labrador's Provincial School Food Guidelines in the fall 2011. As part of the policy, Participation Nation provides milk for all Festival of Sports and Jamborees. Students are asked to abstain from junk food during Participation Nation-sponsored events. Healthy meals and snacks are subsidized. Students collect an Eat Great and Participate nutrition pin.

Contact

Trish Broyer
Telephone: 709-729-3684
Email: tbroyer@sportnl.ca
Website: www.schoolsportsnl.ca/participation-nation/default.aspx

Partnerships

- Public Health Agency of Canada (funder for the Registered Dietitian as program co-ordinator)
- Newfoundland and Labrador Department of Tourism, Culture and Recreation (funder)
- Steering Committee members: Recreation Newfoundland and Labrador, Sport Newfoundland and Labrador, School Sports Newfoundland and Labrador, Community Youth Network, Aboriginal Sport and Recreation Circle (Labrador), Regional Health Authorities/ Regional Nutritionists, Regional Wellness Coalitions, Healthy Students Healthy Schools, Dietitians of Newfoundland and Labrador, Departments of Health and Community Services and Tourism, Culture and Recreation.
- Dietitians of Newfoundland and Labrador, Regional Nutritionists, Dietitians of Canada (program administration), Regional Wellness Coalitions, and the School Health Promotion Liaison Consultants for Healthy Students Healthy Schools are key program development and implementation partners.

Contacts

Jill MacEachern, MSc, RD
Eat Great and Participate Coordinator
Departments of Tourism, Recreation and Culture
and Health and Community Services
Confederation Building, West Block
P.O. Box 8700
St. John's, NL A1B 4J6
Telephone: 709-729-4432
Fax: 709-729-7743
Email: jillmaceachern@gov.nl.ca

Glendora Boland, BSc, RD
Provincial Nutrition Consultant
Department of Health and Community Services
Health Promotion and Wellness Division
P.O. Box 8700
St. John's, NL A1B 4J6
Telephone: 709-729-6013
Fax: 709-729-7743
Email: glendoramboland@gov.nl.ca



Ontario: Ontario After-School Program

Goals

The goal of Ontario's Ministry of Tourism, Culture and Sport's After-School Program is to attract and retain in-need children and youth by providing fun and engaging programs that:

- contribute to the reduction of childhood obesity and poverty;
- increase physical fitness;
- increase skills and knowledge related to healthy food and life choices;
- contribute to student achievement; and
- promote self-esteem.

Activities

The core elements of the program are healthy eating, physical activity, and personal health and wellness. It evolved from what was originally to be a childhood obesity prevention strategy addressing the primary modifiable risk factors: unhealthy eating, physical inactivity, and sedentary behaviour. Broad consultation across government and with a collaborative group of experts in the area of after-school programming supported a broader, integrated approach to child health. While still maintaining a focus on the prevention of childhood obesity, the program integrates key components of the province's poverty reduction strategy.

The program is in its third year and has undergone annual process evaluations. The results have been shared with 119 organizations funded to deliver 320 programs in priority neighbourhoods identified by socio-demographic characteristics and access to after-school programs and services. Programs operate in schools (63%) and community-based settings (37%).

Funded programs are required to dedicate 20% of their weekly program time to nutrition education. A healthy snack, consistent with Ontario's provincial guidelines, must be served to each child each day the program operates. The guidelines provided to funded programs encourage and emphasize food preparation by the participants.

Planned outcomes

The Healthy Food Choices and Nutrition Education component of the program has its own specific outcomes:

- Participants are making healthy food choices.
- Participants have the ability to plan a healthy meal.
- Participants can demonstrate age-appropriate knowledge about nutrition. (For example, older participants can read and assess a food label; younger participants know the importance of vegetables and fruit.)

The focus and outcomes of the healthy eating component were developed after consulting with members of the collaborative group composed of the Ontario Public Health Association, YMCA Ontario, Boys and Girls Clubs Ontario, Parks and Recreation Ontario, the Ontario Physical and Health Education Association, and other healthy eating key informants and experts.

Resources were identified through an in-house and external expert review process. As well, an extensive scan was conducted of existing healthy eating programs and activities within after-school programs across the province, notably those offered by Boys and Girls Clubs of Ontario and YMCA Ontario.

Evaluation

Two program evaluations are completed each year. The mid-year evaluation focuses on success in achieving the program mandate and captures administrative information. The end-of-year evaluation uses tools based on Survey Monkey to capture feedback from programmers, participants, and parents. Feedback includes satisfaction with the program as well as knowledge and behaviour change. The survey responses from parents and children support the program's success. Healthy eating knowledge is increasing and resulting in changes within the home environment.

Lessons learned

Ontario's After-School Program has been a great success thus far. Several factors have contributed to what has worked, including:

- The breakdown of program content with a percentage of dedicated time to organizational needs. This may include extra physical activity, cultural activities, or homework help.
- The detailing of program outcomes, recommended resources, and suggested implementation strategies.
- The sustainability and continuity of the program, with the same organizations funded for three years.
- The consistency in the funding approach across sponsoring organizations.
- Confirmation that the programs are reaching neighborhoods where positive opportunities for children and youth are most needed.
- Dedicated funding for healthy snacks.
- Support for food skills development and cooking—one of the most popular activities for the children in the program.

Access to facilities and equipment is an important challenge, as are funds for food that will support hands-on food experiences. In year one of the program, one-time funding for program facilities and equipment was provided. However, the funds were not necessarily focused on supporting the healthy eating component of the program. Funds could go towards physical activity equipment, kitchen equipment, or health education items. Food security is a greater focus of the program than anticipated.

When sponsoring organizations are able to afford food, the snack component of the program has evolved into a meal in high priority neighborhoods. In rural and remote areas of the province, the availability of affordable, nutritious foods is a continued challenge.

To further enhance program quality, the province is assessing the feasibility of using new technology to provide training for program staff. This is important in light of the size of the province and the distribution of the programs.

Continued and strengthened support from organizations such as public health, schools, and school districts is of great importance to the ongoing success of local programs. At the provincial level, there is interest in facilitating a process for sharing stories, practices, and ideas.

Advice to other communities

Ontario's After-School Program could be adapted to other jurisdictions. In high priority neighborhoods, it is crucial to address challenges related to food insecurity. The program content must be sensitive and responsive to the food realities of participating children and their families.

