

Assessing the Impact of the Primary School-based Nutrition Intervention *Petits cuistots – parents en réseaux*

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ABSTRACT

Objectives: This study sought to provide an intermediate impact assessment of the nutrition intervention *Petits cuistots – parents en réseaux* (Little Cooks – Parental Networks) on: 1) knowledge, attitude, capacity and experience with regard to nutrition, diet and cookery, and 2) parental and/or family participation in school.

Participants: A total of 388 students from grades 5 (participants) and 6 (non-participants).

Setting: The evaluation of the nutrition intervention took place in each of the seven participating elementary schools, all of which are located in Montreal's most disadvantaged neighbourhoods.

Intervention: The program component "Little Cooks" is a nutrition workshop run by community dietitians. Each of the eight annual workshops features a food item and nutrition theme with a recipe for a collective food preparation and tasting experience. Classroom teachers participate to provide classroom management and program support. The "Parental Networks" component of the program invites parents to assist with the nutrition workshop, and offers additional parent and family activities which link to nutrition workshop themes (e.g., dinners or visits to local food producers).

Outcome: The program had some impact on knowledge of the nutrient content of food, food produce and cooking; attitude and experience with tasting of new or less common foods; and perceived cooking capacity. Families with students participating in the program participated more in school activities than did families of students not in the program.

Conclusions: Our assessment indicates a potential program impact upon several intermediate impact measures, and in so doing highlights a promising nutrition capacity-promoting intervention.

Key words: Program evaluation; primary schools; food habits; health promotion

La traduction du résumé se trouve à la fin de l'article.

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Recent approaches to nutrition education provide concrete experiences with food and integrate into core curricular subject areas.¹⁻⁷ Such interventions are premised on theory⁸ and empirical research⁹ showing that children's food preferences are strongly influenced by associative conditioning from direct experience with food. This study presents the results of an intermediate impact assessment of a novel nutrition intervention promoting nutritional and culinary education for schoolchildren and their families' participation in school activities. The program theory holds that children can be motivated to develop dietary behaviours which prevent chronic diseases by building their interest with food and cooking. The overarching strategy instructed students about food and nutrition, and placed students in action preparing and tasting food. The constructs evaluated for the purposes of this study included: 1) knowledge, attitude, capacity and experience with regard to nutrition, diet and cookery; and 2) parental and/or family participation in schools.

The nutrition education intervention *Petits cuistots – parents en réseaux* (PC-PR) (translated as Little Cooks – Parental Networks) is a community-based initiative which began as a collective kitchen and expanded into a nutrition education program in 1998.¹⁰ The program component "Little Cooks" is a nutrition workshop run by community dietitians hired full time by the community organization *Cinq Épices*. Each of the eight annual workshops features a different food item and nutrition theme together with a recipe. Classroom teachers are asked to provide classroom management and program support. The recipe and tasting sample provide take-home examples of the cooking experience in order to link the "Parental Networks" component and invite parents' participation in the nutrition workshop. Community workers (also working full time for the program) invite parents to activities for themselves and their family. Information on the program and process evaluations are available online (<http://www.cacis.umontreal.ca/pdf/Bilanactivites2006.pdf>, Accessed February 20, 2008).

METHODS

Design and sample

The study was conducted within the 7 participating schools, all of which are located

in the most disadvantaged neighbourhoods in Montreal.¹¹ The study involved a cross-sectional survey of grade 5 students participating in the program for up to 6 years and grade 6 students at the same school (“non-participants”) who were not ever intentionally exposed to the program. The program was implemented uniquely in kindergarten classrooms in 1999/2000. Nutrition workshops occurred 8 times per year with a 1.5 hour duration (12 hours per year).

In the spring of 2005, all students whose parents had consented (81.1% of 497 grades 5 and 6 students combined) were invited to complete the nutritional survey. Among those consenting, a total of 388 students (78.1% of eligible) completed the survey during class time under examination conditions. Institutional review board approval was provided by the University of Montreal Faculty of Medicine’s Ethical Research Review Committee.

