COMMUNITY-BASED COMMUNICATION STRATEGIES TO PROMOTE INFANT IRON NUTRITION IN NORTHERN CANADA

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ABSTRACT

Objectives. To evaluate innovative communication strategies promoting iron nutrition for infants at risk for iron deficiency anemia (IDA) in a northern Aboriginal community.
Study Design. A prospective process evaluation.
Methods. A social marketing approach was used in the development, implementation and evaluation of the communication strategies. A post-intervention questionnaire was administered to a sample (n = 45) to evaluate reach and exposure of the strategies, and sales of iron-rich infant foods were examined pre- and post-intervention.
Results. Multiple communication channels were associated with an increased awareness of IDA and an increased self-reported use of iron-rich infant food. Radio was the most successful channel for reach and exposure of messages. Iron-rich infant food sales increased from pre- to post-intervention ($p < 0.05$). Breadth of exposure to cooking activity was more limited; however, participants reported increased confidence in preparing homemade baby food.
Conclusions. Communication strategies are a promising strategy for infant IDA prevention where appropriate food is available.
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Keywords: aboriginal health, infant feeding, iron deficiency anemia, primary prevention

INTRODUCTION

The prevalence of iron deficiency anemia (IDA) among infants from industrialized countries has declined in recent years. Rates of 2-4 % compared to 6-8% IDA, nearly twenty years ago, have been reported (1-4). Improvements in iron fortification of infant food, feeding practices, as well as programs that provide these foods (e.g., Special Supplemental Food Program for Women, Infants and children–WIC) have been attributed to the decline (1, 5).

Despite the reported achievements, IDA continues to be a major public health issue in certain minority subgroups—with prevalence rates that approach those reported from developing countries (6, 7). Canadian Aboriginal infants and young children are at particular risk, with reported IDA prevalence rates of 11-35% (8-10). This rate is much higher than among non-Aboriginal Canadian children, who have documented rates of 3-7% (4, 11, 12).

These elevated prevalence rates are an indicator that IDA should be considered of high public health significance among the affected population groups (13). Moreover, increasing evidence from the literature has shown a consistent association between IDA and psychomotor, cognitive delay, as well as behavioural disturbances in infants and children (14-16).

There have been few efforts to research and document effective prevention strategies for early childhood IDA. Three main approaches include iron supplementation, iron-fortification of infant food, and food-based approaches to promote iron-containing complementary food (e.g., red meat, fish and poultry), or to increase iron bioavailability in the diet (17). No single approach will be successful for all populations and in all situations. However, food-based approaches and food fortification are recommended to address iron deficiency in populations where there is mild and clustered deficiency, as is the case in industrialized countries (13).

Communication strategies can effectively promote both fortified and naturally occurring high-iron infant food. These strategies, such as those that are part of a social marketing approach, aim to generate consumer demand for improved micronutrient status and to remove barriers to adopting optimal infant feeding practices (13, 18). Communication strategies have been used in developing countries to promote food-based prevention approaches for vitamin A deficiency (19, 20) and to improve complementary infant feeding practices (21, 22). Food-based prevention approaches for iron deficiency have focused primarily on promoting food preparation techniques to improve iron bioavailability, since access to, and consumption of, highly bioavailable iron food, such as meat, is more difficult in developing countries, due to economic, religious, or cultural factors (23). However, among communities where highly bioavailable, iron-rich food sources exist, communication strategies offer a promising approach for promoting these foods in high-risk groups (24).

To our knowledge, there are no documented studies of communication strategies to prevent IDA in young children from at-risk communities within industrialized countries. Only a few studies have used individual nutrition counseling to bring about dietary behavioural change, successfully raising immediate awareness of IDA, but having little impact on feeding practices (25-27). Researchers have

suggested that a more successful education approach would be to use the local media to target at-risk groups in the community (26).