Funding and partnerships are needed to secure the facilities and equipment that support quality food skills programming. Decisions about the location of a program and the space needed have to take into account both the healthy eating and the physical activity components of the program.

Partnerships

Interministerial collaboration:

- Ministry of Tourism, Culture and Sport;
- Ministry of Education;
- Ministry of Child and Youth Services;
- Ontario Ministry of Agriculture Farming and Rural Affairs;
- Ministry of Aboriginal Affairs; and
- Ministry of Citizenship and Immigration.

Collaborative group of experts

- Ontario Public Health Association
- YMCA Ontario
- Boys and Girls Clubs Ontario
- Parks and Recreation Ontario
- Ontario Physical and Health Education Association.



Local partners

At the local level, each organization has its own partners. These include public health, grocers, orchard workers, chefs, traditional food hunters and chiefs, community kitchens, food security networks, and food bank organizations. Local partners provide food, services, and volunteer time to support program implementation.

Contact

Donna Howard
Team Lead
Ontario Ministry of Tourism,
Culture and Sport
Sport, Recreation and Community
Programs Branch
777 Bay Street, Suite 2302
Toronto, ON M7A 1S5
Telephone: 416-327-0410
Fax: 416-314-7458
Email: Donna.Howard@ontario.ca
Website: [www.mhp.gov.on.ca/en/
healthy-communities/afterschool/
default.asp](http://www.mhp.gov.on.ca/en/healthy-communities/afterschool/default.asp)

Lowertown Community Resource Centre Club 310 After-School Program

A priority for staff at Lowertown Community Resource Centre is learning about food and nutrition in fun and creative ways while providing nutritious foods to participants of Club 310. The Resource Centre is located in downtown Ottawa in a culturally diverse and high-needs neighborhood, where children and families experience income-related food insecurity. Participants aged 6–12 particularly enjoy hands-on activities such as snack preparation, gardening, and healthy food-related crafts. Vegetable seeds were planted in pots decorated by the children at the start of the season last year and transplanted to a garden at the centre for the summer. Older children (aged 9–12) enjoy working as a team to plan, prepare, and serve snacks to juniors.

Field trips to the kitchens at the Centre's youth centre and the Resource Centre itself provide the children with opportunities to try cooking. Program staff have observed a notable openness among the children to try new foods, as many know that at home, a snack may not be available.

Plans for the upcoming year include food and nutrition education and training for program staff to enhance food-related opportunities for program participants. There will also be the regular purchase of a greenbox of locally produced fresh fruit and vegetables, both to use within the program and to promote to families.

Contact

Children and Youth Program Coordinator
Lowertown Community Resource Centre
Telephone: 613-789-3930 ext. 320
Email: info@crcbv.ca



Ohio: Just for Kids! After School Teen Mentoring Healthy Eating and Physical Activity Program

The original Just for Kids! Curriculum is a healthy eating and physical activity program designed to be delivered in a group setting, such as a classroom, with 3rd and 4th grade children. Just For Kids! After School Teen Mentoring Healthy Eating and Physical Activity Program is an adaptation, modeled on the Shapedown program developed at the University of California San Francisco.

Just for Kids! Teen Mentoring was developed in response to the concerns of school health nurses working with elementary schools in rural Appalachia about childhood obesity, unhealthy eating practices, and physical inactivity. The counties and school districts where the program pilots have been implemented have childhood and adult obesity rates that are higher than national, racial, and geographic subgroup rates.

The adapted program for teens is an innovative mentoring model. It pairs trained senior high school-age teens with elementary-age children to deliver the curriculum, which incorporates current scientific and clinical understanding, including contributions from nutrition, exercise physiology, endocrinology, psychology, family therapy, family medicine, and behavioural and developmental pediatrics.

The curriculum addresses the role of exercise and food in promoting health, as well as moderation in sedentary activities. It encourages children to set reasonable behavioural goals for themselves. Just For Kids! dietary recommendations are consistent with the U.S. Recommended Dietary Allowances, the National Cholesterol Education Project Guidelines, and the Food Pyramid (now My Plate).

Planned outcomes

The curriculum uses four of the most commonly employed behaviour modification methods for children: reinforcement, goal setting, self-monitoring, and planning ahead. The Just for Kids! Curriculum has four goals:

- learn to eat more healthy foods;
- learn to be more active, build muscle, and make your body strong;
- feel better about yourself and like your body; and
- learn how to speak up and talk about your feelings.

The healthy eating program focuses on knowledge and skill development targeting four dietary behaviours:

- eating at least one fruit daily;
- eating healthy foods at lunch;
- eating healthy foods at dinner; and
- eating breakfast.

Activities

The after-school program involves a one-hour meeting of the mentors and mentees for eight weeks. Forty-five minutes are spent on structured activities, such as a story that the mentor and child read together, follow-up fun, and hands-on activities. Fifteen to twenty minutes are spent on structured and unstructured physical activity-focused play. A healthy snack is provided to all program participants at the beginning of each session.

To prepare for the program, teen mentors take a six-hour training session based on the University of Texas Developmental Age Mentoring Program. Mentors meet with the program supervisor weekly to confirm the plan for the day and to debrief.

Evaluation

For the most part, the Just for Kids! Teen Mentoring adaptation has exceeded program expectations. Factors that have contributed its success include the support of schools, the school district, and the community and the commitment of the teen mentors. Retention rates have ranged from about 80–90%. Most participants attend all program sessions.

While not having as great an impact on healthy eating and physical activity attitudes, there were significant changes in:

- self-reported knowledge;
- perceived support for health-related decision making;
- self-efficacy;
- health behaviours; and
- measured BMI.

The results of the mentoring pilot support, in part, previous research on the Just for Kids! Curriculum delivered in an adult-led, group format. That research found significant differences in physical fitness, flexibility, and nutrition knowledge, as well as positive trends in cardiovascular fitness and body mass index. A current research study is comparing the impact of the program when delivered by adults to its impact with teen mentors. Although not formally researched to date, teen mentors have reported making positive changes to their own health behaviours as a result of their role with the program and relationship with the mentees. They credit the program with improvements in decision-making and academics.