Nutritional questionnaire

The identification of impact measures and construction of survey questionnaire involved a strong collaboration with program staff and administration, and was guided by program documentation, participant observation and published evaluations of other elementary schools nutrition programs.¹²⁻¹⁹ The questionnaire was pilot tested within two ‘mixed’ classrooms with grades five and six students (n=43), in a school serving a demographically similar population. On-site testing verified student comprehension and duration and reliability analysis verified internal consistency of scales, variation of knowledge measures and co-variance of experience and capacity measures. Standard questions for assessing knowledge and skills believed to mediate healthy eating behaviour¹²⁻¹⁹ are not suited to interventions emphasizing an interactive approach to learning.⁴ Contemporary approaches to evaluating nutrition education have assessed knowledge in relation to ecology, technology and science^{4,6,20-25} or food preferences and readiness to try uncommon foods.^{4,26} Such tools were not applied to our evaluation as they assess impacts highly specific to the activities of the program in which they were developed and used.

Measures

Measures were inspired from questionnaires evaluating nutrition interventions for primary school age children (Appendix A).¹²⁻¹⁹

TABLE I
Characteristics of Program Participants and Non-participants (n=388)

Variables	Grade 5 Participants (n=209)	Grade 6 Non-participants (n=179)
Rate of Participation	81.6% (209/256)	74.3% (179/241)
Sex (n=385)		
Male	54.6%	51.1%
Missing	0.01%	0.01%
Attendance at present school (n=388)		
Mean number of years (std dev)	4.2 (2.08)	4.9 (2.28)
Proportion new to school	28.2%	22.9%
Siblings in same school (n=388)		
Proportion with sibling participating in program	41.7%	46.3%
Mean number of siblings (std dev)	0.64 (0.82)	0.63 (0.82)
Participation of family or guardian in school activities (n=388)		
“Often”	11.5%	6.1%
“Sometimes”	31.6%	18.4%
“Never”	56.9%	75.4%
Perceptions of school (n=388)		
Liking for school at the moment		
Likes school a lot	38.7%	36.9%
Likes school a bit	46.1%	45.5%
Doesn’t like school a lot	10.3%	13.6%
Doesn’t like school at all	4.9%	4.0%
Satisfaction with school (std dev)	3.82 (0.87)	3.63 (0.98)
Perception of classmate support (std dev)	3.76 (0.76)	3.83 (0.65)
Perception of teacher support (std dev)	4.10 (0.67)	3.90 (0.72)

Knowledge

Measures assessing knowledge of the nutritive value of food, the Canadian food guide, locally grown produce, and cooking procedures consisted of 8 to 10 items. Responses to food transformation, and international cuisine measures were dichotomized, where students responding correctly to at least half of the questions were considered to have knowledge acquisition.

Attitude

The first attitude measure assessed the perceived association between healthy eating and knowing how to cook. Response options for this 5-question scale (Cronbach’s Alpha 0.73) ranged from 1-4, with highest score indicating a higher perceived association. A second measure listed 10 food items typically disliked by children, where respondents indicated having tasted and having a liking or disliking for the item, or not having tasted it but being willing (or not willing) to do so. Positive attitudes towards food were denoted by greater numbers of food items that respondents reported liking or being willing to try. A third measure of attitude involved 3 items regarding the anticipation of negative peer reaction to a hypothetical situation involving uncommon or new foods.

Experience

One measure queried experience tasting new foods from a list of 10 food items that

are relatively uncommon or typically disliked by children. The second measure included seven items asking about experience with food preparation at home. Scores ranged from 1 (never having participated) to 3 (participating regularly).

Capacity

This measure included seven items with a 4-point Likert response scale ranging from incapable to completely capable. The distribution of this outcome was highly skewed (the majority of respondents reported a higher level of capacity). Responses were dichotomized for analysis on the basis of whether scores were below the sample median (corresponding to lower capacity) or above (corresponding to higher capacity).