Targeting at-risk populations with the promotion and provision of iron-fortified infant formula and food has been the cornerstone of IDA prevention in industrialized countries (10, 28, 29). While this approach presents a simple, 'attractive' option by ensuring a good source of iron for infants, it fails to address two important issues. The first issue pertains to breastfeeding promotion and protection. Several studies provide strong evidence of the benefits of breastfeeding for infants (30-32). Breast milk is an excellent source of bioavailable iron and provides exclusively breastfed healthy infants with an adequate iron intake for the first 6 months of life, after which iron-rich complementary food is needed (33). Breastfeeding is part of a strong cultural tradition among Aboriginal communities in Canada, thus promoting iron-fortified formula for IDA prevention is inappropriate.

The second issue pertains to sustainability. Prevention efforts that focus on iron-fortified formula, rather than a food-based approach to promote iron-rich complementary food, will fail to provide an infant with longer-term protection. From 7 months of age, an infant requires adequate exposure to a diverse diet, including different textures (e.g., meat) and flavors, to ensure a successful transition to family food. Infants dependent on iron-fortified formula for their iron source will be at risk for IDA when switched from formula to cow's milk. This is particularly troublesome, as a study from the United States has indicated that high prevalence rates of IDA persist among toddlers (34).

In many Aboriginal communities, breastfeeding is common and the traditional diet includes excellent sources of iron-rich wild meats, many of which were, and continue to be, part of infant feeding practice. Within these communities, communication strategies have the potential to successfully promote these available sources of iron. This paper examines the development and implementation of a community food-based approach to promote iron-rich complementary feeding and support breastfeeding. The results of the needs assessment and process evaluation of the different implemented strategies are presented. The impact evaluation, including changes in dietary iron intake of infants, is presented in a separate paper (35).

MATERIALS AND METHODS

Background

In the past decade, the Cree regional health board has recognized IDA as a significant infant health issue. Screening of all 9-month old infants in the region was instituted in 1995, and it was found that 32% of infants had low haemoglobin values (<110 g L^{-1}); 11% of these showed evidence of microcytic anemia (8). Low iron intakes from complementary food were reported to be a contributing factor (36).

Based on these findings, the 'infant feeding project' began in 1999, with the aim of implementing primary prevention strategies in a pilot community. The project involved a partnership between McGill researchers and an existing federally funded community program, i.e. the Canada Prenatal Nutrition Program (CPNP). All Aboriginal communities in Canada are eligible for funding through this program,

which aims to improve the health and birth outcome of at-risk pregnant women and infants, through nutrition counselling and support (37). To enhance sustainability, a community person was hired and trained to assist in the project.

A research agreement was developed and signed by McGill University, the regional health board's research committee, and the community band council. This agreement identified the obligations and ethical conduct for each party, in all aspects of the study. Separate ethical approval was also obtained from the Ethical Review Committee at McGill University. All potential participants involved in the data collection were informed of the study objectives, and written consent was obtained prior to interviews.

Project setting

The project took place in the largest Cree community, located on the eastern coast of the James Bay in northern Quebec, accessible year round by road and air. An estimated 3100 people live in this community, with approximately 95 infants born each year (38). There are high rates of breastfeeding, with 87% of mothers initiating exclusive breastfeeding, 30% of mothers predominantly breastfeeding at 9 months, and another 15% giving both breast milk and complementary foods at 9 months (Unpublished data, Willows N.). Common Cree traditional food includes goose, moose, caribou and fish. Historically, infant feeding practices included the provision of Cree traditional meats, such as fish and broth, fried fish guts and flour, and premasticated meats.

Two basic underlying concepts of current cognitive–behavioural theories/models guided the project. First, knowledge is a mediating factor for behaviour and second, knowledge is necessary, but insufficient to produce behavioural change. An individual's beliefs, level of motivation and skills, as well as the environment in which they live, are important contributing factors to their ability to change behaviour (39).