The schools and school district have acknowledged the contribution of the after-school program to health curriculum outcomes. Time for health curriculum was reduced to address other academic concerns in recent years. Offered only once a week for eight weeks, Just for Kids! is blended with and supportive of the outcomes of other after-school programs operating within the schools, many of which focus on academics.

Lessons learned

One adaptation that has been made since the initial pilot is the addition of a celebration party at the end of the program to build in the opportunity for program participants and mentors to say goodbye to one another. The difficulty associated with ending the newly developed relationship was not anticipated in the pilot.

Next steps

A next step for the program is to develop a component for parents, which would significantly augment the information currently provided to families. Run concurrently with the children's program, it is anticipated that it will have a food skills and food security focus, to address concerns expressed. It will aim to have a positive influence on family food decisions.

Also planned is the development of a mechanism to monitor the program's effects on both the children and their teen mentors over a longer time period.

Mentors, kids, and the schools would like the program to run longer. However, weather concerns and the lack of transportation for participants are barriers.

Advice to other communities

The Just for Kids! Teen Mentoring Healthy Eating and Physical Activity Program can be adapted to other communities and can also be adapted for slightly older or younger children. The program is not overly resource-intensive, which makes it accessible to communities with a low socioeconomic status and those that are rural or isolated. Adequate, focused training and weekly support for the teen mentors have been key factors in the program's success.

Partnerships

Schools and school districts in rural Appalachia and existing after-school programs have been key partners in the program. The program currently operates in three schools with plans to expand to 20.

Local farmers provide fresh fruit and vegetables for snacks. Small business owners and other community stakeholders have supported the program's implementation.

Research funds, to date, have supported the program, paying for the program supervisor, program materials, the stipend for teen mentors, and the purchase of healthy snacks.



Contact

Laureen H. Smith, PhD, RN
Assistant Professor
The Ohio State University College of Nursing
342 Newton Hall, 1585 Neil Avenue
Columbus, OH 43210
Telephone: 614-292-4578
Fax: 614-292-4849
Email: smith.5764@osu.edu

California: Healthy Behaviors Initiative

In California, approximately three-quarters of a million children participate in after-school programming supported by state and federal funding. The Healthy Behaviors Initiative is building a sustainable infrastructure to support positive changes in the eating habits, physical activity levels, and food security of 4,000 after-school program sites located in urban and rural communities throughout the state. After-school programs that have core state funding through the After School Education and Safety Program and funding via the federal 21st Century Community Learning Centers program are eligible to participate in the initiative as they share basic requirements. They:

- are located in low income areas;
- have stated outcomes related to improvements in student academic performance and student behaviour;
- maintain daily attendance of 84 students at the elementary school level and 110 in middle school programs; and
- are free to students and families.

The initiative was developed in response to compelling state and national level concerns about growing rates of childhood obesity, early onset Type II diabetes, poor nutrition among children and youth, and physical inactivity. There is also concern about the relationship between these factors and academic, physical, social, and emotional health. The Healthy Behaviors Initiative aims to build on the strength of existing programs, enabling them to address these health concerns and the issue of food insecurity.

Learning Centers have been developed as a vehicle for influencing positive changes in after-school programs. Since 2004, 28 multi-site after-school programs have been selected through a competitive process and have worked together in learning communities to integrate exemplary practices into their programming. Leaders within these programs meet one to two days every two months and receive on-the-ground coaching for a year. Successful programs are certified as official Learning Centers and provide immediate and ongoing support to hundreds of other programs in their regions.

Activities

The program's key resource is *Changing Lives, Saving Lives: A Step-By-Step Guide to Developing Exemplary Practices in Healthy Eating, Physical Activity and Food Security in Afterschool Programs* (2010). The guide was developed by the Center for Collaborative Solutions, in consultation with leaders from ten model after-school programs and with guidance from the California Department of Public Health, the California Department of Education, and a statewide Healthy Behaviors Initiative Advisory Group.

Healthy eating and physical activity are core components of the participating after-school programs. The emphasis is on hands-on, practice-based learning. Programs are encouraged to be alert to every opportunity they have to integrate quality, research-based practices into their program culture, philosophy, and programming. Most program staff are from within the communities where the programs are based and experience the same economic realities. Ongoing training and coaching helps them become healthy eating and physical activity role models. The quality of the food environment within programs has been a priority and has been achieved across the initiative. Only nutritious foods are provided or prepared. A key component of the program is to help families access available support programs, including food banks and income supports.

Evaluation

Although a comprehensive evaluation has not yet been completed, a well-known national evaluation firm worked with the Center for Collaborative Solutions for over a year, visited sites, and conducted qualitative assessments to determine whether sites have developed as desired.

The findings of this process supported the hypothesis that, if after-school programs are supported in integrating the practices of the Healthy Behaviours Initiative, the result will be healthy, active kids who are ready to learn.

Independent observations and surveys conducted by local programs and their partners confirm that children and families have made positive changes to their eating habits and food practices. Both children and families have increased their access to, and consumption of, fresh fruit and vegetables, and increased their physical activity.

Next steps

From an evaluation perspective, the next step is to explore the impact of the program on the physical health of participating children and youth over time. Internal tools will need to be fine-tuned to ensure that any changes observed can be attributed to the influence of after-school programs.

Twenty-eight Healthy Behaviors Learning Centers will be operational in fall 2012, with every comprehensive after-school program in California having immediate and ongoing access to their support.

The support of Registered Dietitians with the California Department of Public Health has been key to the successful integration of healthy-eating related practices. An important next step is already underway. Additional Dietitian support will be provided to programs through the California Department of Education Child Nutrition Division.



Lessons learned

Experience to date supports the Healthy Behavior Initiative's basic tenet that a learning community/ learning center approach (which fosters the desire to learn, share, improve, and grow), develops and sustains an efficient and supportive infrastructure for after-school programs and provides a cost-effective platform for improving the health and well-being of students and their families.

The after-school programs involved in the initiative are free to children and families and require that they are registered (that is, they are not drop-in programs). This provides a great opportunity to make a positive impact on health, as well as social and academic outcomes.

Advice to other communities

The Healthy Behaviors Initiative model is transferable to other jurisdictions. The initiative's lead consultant is currently working with other states in the U.S. to build similar supportive infrastructures for after-school programs. A key consideration in building a learning community is to be systematic and deliberate about ensuring diversity in the selection of participating programs. This facilitates learning and transferability.