Parental and/or family participation in school

Respondents reported whether or not they had a family member or guardian who ever participated in any school activities in the past. Since the rate of participation as “often” was very low, this category was collapsed with “sometimes”, to provide a dichotomized measure of parental participation.

Covariates

Having arrived at the school during 2003/04 or 2004/05 was considered new to the school. Sibling participation in program was assessed by asking about the school

TABLE II

Knowledge Measures Controlled for Sex, Newness to the School, Presence of Sibling Participating in Program, and Family and/or Parental Participation in School

Dependent Variables	Grade 5 Participants	Grade 6 Non-participants	Test Statistic
1. Knowledge of nutritive value of food <i>Mean number of correct responses (out of 10)</i>	3.4	2.8	$\chi^2=11.4$ (p<0.001)
- Added effect of parental participation in school† <i>Mean number of correct responses (out of 10)</i>	4.1	3.3	$\chi^2=11.0$ (p<0.001)
2. Knowledge of Canadian food guide <i>Mean number of correct responses (out of 10)</i>	5.8	5.8	$\chi^2=0.72$ (NS)
- Added effect of parental participation in school† <i>Mean number of correct responses (out of 10)</i>	6.3	6.3	$\chi^2=5.0$ (p<0.05)
3. Knowledge of locally grown produce <i>Mean number of correct responses (out of 10)</i>	6.4	6.4	$\chi^2=0.1$ (NS)
4. Knowledge of food transformation process <i>Proportion answering correctly</i>	47.5	34.0	OR 2.1; 1.4-3.2* (p<0.001)
- Added effect of parental participation in school† <i>Proportion responding correctly</i>	61.0	43.0	OR 1.7; 1.1-2.7* (p<0.01)
5. Knowledge of international cuisine <i>Proportion answering correctly</i>	11.3	11.3	OR 1.3; 0.7-2.3* (NS)
- Added effect of parental participation in school† <i>Proportion answering correctly</i>	19.8	19.8	OR 1.9; 1.1-3.4* (p<0.05)
6. Knowledge of cooking procedures <i>Mean number of correct responses (out of 8)</i>	4.2	2.8	$\chi^2=33.8$ (p<0.001)
- Added effect of being a girl‡ <i>Mean number of correct responses (out of 8)</i>	5.1	3.7	$\chi^2=15.7$ (p<0.001)

* Odds ratio (95% Confidence Interval)

† Responding “no” to parent participation as reference category (0), model tested for added effect of parental participation as “sometimes” or “often”

‡ Boy reference category (0), model tested added effect of being girl (1)

TABLE III

Attitude Measures Controlled for Sex, Newness to the School, Presence of Sibling Participating in Program, and Parental Participation in School Activities

Dependent Variables	Grade 5 Participants	Grade 6 Non-participants	Test Statistic Chi-square OR OR (95% CI)*
1. Belief that knowing how to cook is associated with healthy eating, from low (1) to high (4) <i>Mean response</i>	3.1	2.9	$\chi^2=7.3$ (p<0.01)
- Added effect of being a girl‡ <i>Mean response</i>	3.3	3.1	$\chi^2=10.9$ (p<0.001)
2. Either liking or being open to tasting less common foods, from low (0) to high (10) <i>Mean response</i>	6.2	5.6	$\chi^2=7.3$ (p<0.01)
3. Perceiving classmates as likely to have a negative reaction to less common or strange foods <i>Proportion having negative perception</i>	64.9	64.9	OR 0.79; 0.47-1.3* (NS)

* OR (95% CI)

‡ Boy reference category (0), model tested added effect of being girl (1)

attended and grade level of sibling(s). Gender was also tested as a covariate.

Analysis

Analysis began by assessing the impact of the program upon each of the knowledge, attitude, capacity and experience measures, and then upon parental and/or family participation in school activities. Analyses controlled for dichotomized covariates, with newness to the school, presence of siblings in the same school, and being a boy as reference categories. The first set of analyses also controlled for gender parental and/or family participation in school activities and tested for moderating effects.