A social marketing approach directed the development, implementation and evaluation of the communication strategies. This approach involves a needs assessment to identify the target audience, their current behaviour and underlying beliefs, the environmental factors that may prevent or facilitate their behavioural change, as well as the influential communication channels for message dissemination. Next, objectives are set and key messages and materials are developed with input and review from the target audience. Finally, these materials and messages are implemented and evaluated for their effectiveness. The evaluation provides feedback for program improvements (39, 40). The strength of this approach is that it is "consumer-driven"; that is, program design and implementation are based on the expressed preferences and values of the target audience. In addition, significant consideration is given to the potential effect of the environment around the behavioural decision. Examination of the target audience's environment ensures that tailored messages reflect the practical realities of behavioural change (39, 40).

Process

Individual and group interviews, as well as direct observation, were used to collect data for the needs assessment (Table I). Multiple methods provided different perspectives from community members, allowed for a closer understanding of the issue of IDA, and ensured that accurate conclusions were drawn from

the data. This approach to data collection, termed "triangulation", is commonly used to strengthen data obtained from qualitative inquiries. Data collected from one source, or method, are confirmed by data collected by other means (41).

Results of the needs assessment revealed that IDA is a recently recognized infant health issue in Cree communities. A community elder stated that IDA was uncommon and that children did not experience the same level of infant illness as today. She shared that *"we were never told our babies had weak blood whenever we took them in (for a check-up) and they were hardly ever sick."* Community health nurses perceived a low awareness of IDA among parents in the community. Data collected through interviews with mothers confirmed these findings. A higher number of mothers reported that they were *'unsure'* what IDA was, what the symptoms were, and what the consequences might be if left untreated. Causes of IDA were also not well known among mothers interviewed; 30% reported that a lack of iron-rich food could cause IDA.

Both key-informants and interviewed mothers reported that jarred infant food was offered more frequently than homemade food. Observations conducted at the grocery stores indicated that a variety of jarred infant food was available, but the availability of high-iron jarred meat and broth was limited. Results

Table I. Qualitative and quantitative methods for the needs assessment.

Methods	Instrument	Participants	Data collected
Individual interviews	Semi-structured interview guide	Key-informants (n = 5): Elder, community health representative, nutritionist, band council member, mother/grandmother	• Common infant food • Traditional Cree infant food • Breastfeeding practice • Community IDA awareness
	Health case scenario*	Mothers with infants aged 3-11 months (n = 55)	• Knowledge and understanding of infant IDA • Infant feeding information sources†
	Self-administered questionnaire	Community health nurses (n = 5)	• Community awareness of IDA • Breastfeeding practice
Group interviews	Semi-structured interview guide	Four group interviews with mothers / grandmothers (n = 23)	• Perceived differences between jarred and homemade infant food • Breastfeeding practice • Importance and awareness of IDA
Direct observation	Record of food items	Grocery stores (n = 2) Convenience store (n = 1)	• Available infant food list

*The instrument consisted of a scenario depicting a mother whose infant was recently diagnosed with IDA. Each mother was read the scenario and told to imagine that the woman in the scenario was asking her for information and advice. Responses to 6 open-ended questions were recorded.

†As part of the demographic data collected, mothers were asked to identify key sources of infant information.

from key-informant and group interviews suggested that mothers rely on jarred infant food, because they have insufficient cooking experience and that mothers perceive jarred food as more convenient. However, some of the mothers interviewed expressed concern about the quality of jarred infant food.

Mothers described traditional food as more 'satisfying for baby', 'more appetizing', and that babies who eat traditional food *'look healthy'*. However, key-informants indicated that mostly older infants (i.e., 10 months and older) were offered traditional food. This differed from the earlier age of introduction to traditional food described by the elder. Suggested barriers to traditional infant food use were the mothers' belief that their infant should not have traditional food before one year of age, their fear that the baby may choke, and a limited access to traditional food, because some families do not have members who hunt. Although breastfeeding was common, some interviewees expressed concern

Table II. Description of intervention activities.