Intentionality is a key practice if you really want to have impact—being clear about what is desired and why, and doing it well. Collaboration is a critical piece, because working with partners accelerates the learning and change process. It is also very important to think strategically about partners. Having the involvement and support of elected officials and key public servants from the outset has been of great benefit to the Healthy Behaviors Initiative.

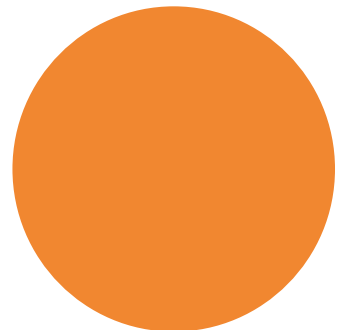
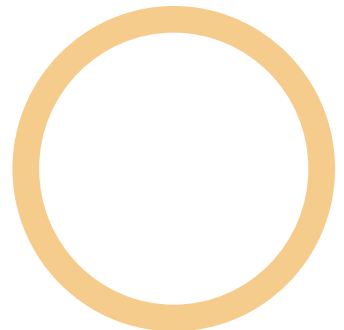
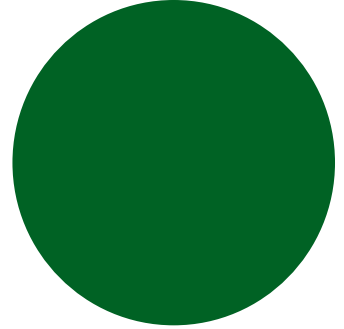
Partnerships

The Healthy Behaviors Initiative is financially and philosophically supported by a public-private partnership involving the California Department of Public Health's Food Stamps program, the California Endowment, and the David and Lucille Packard Foundation.

The California Department of Public Health, the Department of Education, private foundations, and after-school program sites are key partners. Fifty state-wide partners participate on the Healthy Behavior Initiative's advisory committee. These include the Cancer Society, people working in nutrition and physical activity, the state Parent-Teacher Association, food bank associations, and key legislators.

Contact

Andria J. Fletcher, PhD
Chief Consultant
Center for Collaborative Solutions
1329 Howe Avenue, Suite 200
Sacramento, CA 95825
Telephone: 916-208-6600
Fax: 916-567-0776
Email: DrAndiAsp@aol.com
Website: www.afterschoolsolutions.org



5. Key program components

The literature review²⁶ and case studies outlined the following evidence-supported components of effective integrated healthy eating and physical activity programs in the after-school time period:

Collaboration: Most successful programs are a collaborative effort involving government and non-government organizations, and local sectors and communities.

Documentation: Programs have a written vision, overall program and healthy eating goals and objectives, and action plans (including outcome-linked activities). There is a plan to measure and manage outcomes.

Integration: Healthy eating principles and practices are embedded into the after-school program. The sponsoring organization creates an environment that encourages children to learn about and enjoy healthy eating.

Objectives and outcomes: Programs have healthy eating objectives and outcomes that align with the length and intensity of the program. They reinforce existing curriculum guidelines or policies. The activities have a stated theoretical basis, or at least are based on a set of assumptions that are relevant to the community.

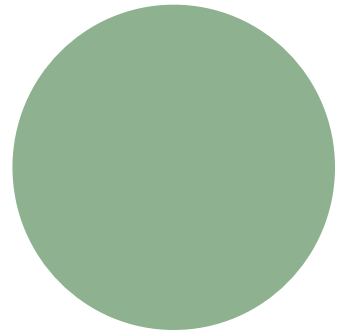
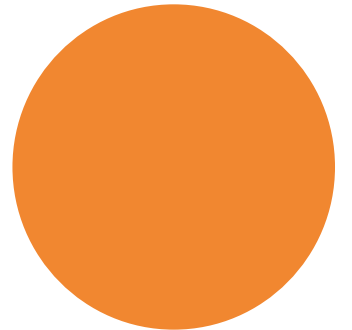
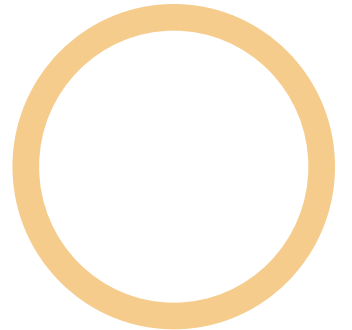
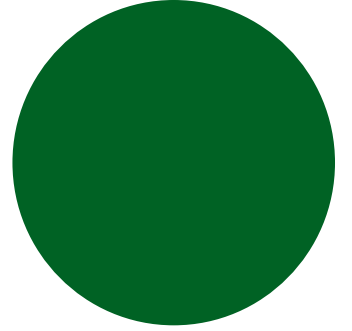
Interactivity: Programs include fun, hands-on, easy-to-implement healthy eating activities. They focus on skills such as cooking and food preparation, meal and menu planning, and reading nutrition labels. They build self-confidence, knowledge, and skills. They include all children and youth who want to take part.

Informed staff: Staff and volunteers are trained in healthy eating and food safety and are competent to deliver the program.

Adequate funding: Programs that provide snacks have enough funds to provide nutritious foods. They have the facilities and equipment to ensure food safety and maintain food quality.

Involvement: Programs involve and engage parents. They have established relationships with schools, community members, and groups. They offer leadership opportunities for participating children and youth.

Standards: Programs that provide food or beverages ensure that they are consistent with national nutrition guidance and provincial and territorial school food policies and/or guidelines. Learning materials that promote healthy eating are evidence-based.