Linear and logistic regression models were used to assess the association between

the program and each of the impact measures while controlling for relevant covariates. For linear regression models, results indicate the mean level of knowledge for program participants and non-participants, and where significant, the additional effect of covariate(s). Logistic models provide the improved odds (if any) of answering the question(s) correctly among program participants relative to non-participants.

RESULTS

Survey participant characteristics are given in Table I. Refusal rates were slightly lower among program participants than non-participants (p=0.06). The proportion of families having attended school activities

“sometimes” was significantly higher (p=0.043) and the proportion of families having “never” attended school activities was significantly lower (p=0.047) among program participants than non-participants.

Participants had greater knowledge than non-participants of the nutritional content of food, food transformation, and cooking procedures. There were no differences in knowledge of the Canadian food guide, local food produce, or international cuisine (Table II). Family and/or parental participation in school activities along with gender appeared as significant covariates.

Two out of three attitudes related to healthy eating differed according to program participation (Table III). Both girls and program participants reported to a

TABLE IV

Experience and Capacity Measures Controlled for Sex, Newness to the School, Presence of Sibling Participating in Program, and Parental Participation in School Activities

Dependent Variables	Grade 5 Participants	Grade 6 Non-participants	Test Statistic Chi-square OR OR (95% CI)*
1. Experience with less common foods, from low (0) to high (10) <i>Mean response</i>	6.2	4.9	$\chi^2=26.2$ ($p<0.001$)
- Added effect of parental participation in school† <i>Mean response</i>	7.15	6.23	$\chi^2= 7.6$ ($p<0.01$)
2. Experience cooking at home, from none (1) to often (3) <i>Mean response</i>	2.34	2.34	$\chi^2=0.38$ (NS)
- Added effect of parental participation in school† <i>Mean response</i>	2.60	2.60	$\chi^2=6.5$ ($p<0.05$)
- Added effect of being a girl‡ <i>Mean response</i>	2.68	2.68	$\chi^2=13.4$ ($p<0.001$)
3. Perceived capacity to cook <i>Proportion with perceived capacity</i>	49.9	33.4	OR 1.99; 1.30-3.04* ($p<0.001$)
- Added effect of being a girl‡ <i>Proportion with perceived capacity</i>	62.3	45.4	OR 1.66; 1.09-2.54* ($p<0.01$)
- Added effect of parental participation in school† <i>Proportion with perceived capacity</i>	63.0	46.2	OR 1.71; 1.08-2.73* ($p<0.05$)

* OR (95% CI)

† Responding "no" to parent participation as reference category (0), model tested for added effect of parental participation as "sometimes" or "often"

‡ Boy reference category (0), model tested added effect of being girl (1)

higher degree than boys and non-participants that knowing how to cook was an important component of healthful eating. Program participants also indicated a greater readiness to taste new foods or to like a set of less typical foods.

Program participants had greater experience in tasting less common foods but they did not report more experience with food preparation at home. Reported level of capacity to prepare food was highest for program participants compared to non-participants (Table IV). Family and/or parental participation along with gender appeared as significant covariates.

Last, the program was associated with family and/or parental participation in school activities. The likelihood of family participation in school activities was 2.8 times higher for families of program participants compared to those of non-participants (95% CI 1.7-4.4, $p<0.0001$). Having arrived at the school within the present or previous school year significantly decreased the probability of parental participation (OR 0.3; 95% CI 0.2-0.6, $p<0.001$). Newness to school did not modify the effect of the program on family and/or parental participation.

DISCUSSION

This study aimed to identify intermediate nutrition intervention program impacts defined in terms of 1) nutritional and cooking knowledge, attitude, experience and capacity, as well as 2) family and/or

parental participation in school activities. Self-reported results reveal program participation to be associated with: student knowledge of the nutrient content of food, the processes through which food is transformed from a raw form into that suitable for consumption, and cooking procedures; more positive attitudes and experiences with tasting of new or less common foods, and a greater perceived cooking capacity; and family participation in school activities.