Activity or materials	Description	Target audience	Frequency	Distribution
Cooking activity*	Hands-on activity to enhance skills and self-efficacy with preparing homemade infant food.	Parents, extended family	Two 2-hour sessions held once a month	School kitchen facility Delivered by community nutrition collaborator and/or nutritionist
Pamphlets	Pamphlet #1 – Basic food preparation, benefits of homemade infant food, food safety, practical tips and recipe. Pamphlet #2 – Definition of IDA, iron-rich food sources, pureed traditional Cree meat recipes.	Parents, community members	Supplied on continuous basis	Cooking activity, community health clinic Grocery store point-of-purchase displays
Posters	Images and key messages developed by community members and local artist.	Parents, community members	Seven different posters	Community health clinic, grocery stores, day-care, arena
Radio dialogues	Recorded by local mothers in Cree and English, about the following topics: • IDA and infancy • IDA and infancy, promotion of Cree traditional meat • Breastfeeding promotion •Homemade baby food promotion	Parents, community members	Four dialogues played 4 times a week, at various times during the day	Free airtime provided by local radio station
Grocery store display†	Point-of-purchase display that used shelf stickers and advertisements to increase awareness of IDA, and encouraged the use and identification of iron-rich infant food.	Parents, extended family	One display per store	Infant food section of two grocery stores
Newsletter articles	Described project's development, assessment and implementation	Parents, community members	Seven articles	Community newsletter

*Adapted from workshop manual (42).
†A new iron-fortified infant cereal and biscuit were introduced in one of the grocery stores, at the request of the project team.

that the practice may be declining, particularly among younger mothers. Identified channels for communicating infant feeding information included family members, print materials, health professionals and radio/television.

Needs assessment results were provided to the community through radio shows, a community display and an information booklet sent to all mothers who participated in the individual interviews. A community radio phone-in show, conducted in Cree, provided feedback and confirmed that the proposed activities were of interest. Four project objectives were set: 1) to increase awareness of IDA, 2) to promote optimal iron-rich complementary food, including traditional meat, using appropriate communication strategies and channels, 3) to provide an opportunity to enhance cooking skills through making homemade baby food, and 4) to support breastfeeding. The primary target audience comprised parents of young infants, with the secondary target audience including the parents' extended families and community members at large. Full implementation of activities occurred for a 6-month period from September 2002 to February 2003.

Table II summarizes the project activities. The development process began with preparation of key messages and images to be used to promote iron-rich infant food and support breastfeeding in the community. Two workshops were conducted with interested community members (n=22), predominantly mothers and grandmothers. During these workshops, participants brainstormed ideas for messages, and provided sketches of images to accompany these messages. Key-informants assisted in the final selection of the messages and sketches. A local artist prepared appropriate artwork for the posters from the image ideas. Ten key messages were chosen in accordance with the project objectives, and were disseminated on posters, pamphlets, and/or on the radio.

In addition to mass media techniques, an interpersonal communication method conveyed information to the target audience about making homemade baby food. Participant recruitment occurred through various methods, including a community display, advertisement posters, radio announcements, and direct phoning of mothers of young infants identified through community health records. The cooking activity was first pilot tested with a group of mothers from the community, and changes were incorporated based on their evaluations. Participants learned about basic food preparation, food safety, the introduction of complementary food and iron nutrition. They also prepared pureed vegetables and fruits as well as traditional meats (e.g., moose, caribou and goose). During each cooking activity, participants were encouraged to compare jarred and homemade infant food for differences in texture, flavour and appearance.