6. Resources

Most provinces and territories have school food guidelines and/or policies which can be accessed from their respective government websites. Some other resources include:

Health Canada

Supportive Environments for Learning: Healthy Eating and Physical Activity Within Comprehensive School Health

[**www.healthcanada.gc.ca/children-healthy-eating**](http://www.healthcanada.gc.ca/children-healthy-eating)

Improving Cooking and Food Preparation Skills' Reports

[**www.healthcanada.gc.ca/children-healthy-eating**](http://www.healthcanada.gc.ca/children-healthy-eating)

Eat Well and Be Active Tool Kit |

[**www.health.gc.ca/eatwell-beactive**](http://www.health.gc.ca/eatwell-beactive)

Eating Well with Canada's Food Guide

[**www.healthcanada.gc.ca/foodguide**](http://www.healthcanada.gc.ca/foodguide)

My Food Guide

[**www.healthcanada.gc.ca/myfoodguide**](http://www.healthcanada.gc.ca/myfoodguide)

% Daily Value—Nutrition Labelling

[**www.healthycanadians.gc.ca/dailyvalue**](http://www.healthycanadians.gc.ca/dailyvalue)

Eating Well with Canada's Food Guide—First Nations, Inuit and Métis

[**www.healthcanada.gc.ca/foodguide**](http://www.healthcanada.gc.ca/foodguide)

United States

National (U.S.) Afterschool Association

www.naaweb.org/

National (U.S.) Institute on Out-of-School Time

www.niost.org/

The SEDL National (U.S.) Center for Quality Afterschool

www.sedl.org/afterschool/

Network of Statewide Afterschool Networks

www.statewideafterschoolnetworks.net/about-national-network/statewide-networks



Appendix I

Federal, provincial, and territorial (F/P/T) background: Milestones supporting the development and enhancement of health promoting programs in the after-school time period

The following F/P/T initiatives have set the stage for the integration of healthy eating and food skills into after-school physical activity programs:

2008

- F/P/T Ministers of Sport, Physical Activity and Recreation (SPAR) (except Quebec) set pan-Canadian targets to increase children and youth physical activity levels by 2015.
- F/P/T SPAR Deputy Ministers identified the after-school time period as one of four priorities for achieving the targets. The other priorities are inter-sectoral collaboration, coordinating F/P/T physical activity social marketing efforts, and a focus on parents and families.

2008–2010

- The F/P/T Physical Activity and Recreation Committee that operates within the F/P/T SPAR forum commissioned an international literature review of inter-sectoral governance models and action frameworks to advance healthy living. The Committee:
 - | commissioned an international scan of after-school programs that include physical activity;²⁸
 - | commissioned a report to identify key learnings from government actions to support physical activity in the after-school time period;¹
 - | supported a national environmental scan of after-school policies and programs at the regional and community levels³³ and
 - | organized a national workshop to identify trends and opportunities to advance physical activity in the after-school time period.³²

- F/P/T SPAR Ministers (except Quebec) created and signed the Joint Policy Statement, Intersectoral Action on Children and Youth Physical Activity, signaling their intent to work with F/P/T Ministers of Health and/or Health Promotion/Healthy Living (except Quebec) and Education Ministers to achieve the F/P/T targets and to collaborate on the after-school time period.
- F/P/T Ministers of Health and/or Health Promotion/Healthy Living (except Quebec) endorsed the Joint Policy Statement.
- F/P/T Ministers of Health and/or Health Promotion/Healthy Living (except Quebec) committed to champion working with all levels of government and in all sectors of society to reduce the prevalence of childhood obesity.
- F/P/T Ministers of Health and/or Health Promotion/Healthy Living (except Quebec) approved *Curbing Childhood Obesity: A F/P/T Framework for Action to Promote Healthy Weights*.

2011

- Ministers of Education (except Quebec) agreed to work with SPAR Ministers (except Quebec) to address children and youth inactivity and agreed to sign the Joint Policy Statement.
- F/P/T SPAR Ministers (except Quebec) endorsed the *Declaration on Prevention and Promotion and Curbing Childhood Obesity: A F/P/T Framework for Action to Promote Healthy Weights*. They identified the importance of collaboration with their Health and/or Health Promotion/Healthy Living colleagues on the shared goal to increase physical activity and reduce childhood obesity.
- Premiers expressed support for the collaborative work that is underway on healthy weights, and encouraged Ministers to work together on initiatives that could lead to greater overall health for Canadians, including opportunities for children and youth in the after-school time period.
- F/P/T Ministers of Health and/or Health Promotion/Healthy Living (except Quebec) endorsed *Actions Taken and Future Directions 2011 on Curbing Childhood Obesity: A Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights*, including the recommendation to “work with colleagues in the education, sport, physical activity and recreation sectors to identify opportunities to enhance food skills and create supportive environments both at school and in the after-school time period.”

Appendix II

Methodology for literature synthesis

The goal of the literature search was to identify promising practices that integrate healthy eating into the after-school time period, particularly within initiatives originally developed with a focus on physical activity.

Databases and key words

The search was conducted on the indexed databases Pubmed, CINAHL, EMBASE and EBSCO (Pubmed, Academic Search Premier, CINAHL, PsychArticles and SocIndex selected), using the following key words and phrases:

- healthy eating and after school programs;
- after school programs and healthy eating outcomes;
- eating habits and children and after school;
- eating habits and children and sedentary behaviour;
- eating habits and youth and after school;
- eating habits and youth and sedentary behaviour;
- extra-curricular and healthy eating;
- after school wellness; and
- extra-curricular wellness.

Inclusion criteria

Inclusion criteria for the search included studies published from January 2001 to July 2011 in the English language. Programs and studies developed for children with specific health conditions—for example, intellectual difficulties and asthma—were not included.

Results

A total of 470 articles were identified. Initial screening of titles and abstracts produced about 45 potentially relevant references, which were retrieved as full papers. About 30 of these informed the rationale for the integration of healthy eating into after-school time-period initiatives and the synthesis of initiatives and promising practices.

While interest was primarily related to programs that integrated healthy eating and physical activity, two studies with a sole focus on healthy eating were included because of their potential for integration.

A generalized internet search using Google and Google Scholar identified numerous after-school program guides.



Appendix III

Additional case studies

FUNDamentals: Physical Literacy Expansion Project

This project will build and expand on the 2010–2011 pilot project, growing to ten clubs in Alberta from an original six. The project operated by the Boys and Girls Clubs of Alberta utilizes the Canadian Sport for Life (CS4L) framework to provide structured and semi-structured after-school programs for children aged six to nine, so they will have the opportunity to master movement skills and learn about physical literacy. While not an original focus of the pilot project, the long history of the Boys & Girls Clubs of Canada with healthy eating education and food skills development was naturally incorporated into the program at almost all of the pilot sites and has become a formalized component of the expansion. Healthy snacks and snack-related nutrition education is provided to participating children, and when possible children are involved in snack preparation. For more information, contact Karen McCullagh at kmccullagh@bgccan.com

Active After School

The Active After School pilot project will have trained and qualified instructors from Strathcona County Recreation, Parks & Culture, assisted by youth aged 12–17 from the Leaders in Training Program. They will provide approximately 30–40 students (grades one to six) with physical activity opportunities between 3:15 and 6:00 p.m. Key objectives include:

- monitoring and evaluating the success of the pilot to support implementation in additional schools by fall of 2012;
- encouraging increased levels of both indoor and outdoor physical activity;
- affordability and sustainability;
- leadership opportunities for older youth; and
- education for children on healthy eating and lifestyle choices.