The lack of program association with knowledge of local food products and international cuisine might be explained by the fact that this information was the subject of just one workshop, whereas information regarding nutrient content of food and cooking procedure was transmitted during each workshop, and thus repeated throughout the school year. The lack of association between long-term participation in the program and knowledge of food groups may be seen as surprising, however.

Contrasted with school-based interventions which develop from theory,²⁷ this intervention is rooted in community-based solutions to local problems where professional dieticians were hired to implement nutrition education in collaboration with community and educational stakeholders.¹⁰ The PC-PR program, similar to theory-driven programs, has demonstrated positive influence on knowledge, attitude and capacity indicators.²⁷ However, results from this study are

unique in showing positive influence upon parental participation and achieving stable presence in schools (i.e., six years at the time of the survey).

The validity of the results assumes students in the participating classes were equally exposed to the program. We did not measure individual absenteeism. Validity also assumes reasonable comparability between students exposed versus those not exposed to the program. In this respect, our results are strengthened by having a comparison group of children (grade 6) from within the same schools as participating students (grade 5), however, this also introduced differential with respect to the intellectual maturity. For these reasons, program effects may be underestimated, most notably in domains associated with maturity (i.e., cooking experience, perceived capacity for cooking, awareness of local food produce).

The student participation rate and parental participation in school activities were slightly higher among grade 5 students and we did not account for multiple comparisons by adjusting p-values within the classes of impact measures. These factors may have overestimated the impact of apparent effects. Further, the outcomes of interest ideally would have been measured prior to and then following exposure to the program in order to assure that the observed effects are attributable to the program. The structure of the intervention and politics regarding its evaluation did not, however, allow for constructing a pretest.

Appendix A

Nutrition Questionnaire

Background Questions (co-variables)

- Are you girl or a boy? Boy Girl
- What grade are you in at school ? 5th Grade 6th Grade
- What grade were you in when you began at this school? Kindergarten Fourth Grade
 First Grade Fifth Grade
 Second Grade Sixth Grade
 Third Grade
- Do you have any brothers or sisters in this school? Yes —> How many? _____
 What grade is he/she in? _____
 No
- Has anyone from your family or a guardian ever come to your school to participate in an activity or a school trip with you? Yes, often
 Yes, sometimes
 No

Knowledge of Nutrition

I. Knowledge of nutritive value of food
(One point per correct response; Maximum score 10, Minimum score 0)

- 1) Food can contain fibre, and some foods have more fibre than others. Which food has the most fibre? cheese white bread
 peanut butter olive oil
 cabbage I don't know
- 2) Food can contain vitamin C, and some foods have more vitamin C than others. Which food has the most vitamin C? milk white bread
 peanut butter squash
 strawberries I don't know
- 3) Food can contain calcium, and some foods have more calcium than others. Which food has the most calcium? butter white bread
 squash yogurt
 cabbage I don't know
- 4) Which food group contains the highest amount of vitamins A, B and C? cereals meat and substitutes
 fruits and vegetables other foods
 milk products I don't know
- 5) Is it true that some fats are better for your health than others? Yes It depends
 No I don't know
- 6) Can you name a fat that would be good for your health? (e.g., butter, margarine, Crisco shortening, olive oil) _____
- 7) Does food that you buy quickly, ready prepared (i.e., 'fast food'), necessarily have to be bad for your health? Yes It depends
 No I don't know
- 8-10) Foods that are known to be bad for your health, can contain too much...
 i) _____
 ii) _____
 iii) _____
 I don't know

II. Knowledge of Canadian Food Guide
(One point per correct response; Maximum score 10, Minimum score 0)

For each food item, name the food group to which it belongs:

- i. Pita bread cereals
- ii. Chick peas meat and substitutes
- iii. Melon fruits and vegetables
- iv. Cabbage other foods
- v. Tofu milk products
- vi. Zucchini I don't know
- vii. Donut
- viii. Egg
- ix. Rice
- x. Cheese

III. Knowledge of locally grown produce
(One point per correct response; Maximum score 10, Minimum score 0)

- 1) Circle all of the food items that are cultivated in Quebec.
- | | |
|-------------|----------------|
| i. cabbage | vi. soy bean |
| ii. apple | vii. corn |
| iii. carrot | viii. orange |
| iv. potato | ix. rice |
| v. banana | x. cauliflower |