A sample of the primary target audience was recruited by telephone from a list obtained from the community health clinic. This list identified mothers with infants aged 3-11 months and who were living in the community during the intervention period. To facilitate recruitment, mothers were given the option of an in-person, or telephone interview. The interview consisted of a questionnaire designed to examine the extent to which respondents received the communication strategies, as well as the extent to which participants viewed, heard, or otherwise used the materials. To decrease respondent burden, questions referred to a selection of key messages, posters and radio dialogues. Cooking activity participants also completed an evaluation at the end of the activity. A computer print-

out of monthly sales for iron-rich food items, promoted in the display, were available from one of the community grocery stores. These data were collected before, during and after the intervention period. Key-informant interviews with those responsible for the project implementation provided further qualitative evaluation data. Quantitative questionnaire data were compiled and analyzed using descriptive statistics, and infant sales data were analyzed using Student's t-test with Statistical Packages for the Social Sciences (SPSS), version 10.0 (SPSS, Inc., Chicago IL). Qualitative data were recorded and their content was analyzed for themes, or reported as recorded.

RESULTS

Of 70 mothers contacted, 45 completed the evaluation questionnaire (response rate of 64%); 23 questionnaires were administered in-person, and 22 were administered by tele-

Table III. Reach and exposure of selected communication strategies.

Activity or materials	Percent aware	Percent participating in activity, viewing, hearing or using materials*
Key message #1: "Iron builds strong blood, strong minds and strong babies."	NA†	94% recalled seeing or hearing message
Key message #2: "Know what your baby is eating; make your own baby food."	NA†	94% recalled seeing or hearing message
Key message #3: "Eating wild meat gives you energy and health."	NA†	94% recalled seeing or hearing message
Key message #4: "Breastfeeding... you carry the nutrition for your baby."	NA†	88% recalled seeing or hearing message
Key message #5: "Traditional food links our babies to our past and gives them a healthy future."	NA†	56% recalled seeing or hearing message
Radio dialogue	100%	100% recalled hearing dialogue
Grocery store display	73%	18% learned something new 45% tried new baby food
Cooking activity	91%	38% attended activity
Pamphlet #1: "The how to of making baby food"	75%	92% took pamphlet
Pamphlet #2: "Iron...helps your baby to have strong blood and to stay healthy"	88%	93% took pamphlet
Posters #1: Iron promotion	NA†	86% viewed poster
Poster #2: Traditional Cree food promotion	NA†	79% viewed poster
Newsletter article	NA†	64% read newsletter article

*Proportion of those who were aware of activity or material.
†NA = not applicable.

phone. The mean age of respondents was 25 ± 5 years (range 18-38 years). The majority of mothers (70%) were not employed outside the home. The mean number of years of education was 9 ± 2 years (range 5-12 years), and the mean number of children was 3 ± 1 child.

A high proportion of respondents were able to recall the key messages, and results suggested that the radio was a more effective communication channel than posters and pamphlets (Table III). Only 56% of respondents could recall a message disseminated exclusively on a poster and none of them could correctly identify where they had seen or heard the message. However, when asked about a message disseminated exclusively by radio, 94% were able to recall the message, and 80% correctly identified that they had heard it on the radio.

The radio was also effective for disseminating the dialogues. Forty percent of respondents reported having learned 'a lot' from listening to the dialogue. This finding was supported by qualitative comments made by respondents. For example, one mother stated *"I enjoyed the radio dialogues and promotion; acting out a show makes me listen more closely to it. It's more enjoyable to hear people doing drama"*, and another shared, *"I learned about anemia by hearing it on the radio"*. The intended frequency for playing the radio dialogues (i.e., at least four times per week) was successfully implemented and received, as results showed 73% of respondents reported hearing the dialogue at least three times.