Programmers are experimenting with themed or seasonal nutrition education and snack programs that are fun and healthy. The overall goal is to teach children how to make healthy choices when they are choosing their own after-school snacks. All nutrition programs are combined with physical activity and are lots of fun! For more information, contact Susan Mullins at mullens@strathcona.ab.ca or Ruth Ginter at ginter@strathcona.ab.ca

The Zone

The Zone is a project of the Town of Morinville Department of Culture and Recreation. It will be delivered between 2:30 and 5:00 p.m. at the town's school. This eliminates transportation barriers for interested children and youth. The project has a physical activity component that exposes the students to various fun activities outside of school sports. It has a healthy well-being component that will focus on learning about, preparing, and enjoying healthy food choices. A mentorship and leadership component is also planned. This will support the participation of selected students in workshops or conferences that develop leadership skills. The goal is to involve students in the development and implementation of Zone activities and support students to become youth advocates within the community. Specific to nutrition is the Young Iron Chefs cooking program. Youth have the opportunity to showcase and lead other youth within the program. The fourth component focuses on youth volunteerism. Youth will partner with the Citizens on Patrol and the Morinville RCMP on projects such as efforts to reduce graffiti, vandalism, and hanging out in parks. For more information, contact Melonie Dziwenka at mdziwenka@morinville.ca

Dash to the Dawe

The City of Red Deer will offer the Dash to the Dawe program to youth aged 11–14, between 3:30 and 6:00 p.m., three days a week, at the G.H. Dawe Community Centre. The focus will be active and fun leisure time activities, healthy lifestyle, including healthy food choices, and building self-esteem, confidence, and social skills. The program aims to provide low-cost physical activity and healthy eating programming to students attending schools in this lower-income neighborhood. The participants will be offered a variety of activities as well as a healthy afterschool snack and beverage. The nutrition component aims to attract more participants to the program and to increase healthy food choices. For more information, contact Erin Low at Erin.Low@reddeer.ca

Alberta Health Services: MEND (Mind, Exercise, Nutrition ... Do It!)

Alberta Health Services is promoting healthy weights in children by launching a free program for families. The program has improved the health and well-being of 30,000 children and youth worldwide. A three-year project funded by the Alberta Cancer Provincial Legacy Fund is underway to adapt and pilot three MEND programs—MEND 2–4, MEND 5–7 and MEND 7–13—across all zones in Alberta Health Services. MEND is a community-and family-based obesity prevention and weight management program. It is supported by two randomized control studies showing strong results. Developed in the United Kingdom, MEND 7–13 is a 10 week (20 sessions) healthy lifestyle program for families with children who have a BMI over the 85th percentile. Program adaptations have been completed (for example, Canadian nutrition guidelines, Canadian grammar and vocabulary, and culturally-relevant images in program materials). A pilot program has also been completed. Eight MEND 7–13 programs will be offered in 2012 and the required training for program staff is underway. For more information, contact Neil MacDonald at Neil.macdonald@gov.ab.ca or visit www.albertahealthservices.ca/5867.asp and www.mendprogramme.org/whatweoffer

Prince Albert Urban Youth Sport Initiative (Lakeland District for Sports, Culture and Recreation)

This initiative aims to reduce the barriers of transportation, nutrition, equipment, and facilities, while providing an introduction to recreational sport experiences for all youth participants in grades three to eight. The program is organized and facilitated by the Urban Youth Sport Coordinator. Ten schools take part in the program and each are allotted 12 spots for participants. The program is offered Monday through Thursday from 3:00 to 4:30 p.m. Transportation to and from the program is provided. Recreation sport activities include a soccer league, learn to curl, a floor hockey league, and a kickball/softball league. A nutrition component is associated with all sports except the learn to curl activity. The school Nutritionist facilitates a nutrition session with each participating school on topics such as healthy beverages, healthy snacks, sports nutrition, and fast food. Students also have a chance to prepare a healthy snack. Participants are given a bagged supper or snack at the end of each session. The food is provided by the Share a Meal Food Bank in Prince Albert. The bagged supper or snack contains foods from all four food groups. Program partners include: the City of Prince Albert, Prince Albert Share-A-Meal Food bank, Prince Albert Northern Bus Lines, Prince Albert Grand Council, Food For Thought Nutritionist, and Community School Coordinators and volunteers. For more information, contact Kristy Thompson at kristy.ldscr@sasktel.net

Prince Albert After School/Evening Recreation Program

The After School/Evening Recreation Program is provided through a partnership of the City of Prince Albert Community Services and the Healthy Choices for Kids committee. The program provides safe, supervised, affordable, positive, recreational activities for school-aged children. Key outcomes of the program are increased daily physical activity, enhanced self-esteem, strengthened youth leadership, and improved nutrition knowledge. The program runs from September to March each year. Schools sign up to participate in the program one day a week. Community Services provides youth recreation staff to facilitate the program and the Community School Coordinator provides student supervision. The target group for the program is children aged 5–13. There is no participation fee. This ensures that children facing economic and social barriers are able to participate. The program time is either right after school (3:30 to 5:30 p.m.) or in the evening (6:00 to 8:00 p.m.). The schools prepare and distribute healthy snacks at each session. For more information, contact Curtis Olsen at colsen@citypa.com

W.J Berezowsky School After-school Community Kitchen (Saskatchewan Rivers School Division)

W.J. Berezowsky Elementary School's most popular after-school program is the after-school community kitchen for children in grades one to two, three to four, and five to six. It runs from 3:15 to 5:00 p.m. Program participants prepare healthy snacks or meals. The program is facilitated by the school's After-School Program Coordinator and is funded through grants. Anywhere from 10 to 15 students take part in each session. Many participants bring their younger siblings to the kitchen, where they do homework or play with toys while the older children cook. For some, the after-school snack is the only meal they get until the next morning at school. Participants have shared that they have prepared some of the foods from the Community Kitchen at home, as they are often responsible for meal and snack preparation for themselves and their siblings. For more information, contact Charlene Cyr at 306-763-5142 or cyrcharlene@yahoo.ca

Manitoba Child Nutrition Council After-School Vegetable and Fruit Program: Exposure, Education, and Environment

The Manitoba Child Nutrition Council's After School Fruit and Vegetable Program builds on the Council's lengthy experience working with vulnerable populations, schools and community-based organizations. Expanding on the Council's school-based fruit and vegetable program initiated in 2008, the after-school pilot's objectives are to:

- increase access to, and the nutritional quality of, foods served in after-school programs that target vulnerable populations;
- increase the capacity of after-school program staff and participants with regards to nutrition knowledge and skills; and
- link the nutrition education opportunities offered in programs with the home environment and larger community.

