

Stakeholder Engagement to Inform Strategies for Improving School-Based Breastfeeding Education in Manitoba

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Executive Summary

Most Canadian mothers intend to breastfeed, yet fewer than 30% achieve the international recommendation of exclusive breastfeeding for 6 months [1]. In part, this happens because new mothers often feel stigmatized when breastfeeding in public, or unsupported by the people around them. Teaching children about breastfeeding at school could help normalize breastfeeding and foster societal support for nursing mothers. We explored this topic with key local, national and international stakeholders in the healthcare and education sectors.

- First, we scanned the current K-12 Manitoba school curriculum, and found that breastfeeding and lactation are not clearly addressed.
- Next, we identified breastfeeding education toolkits in other jurisdictions and spoke with their developers, and found that support from school administrators was essential to their uptake by teachers and students. We also identified similar initiatives delivered outside of school curriculums.
- Finally, we conducted interviews, focus groups and online surveys with Manitoba educators and health care providers to gather input and opinions on educating students about breastfeeding. Most were supportive, although a few perceived that lack of time and resources, potential discomfort from students and parental concerns as barriers to educating students about breastfeeding.

Based on the results of this project, we recommend the following next steps:

- Provide educators with updated, accessible information and educational resources about breastfeeding
- Form a working group with educators to co-develop and pilot test materials in K-12 classrooms
- Partner with local organizations that are currently engaged in schools to incorporate breastfeeding information in their programs (for example: Nūton, Roots of Empathy)

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Breastfeeding: Importance & Challenges

Breastfeeding has many established benefits for maternal and child health[2]. These include reducing the risk of asthma and obesity in children who are breastfed, and reducing the risk of breast cancer and cardiovascular disease in mothers who breastfeed [2]. Breastfeeding also benefits society at large by reducing the costs associated with these conditions, both directly (e.g. medications and hospitalizations) and indirectly (e.g. lost wages and productivity from parents caring for an ill child) [3]. The World Health Organization (WHO) recommends exclusive breastfeeding for the first 6 months of life [4], but only 26% of Canadian infants achieve this milestone [1]. Around the world, breastfeeding rates have improved over recent years through innovative campaigns and interventions [5][6], but still fall far short of the WHO recommendation.

Mothers who decide not to breastfeed or stop breastfeeding earlier than planned often attribute their decision to social stigma, embarrassment, or lack of support from family members and their workplace environment [7]. Rather than expecting individual mothers to be solely responsible for breastfeeding, it is important for family members, health care professionals, workplaces, and communities to collectively support mothers who choose to breastfeed [1][9]. Society can help support mothers by improving workplace maternal leave policies, offering social support networks to encourage mothers who want to breastfeed, providing access to health care professionals who specialize in supporting breastfeeding mothers and infants (e.g. lactation consultations, midwives, public health nurses), and increasing public awareness about the importance of breastfeeding [8]. This societal support for breastfeeding is relatively weak in Canada because the majority of breastfeeding education and promotion is targeted towards pregnant women and new mothers, with few resources directed to society at large.

Learning About Breastfeeding at School

One way to improve public support for breastfeeding is through school-based education programs. Schools play an important role in health promotion because lifestyle habits are shaped during childhood [9]. School-based health education can therefore help to create a foundation of lifelong healthy behaviors; this has been demonstrated for dental hygiene [10], injury prevention [11], and nutrition [12]. The same concept likely applies to breastfeeding, since parents formulate opinions about infant feeding long before they have children [13]. Children also act as messengers by sharing positive health practices with their families and peers, benefiting their community and society at large [14]. Educating young students about breastfeeding provides the opportunity to address questions and misconceptions at an early age and foster a positive attitude towards breastfeeding as a normal and healthy way to feed infants.

A systematic review of breastfeeding education programs in schools identified 48 studies on this topic and found that children generally lack breastfeeding knowledge and may hold negative views on breastfeeding, although the majority of children were receptive and interested in knowing more about breastfeeding. The review also found that most teachers are supportive in incorporating breastfeeding knowledge into the classroom, but have limited breastfeeding knowledge and do not have enough time allocated for this topic [15]. One of the included studies was performed in Manitoba by Martens et al., who evaluated a school intervention on breastfeeding education in the Sagkeeng First Nation. They found an increase in breastfeeding beliefs and breastfeeding attitudes from female students after the learning session, which covered breastfeeding topics related to health, cost, and normalization [16].

PROJECT OBJECTIVES: To identify and engage appropriate stakeholders and explore potential ways to integrate information about breastfeeding in the Manitoba school curriculum.

Methods

1. A scan of the existing **Manitoba school curriculum** was conducted to identify areas where breastfeeding is already addressed or could potentially be integrated.
2. A search was conducted for **breastfeeding education resources and initiatives outside of Manitoba** and their creators were contacted to discuss development and uptake.
3. **Education stakeholders** (school administrators and curriculum consultants) at the provincial and federal level were interviewed to discuss curriculum development, preferences, and anticipated barriers related to school-based breastfeeding education.
4. Information booths were held at the **Manitoba Teachers Society Professional Development (PD) Day**. PD Day is held every October, hosted by special area groups of educators to provide updated subject-specific information. We leveraged PD Day to help spread awareness of our project, recruit teachers for focus groups and surveys, distribute learning materials (ie. Infographics, breastfeeding toolkits), and have informal discussions with educators about breastfeeding education. Booths were held at the Manitoba Home Economics Teachers Association and Physical and Health Educators of Manitoba PD Day events. We plan to continue and expand our engagement with PD Day and the Manitoba Teachers Society in the future by hosting an interactive workshop about human milk science.
5. **Focus groups and surveys were conducted** with teachers and healthcare providers. Teachers were recruited via Manitoba Teachers Society PD Day (see above) and via email circulation. Health care providers were recruited via email circulation through the Winnipeg Regional Health Authority (WRHA). Focus groups were audio recorded and important points of discussion were transcribed. Open-ended responses from the focus groups and online survey were categorized into themes. Quantitative responses from surveys were summarized in tables and graphs.
6. **Results were presented** at the Children's Hospital Research Institute of Manitoba Child Health Research Day (October 2017 & 2018) (**Appendix F & G**) and shared online (<https://www.azadlab.ca/breastfeeding-education-study.html>). An abstract has also been accepted at the national Knowledge Translation (KT) Canada conference (Winnipeg, May 2019).