The evaluation of the grocery store display showed that this was a particularly effective channel to increase awareness of iron-rich food sources and to encourage their use. For example, one mother shared that she learned about *"iron-fortified cookies and cereal. I wouldn't have known there was iron in these foods if I didn't see these displays at the store"*. Moreover, this increased awareness appears to have led to self-reported changes in food use. Almost half of the respondents reported trying a new food with their infant because of seeing the display and reading the accompanying print material, including traditional meats and iron-fortified cereals. Reported sales before, during and shortly after the intervention period supported these findings (Figure 1). There were statistically significant increases in the mean

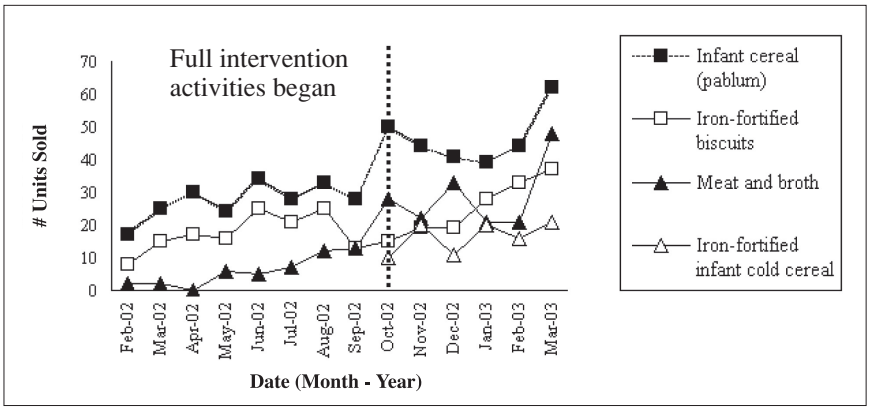

Figure 1. Sales of iron-fortified infant food promoted in grocery store point-of-purchase display. Data were missing for one type of iron-fortified infant biscuit. The grocery store was unable to obtain new stocks of iron-fortified infant cold cereal during December.

sales of iron-fortified infant cold cereal, infant cereal (pablum), jarred meat and broth, and iron-fortified biscuits before (February-May 2002) and at the end (December 2002-March 2003) of the intervention period ($p < 0.05$).

Participation in the cooking activity was modest, despite a reported high awareness among respondents. The intended frequency of this activity (i.e., monthly) was lower, as the project team was unable to offer sessions in December (due to the holiday season) and in January (due to a community-wide gastrointestinal flu). The activity reached 34 parents (30 mothers and 4 fathers), with an average of 5 participants per class (range 2-9). There was a slight tendency for younger mothers not to attend the activity, as only 22% of respondents aged 20 years or younger reported attending the activity, compared to 42% of respondents aged 21 years or older. Those attending reported an increased level of confidence about feeding infants and making homemade infant food; 75% agreed that they felt more confident knowing why it is important to start complementary food. and 86% reported more confidence in making their own infant food. The majority of participants indicated their intent to make homemade infant food *'most of the time'* or *'always'*: 57% and 30%, respectively. Positive aspects of the cooking activity reported by participants are summarized in four themes: 1) taste-testing: opportunity to taste differences between homemade and jarred infant food 2) socializing: opportunity to share with other parents 3) hands-on activity: opportunity to use equipment and make food from scratch 4) specific learning: learned about ingredients in infant food, as well as the benefits and preparation of traditional meats. Negative comments included that the session was not long enough and that, for some sessions, there were too few participants.

Two main barriers to participation in the cooking activity, identified from the questionnaire, were the lack of babysitting and time. Members of the project team implementing the activity suggested that other barriers were competing community events, poor weather, and traditional activities, such as hunting, which meant that families left the community to live at their bush camps.

DISCUSSION

This study represents the first documented use of community-based communication strategies to promote a food-based approach for IDA prevention in infants from industrialized countries. Evidence from developing countries has shown these strategies to be potentially promising, particularly in communities where sources of micronutrient-rich food are available and accessible (19-22). In industrialized countries, IDA remains a serious infant health issue for certain subgroups of the population. Provision and promotion of iron-fortified formula and infant cereal continues to be the basis of primary prevention. Yet, in many at-risk populations, such as infants from Aboriginal communities, there is good access to high-iron infant food, such as traditional meats. Furthermore, breastfeeding may be threatened by the promotion of iron-fortified formula, as has been suggested by a recent evaluation of the WIC program in the United States (43).