After-school program staff are supported through training and regular email contact. Monthly newsletters provide a means to reach parents and caregivers with healthy eating messages. Currently, 45 sites serving 1700 participants are supported through the program. In each year of the two-year program funding allows sites to provide 22 weeks of fruit and vegetable snacks, at least three times a week. Sites include schools, after-school childcare programs, after-school recreation programs, and friendship centres. Sites were selected based on the program's priority for vulnerable populations and food security. Geographic considerations, having an existing physical activity component, and program or site capacity were also taken into account. For more information, contact Maxine Meadows at zmeadows@mtmts.net or Viola Prowse at vprowse@mts.net

After the School Bell Rings: A Manitoba After School Recreation Project

This provincial initiative focuses on increased access and opportunities for children and youth aged 6–12, to engage in physical activity and healthy living practices in the after-school time period. The initiative will identify and develop resources to assist providers of after-school programs to increase physical activity, healthy eating, and active transportation within their programs. Providers of after-school programs will have opportunities to share ideas, problem solve, and work together to provide effective after-school programs. The project website includes resources related to after-school programs, physical activity, nutrition, and active transportation. Interactive features that encourage information sharing and communication among after-school program providers are under development. For more information, contact Roy Mulligan at reconnections.pro@sportmanitoba.ca or visit www.afterschoolmanitoba.ca/

Combo

Combo was started three years ago in a small rural New Brunswick school in Grande-Digue by two parents, in collaboration with the school principal, who wanted a way to keep children active after school hours. Two after-school activities (hence the name Combo) are provided on the same day. These activities occupy the students until pick-up, instead of bus transportation home immediately after school. Activities are planned based on the interests of students. Cooking demonstrations and classes have been one of the most popular activities since the program began. A local chef facilitates the cooking program, which has been tailored to the school's limited facilities and equipment. The foundations of the program are food safety, food skills development, and healthy eating. As a result of the program's success and the school board's support, a community classroom has been developed where children can cook and create art. The school now has a fridge, counter, and small oven. Local food and financial partners are greatly valued, and procuring foods from local producers and retailers is a priority, as is educating students about the value and benefits of doing so. Other program activities include a sports initiation program, gardening, art, a photo workshop, and a movie-making workshop. Participants are provided with a healthy snack and have a 20-minute period to do their homework. Currently, 125 children out of a total of 215 students who attend the school participate in Combo. For more information, contact Lucie Gosselin at creade@nbnet.nb.ca or visit www.carnetwebds11.ca/grande-digue/

HEAT Club Curriculum: Shape Up Somerville (U.S.)

Shape Up Somerville is a citywide campaign to increase daily physical activity and healthy eating through programming, physical infrastructure improvements, and policy work. The initiative began as a community-based participatory research study at Tufts University, targeting children in grades one to three in Somerville public schools. The study aimed to determine, in a controlled trial, if an environmental intervention could prevent a rise in BMI z scores among children. The intervention enhanced the availability of physical activity and healthy eating options throughout their day. The goal was realized with a modest, but statistically significant decrease in BMI z scores. The availability of foods of lower energy density within the school environment also decreased.

Created in connection with Shape Up Somerville, the HEAT (Healthy Eating, Active Time) Club is a curriculum designed for children aged 5–10 in after-school programs to improve eating habits and increase physical activity levels. It has 26 lessons and is comprised of active games, food activities, and creative arts lessons. Each activity in the curriculum addresses one or more of these four aims:

- increase consumption of fruit, vegetables, low-fat milk products, and whole grains;
- decrease consumption of foods that are high in saturated fat and sugar;
- increase physical activity; and
- decrease screen time (TV, video, and computer).

The HEAT Club, supported by a training module for leaders, has been implemented in more than 100 after-school programs across the United States. In addition, MyHeat has been piloted for middle-school students. Outcomes associated with the use of the HEAT Club curriculum include the development of school wellness policies and their application within the after-school environment. For more information, contact Julia Canfield at Julia.canfield@tufts.edu




References

- ¹ Clyne GR. Physical activity promotion in the after-school time period: key learnings from government action across Canada. Calgary: Interprovincial Sport and Recreation Council; 2011.
- ² Van Cauwenberghe E, Maes L, Spittaels H, Van Lenthe FJ, Brug J, Oppert J-M, et al. Effectiveness of school-based interventions in Europe to promote healthy nutrition in children and adolescents: systematic review of published and 'grey' literature. *Br J Nutr*. 2010; 103:781–797.
- ³ Taylor JP, Evers S, McKenna M. Determinants of healthy eating in children and youth. *Can J Public Health*. 2005; 96(Suppl 3):S20–S26.
- ⁴ Garriguet D. Overview of Canadians' eating habits 2004. Nutrition: findings from the Canadian Community Health Survey. Statistics Canada; 2006.
- ⁵ Gilbert J, Miller D, St-Pierre S. What do children eat during the after-school period? (CCHS, Cycle 2.2 (2004) secondary data analysis; unpublished). Office of Nutrition Policy and Promotion, Health Canada; analyses performed in 2012.
- ⁶ Dietz WH, Strasburger VC. Children, adolescents and television. *Curr Probl Pediatr*. 1991; 21:8–31. In Lowry R, Wechsler H, Galuska DA, Fulton JE, Kann A. Television viewing and its associations with overweight, sedentary lifestyle, and insufficient consumption of fruits and vegetables among US high school students: differences by race, ethnicity and gender. *J Sch Health*. 2002; 72:413–421.
- ⁷ Liang T, Kuhle S, Veugelers PJ. Nutrition and body weights of Canadian children watching television and eating while watching television. *Public Health Nutr*. 2009; 12:2457–2463.
- ⁸ Lowry R, Wechsler H, Galuska DA, Fulton JE, Kann A. Television viewing and its associations with overweight, sedentary lifestyle, and insufficient consumption of fruits and vegetables among US high school students: differences by race, ethnicity and gender. *J Sch Health*. 2002; 72:413–421.
- ⁹ Utter J, Neumark-Sztainer D, Jeffery R, Story M. Couch potatoes or french fries: are sedentary behaviours associated with body mass index, physical activity and dietary behaviours among adolescents? *J Am Diet Assoc*. 2003; 103:1298–1305.
- ¹⁰ Alberta Recreation & Parks Association. Afterschool recreation initiatives: executive summary. Edmonton; 2009. Available from: <http://s3.arpaonline.ca/docs/AfterSchool-Report.pdf>
- ¹¹ Administration for Children and Families, Child Care Bureau. Promoting physical activity and healthy nutrition in afterschool settings: strategies for program leaders and policy makers. U.S. Department of Health and Human Services; 2006.
- ¹² Veuglers PJ, Schwartz ME. Comprehensive school health in Canada. *Can J Public Health*. 2010; 101(S2):5–9.