IV. Knowledge of cooking procedures

(One point per correct response; Maximum score 8, Minimum score 0)

- Before you begin to cook, it is important to...
1. _____ and _____
 2. _____ and _____
 3. _____
- I don't know
- When you cook, it is important to...
1. _____ and _____
 2. _____ and _____
 3. _____
- I don't know
- After finishing to cook, it is important to...
1. _____ and _____
 2. _____
- I don't know

V. Knowledge of food transformation process

(Two out of three responses correct = 1; less than two out of three responses correct = 0)

- 1) What makes some types of honey darker than others? the type of flower
 the type of bees
 the time of the year
 I don't know
- 2) Tofu is made from what kind of food? soy beans
 lentils
 green peas
 red kidney beans
 I don't know
- 3) What does the word "pasteurized" mean? boil a liquid to improve its taste
 bring animals to the field so they can eat
 boil a liquid in order to kill the bacteria
 I don't know

VI. Knowledge of international cuisine

(Two out of four responses correct = 1; less than two out of four responses correct = 0)

- 1) Traditionally in South-East Asia, the people eat...? red meat and potatoes
 pasta, tomato sauce and cheese
 rice, fish, vegetables and fruit
 I don't know
- 2) What is a curry? a red spice
 a brown spice
 a mix of spices
 a type of African food
 I don't know
- 3) What do you need to do in order to prepare a rice paper for a spring roll? boil it
 soak it in warm water
 cut it in little pieces
 I don't know
- 4) In nature, in what form do we find cilantro, basil, and parsley? flower
 root
 leaf
 I don't know

Attitude toward healthy eating

1. Attitude scale measuring belief that knowing how to cook is associated with healthy eating (4 items)

- 1) When I am an adult, it will be important for me to know how to cook so that I can eat healthy completely agree
 more or less agree
- 2) To eat healthy, you have to know how to cook more or less disagree
 completely disagree
- 3) People need to know how to cook in order to eat healthy
- 4) It is important to know how to cook to eat healthy
- 5) People who do not learn how to cook cannot eat healthy

...continues

Appendix A, continued
Nutrition Questionnaire

II. Liking or being open to tasting less common foods
(One point with; Yes, I have eaten this food OR No but Yes, I would like to; Maximum score 10, Minimum score 0)

Have you ever eaten the following foods:

- i. Cabbage yes Like it? Yes No
- ii. Bok-choy cabbage no
- iii. Squash Like to try it? Yes No
- iv. Cantaloupe I don't think so
- v. Goat cheese Like to try it? Yes No
- vi. Chick peas
- vii. Soy beans
- viii. Tofu
- ix. Whole wheat pita bread
- x. Lentils

III. Perceived classmates' attitude toward less common or strange foods
(Responding (1) or (2) = 1 for positive reaction; Responding (3) or (4) or (5) = 0 for negative reaction)

- 1) Imagine that one day you brought something to school that nobody in your class had ever seen before. What do you think would be the reaction of your classmates?
 - (1) they wouldn't say anything
 - (2) they would politely ask you what it was
 - (3) they would impolitely ask you what it was
 - (4) they might laugh at you
 - (5) they might say "yuck" or "disgusting"
- 2) Imagine now that you were to bring a food that had a strange look. What do you think would be the reaction of your classmates?
- 3) Imagine now that you were to bring a food that had a strange smell. What do you think would be the reaction of your classmates?