Several unique features of the project may have contributed to its successful implementation. The use of a social marketing approach ensured that communication strategies focused

on the perceptions and needs of the target audience. In particular, the breadth of information obtained from various community members through the needs assessment was critical to the formulation of appropriate objectives. The development of relevant messages by members of the target audience, using colloquial vocabulary, enhanced the acceptance of the information. To ensure cultural acceptability, members of the target audience and a local artist created the poster images. Identified barriers to behaviour change, such as the mothers' belief not to use Cree traditional meat with younger infants, were challenged through the development of dialogues and messages that promoted the benefits of feeding infants this excellent source of iron from an earlier age. The use of local expertise and resources, including the key partnership between an existing community program and the training of a local community person, contributed to the success and sustainability of this project.

The project yielded considerable knowledge concerning successful communication channels for message dissemination. A key strength was the use of multiple channels to increase awareness of messages and to bring about positive self-reported behavioural change. Previous studies have shown that multiple channels of communication, such as interpersonal and mass media approaches, are effective in behavioural change (22,44). The radio messages, in particular, attained a high level of diffusion in the community, increasing awareness of key messages and enhancing acceptability. It was important that they were disseminated in the Cree language.

Another encouraging channel of communication was the grocery store point-of-purchase display. The evaluation results revealed a positive self-reported behavioural change from some mothers; this was further verified by increased sales of iron-rich infant food promoted in the display. The positive self-reported food choices demonstrated in this project are similar to results obtained in another community study that used a point-of-purchase display (45). Community members rely on their grocery stores for most of their shopping needs. One factor that may impact food sales data is "bulk" shopping, which can occur in the community stores prior to people leaving for hunting, or to spend time in the bush. "Bulk" shopping can also happen away from the community, when members travel to southern communities. However, women with newborn infants are less likely to be living in the bush for extended periods. Furthermore, expense and time for travel to southern communities can be prohibitive for some families. The birth rate was stable over the period reported, indicating that sales did not reflect the number of infants in the community (38).

Grocery store displays may be effective because they can influence consumers about healthier food choices in the environment where the choice occurs. However, the effectiveness of the displays may not persist once the information is removed. This suggests that consumers are more influenced by indicators from their environment (i.e., at the grocery store), rather than by relying on memory when making a food choice (46). Thus, nutritional information provided through this channel should be a continuing effort if it is to ensure longer-term behavioural changes.

The use of an interpersonal channel of communication appeared promising. Partic-

ipants in the cooking activity reported increased confidence in preparing homemade infant food and their intent to continue with this new behaviour. However, the breadth of exposure to this activity was limited, especially among mothers less than 20 years of age. The low participation appeared to be due to barriers such as lack of time and babysitting, as opposed to lack of recruitment effort. Target audience segmentation by mother's age prior to our needs assessment may have revealed different needs and perceptions among younger mothers, and thus led to a different recruitment, or program, approach for this subgroup. This limitation is important to note, as the reported teenage pregnancy rate among Aboriginal youth is four times higher than the national (Canadian) rate. Furthermore, the pregnancy rate in younger (less than 15 years of age) First Nation adolescent girls living on reserves is 11 per 1000 live births, compared to 0.6 per 1000 live births in the general Canadian population (47).

Conclusions

Studies are warranted to explore the effectiveness of IDA primary prevention strategies that will promote an optimal intake of high-iron complementary food and encourage breastfeeding. Communication strategies to promote a food-based approach in preventing IDA present a promising and novel approach. The current study has shown that this process can be successfully implemented in a community with access to iron-rich infant food. However, further studies are required to verify that this approach is feasible in other communities with infants at risk of IDA.

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