- ¹³ Joint Consortium for School Health. JCSH Healthy Schools Tool Guide. Victoria, BC: JCSH; 2009. Available from: www.jcsh-cces.ca
- ¹⁴ Choudhry S, Selvaraj K, Gliessen K, Myers A, Darukhanavala A, Lipton R, et al. Power-Up: a collaborative after school and family pilot study to prevent obesity (Conference Abstract). *J Gen Intern Med*. 2010; Supplement.
- ¹⁵ Colman KJ, Geller KS, Rosenkranz RR, Dzewaltowski DA. Physical activity and healthy eating in the after-school environment. *J Sch Health*. 2008; 78:633–640.
- ¹⁶ Dzewaltowski DA, Rosenkranz RR, Geller KS, Coleman KJ, Welk GJ, Hastmann TJ, et al. HOP’N after-school project: an obesity prevention randomized controlled trial. *Int J Behav Nutr Phys Act*. 2010; 7:90–102.
- ¹⁷ Economos CD, Hyatt RR, Goldberg JP, Must A, Naumova EN, Collins JJ, et al. A community intervention reduces BMI z-score in children: Shape Up Somerville first year results. *Obesity*. 2007; 15:1325–1336.
- ¹⁸ Engels HJ, Gretebeck RJ, Gretebeck KA, Jimenez L. Promoting healthful diets and exercise: efficacy of a 12 week after-school program in urban African Americans. *J Am Diet Assoc*. 2005; 105:455–459.
- ¹⁹ Hermann JR, Parker SP, Brown BJ, Siewe YJ, Denney BA, Walker SJ. After-school gardening improves children’s reported vegetable intake and physical activity. (Gem No. 412) *J Nutr Ed Behav*. 2006; 38:201–202.
- ²⁰ Hyland R, Stacy R, Adamson A, Moynihan P. Nutrition-related health promotion through an after-school project: the responses of children and their families. *Soc Sci Med*. 2006; 758–768.
- ²¹ Kelder S, Hoelscher DM, Barroso CS, Walker JL, Cribb P, Hu S. The CATCH kids club: a pilot after-school study for improving elementary students’ nutrition and physical activity. *Public Health Nutr*. 2004; 8:133–140.
- ²² Mozaffarian RS, Wiecha JL, Roth BA, Nelson TF, Lee RM, Gortmaker SL. Impact of an organizational intervention designed to improve snack and beverage quality in YMCA after-school programs. *Am J Public Health*. 2010; 100:925–932.
- ²³ Samuels SE, Craypo L, Boyle M, Crawford PB, Yancey A, Flores G. The California Endowment’s Healthy Eating, Active Communities Program: a midpoint review. *Am J Public Health*. 2010; 100:2114–2123.
- ²⁴ Smith LH. Piloting the use of teen mentors to promote a healthy diet and physical activity among children in Appalachia. *J Spec Pediatr Nurs*. 2011; 16:16–26.
- ²⁵ Story M, Sherwood NE, Himes JH, Davis M, Jacobs DR, Cartwright Y, et al. An after-school obesity prevention program for African American girls: the Minnesota GEMS pilot study. *Ethn Dis*. 2003; 13 (Suppl 1):S1–54 – S1–64.
- ²⁶ Brown T, Summerbell C. Systematic review of school-based interventions that focus on changing dietary intake and physical activity levels to prevent childhood obesity: an update to the obesity guidance produced by the National Institute for Health and Clinical Excellence. *Obes Rev*. 2009; 10:110–141.
- ²⁷ Story M, Kaphingst KM, Robinson-O’Brien R, Glanz K. Creating healthy food and eating environments: policy and environmental approaches. *Annu Rev Public Health*. 2008; 29:253–72.

- 
- ²⁸ Bauman A. Review of after-school programs (ASPs) – do they influence physical activity? Unpublished report prepared for Public Health Agency of Canada, Ottawa; 2009.
- ²⁹ Health Canada. Improving cooking and food preparation skills: a profile of promising practices in Canada and abroad. 2010. Available from: www.hc-sc.gc.ca/fn-an/nutrition/child-enfant/cfps-acc-profil-apercu-eng.php
- ³⁰ Wiecha J, Gannett E, Hall G, Roth B. National AfterSchool Association Standards for Healthy Eating and Physical Activity in Out-Of-School Time Programs. (Adopted April 2011). Available from: www.naaweb.org/default.asp?contentID=672
- ³¹ Fletcher AJ. Changing lives, saving lives, a step-by-step guide to developing exemplary practices in healthy eating, physical activity and food security in after school programs. 2011. Healthy Behaviors Initiative. Center for Collaborative Solutions. Available from: www.afterschoolsolutions.org
- ³² Vail S. Post-workshop report: F/P/T after-school time period physical activity workshop. Toronto; 2010. Available from: www.prontario.org/index.php?ci_id=6386
- ³³ Robertson J. Active living after-school environmental scan. Unpublished report prepared for Physical and Health Education Canada; April 2010.

Notes