Experience with food Capacity with food preparation

I. Experience with less common foods
(Responding Yes = 1; Responding No or I don't think so = 0)

- Have you ever eaten the following foods:
- i. Cabbage Yes No I don't think so
 - ii. Bok-choy cabbage
 - iii. Squash
 - iv. Cantaloupe
 - v. Goat cheese
 - vi. Chick peas
 - vii. Soy beans
 - viii. Tofu
 - ix. Whole wheat pita bread
 - x. Lentils

II. Experience cooking at home (7 items)
(Responding 'Yes, often' = 3; Responding 'Yes, from time to time' = 2; Responding 'No' = 1)

- 1) At home, have you ever prepared something for yourself to eat? Yes, often Yes, from time to time No
- 2) At home, have you ever prepared something for somebody else to eat, such as your parents, your friends, your family?
- 3) At home, have you ever participated in the preparation of a meal?
- 4) At home, have you ever participated in the preparation of your own breakfast?
- 5) At home, have you ever participated in the preparation of your own lunch?
- 6) At home, have you ever participated in the preparation of your own dinner?
- 7) At home, have you ever participated in the preparation of something following a recipe?

III. Perceived capacity to cook (7 items)
(Mean of responses falling below the sample median = 0; Mean of responses falling above the sample median = 1)

- 1) Do you feel capable to follow a recipe from start to finish? very capable more or less capable not very capable not at all capable
- 2) Do you feel capable to cut tomatoes into cubes?
- 3) Do you feel capable to cut an onion in slices?
- 4) Do you feel capable to measure a cup of flour?
- 5) Do you feel capable to measure something with a tablespoon?
- 6) Do you feel capable to choose the best cooking utensil to grate a carrot?
- 7) Do you feel capable to choose the best cooking utensil to peel an apple?

CONCLUSIONS

The PC-PR nutrition intervention suggests some moderate effects on cooking and nutritional knowledge; culinary experience; capacity to cook; attitude toward cooking, healthy eating, tasting and enjoying foods from which children typically abstain. Results also suggest some effect on parental participation with school activities. Given that parental participation was found to offer a relative advantage to participants, the potential benefits of a program encouraging parental participation, such as PC-PR, is noteworthy. Although design limitations must be considered when interpreting the results, this study has identified potential program mechanisms through which future evaluations of nutrition interventions similar to PC-PR could take place.

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RÉSUMÉ

Objectifs : Cette étude vise à produire une évaluation intermédiaire des effets de l'intervention nutritionnelle « Petits cuisinots – parents en réseaux »; elle est fondée sur un ensemble de mesures des effets du programme, dont 1) les connaissances, les attitudes, les habiletés et l'expérience à l'égard de la nutrition, de l'alimentation et de l'art culinaire chez les enfants et 2) la participation parentale et/ou familiale à l'école.

Participants : Un total de 388 élèves de 5^e année (participants) et de 6^e année (non-participants).

Lieu : L'évaluation du programme nutritionnel a eu lieu dans les sept écoles primaires participantes. Les écoles étaient toutes situées dans des quartiers défavorisés de Montréal.

Intervention : Le volet « Petits cuisinots » est un atelier nutritionnel animé par des diététiciennes communautaires. Chacun des huit ateliers annuels présente un aliment particulier et un thème nutritionnel avec une recette pour faire l'expérience de cuisiner et de déguster ensemble. Les enseignantes participent à l'atelier et assurent la gestion de la classe et le soutien au programme. Le volet « Parents en réseaux » invite les parents à assister aux ateliers nutritionnels et offre des activités parentales et familiales additionnelles liées aux thèmes des ateliers nutritionnels (p. ex., repas collectifs ou visites chez des producteurs agricoles locaux).

Résultats : Le programme a eu certains effets sur la connaissance de la valeur nutritive, de la production et de la transformation des aliments; sur l'attitude et l'expérience quant au fait de goûter des aliments nouveaux ou moins connus; et sur la perception de la capacité à cuisiner. Les familles dont les enfants ont participé au programme ont eu un niveau de participation plus élevé aux activités scolaires que les familles des élèves qui n'ont pas participé au programme.

Conclusions : Notre évaluation montre certains effets potentiels du programme sur diverses mesures intermédiaires des effets et met ainsi en évidence une intervention prometteuse en vue de promouvoir les capacités nutritionnelles.

Mots clés : intervention nutritionnelle; évaluation des effets; santé scolaire; enfants et jeunes



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