Project Timeline

Task	Date
Scan of existing breastfeeding in Manitoba and other jurisdictions	May-July 2017
Consultation with developers of breastfeeding toolkits	June-August 2017
PD Day with Manitoba Teachers	October 2017
Focus group with educators	December 2017
Focus groups with healthcare professionals	January & August 2018
Online survey	February-October 2018
Summary and interpretation of focus groups and survey data	September-October 2018
Presentation at CHRIM Child Health Research Day	October 2017 & 2018
Report writing	November 2018 - March 2019
Presentation at KT Canada Conference	May 2019

Results

1. Scan of existing Manitoba school curriculum

From discussions with school administrators and curriculum consultants, and after reviewing the current Manitoba school [curriculum](#), we found a few areas where lactation and infant feeding (including but not limited to breastfeeding) might be addressed, but are not explicitly mentioned, as shown in **Table 1**.

Table 1. Areas in the Manitoba school curriculum where infant feeding may be discussed.

Grade(s)	Subject	Content	Mandated
2	Physical Health Education	Mammalian biology	Yes
6-8	Sex Education	Early life development	Yes
10	Family Studies	Early life development	No – elective course
Varies from K-8	Roots of Empathy*	Mother and baby visits	No – optional program (not part of curriculum)

*[Roots of Empathy \(ROE\)](#) is a classroom program that involves a mother and baby visiting the classroom each month throughout the school year to discuss child development. The program is usually offered in Grade 1, although some schools offer the program in higher grade levels, up to grade 8. ROE is currently available in over 200 Manitoba schools. In most divisions, this is an optional program, although it is mandatory to all students in the St. James School Division. Breastfeeding is an optional topic of discussion and mothers may choose to speak about breastfeeding and/or breastfeed in front of students if they feel comfortable to do so.

2. Scan of existing breastfeeding education tools and initiatives outside Manitoba

An internet search was conducted to find breastfeeding education curricula developed for school age children. The search was conducted in English with no geographical restrictions. A total of five breastfeeding education toolkits were found; two from the United States (Indiana and Alabama), one from Canada (Ontario) and three from the United Kingdom (Leicestershire, Scotland, and England) (**Table 2**).

The breastfeeding toolkits are educational resources designed to educate students about breastfeeding. Three toolkits were designed specifically for high school students and one was designed for K-12, with lessons developed for each individual grade level. Topics within the toolkits range from barriers to breastfeeding, breastfeeding benefits, and comparing formula feeding to breastfeeding. We connected with developers of these toolkits to understand the uptake and evaluation of the toolkits, challenges faced and advice for avoiding or addressing these challenges, and general thoughts on how to integrate breastfeeding education into school-based education. Key findings are summarized in **Table 2**.

Table 2. Summary of breastfeeding education tool kits and comments from their creators.

Toolkit with URL for download Contact Person	Education Stakeholder Engagement	Uptake	Other Comments
Alabama Department of Public Health (Grades K-12) Amy Stratton Public Health Nurse, Alabama Department of Public Health	No response.	No response.	No longer in use and is currently outdated.

Ontario Public Health Association (Grades 9-12) Heather Lawson Public Health Nurse, Ontario Public Health Association (OPHA)	<ul style="list-style-type: none"> • School administrators and teaching staff not involved in development. • Primarily developed by public health nurses. 	<ul style="list-style-type: none"> • Not currently used in schools (uptake was not monitored). No plans to update toolkit. • Felt that if teaching staff were involved during the development process, there could have been more uptake. 	Developed for high school students because students go through body changes and have more understanding with this topic.
Leicestershire Healthy Schools (Grades 9-12) No response.	No response.	No response.	No response.
Marion County of Public Health Department (Grades 9-12) Pamela Desir Public Health Nurse, Marion County of Public Health Department (Indiana, USA)	School administrators and teaching staff involved in the development process and reviewed the toolkit several times.	<ul style="list-style-type: none"> • Not monitored for usage but still receives requests for the toolkit. • Pre/post test showed improved knowledge and attitudes towards breastfeeding. 	<ul style="list-style-type: none"> • Based off of OPHA's toolkit and modified to meet needs of their students. • Targeted to high school students to provide information around parenting as they may become parents themselves in the near future.
Breastfeeding Information Pack for Junior Cycle Sarah Brennan, Emma Pickett Department for Health and Children (Ireland, UK)	<ul style="list-style-type: none"> • Development took place in Fall 2006. • Joint project by Department for Health and Children and the European Commission. • Key experts in breastfeeding education, teachers, students, and parents were consulted. • National consultative committee oversaw the project. 	No response.	No response.

We also connected with four international groups working on school-based breastfeeding education initiatives, in various stages of development:

Mother's Milk and Mammals

George Ziegler & Aloka Patel, Rush University, USA

This initiative in Chicago was developed to target 4th and 5th grade students who electively joined medicalscience based extracurricular education sessions. The program was delivered as an after-school (extracurricular) session about breast milk science. Questionnaires were completed before and after the session. The pilot study found that students expressed interest in learning more about breastfeeding and their general knowledge of breastfeeding increased after the session on breast milk science.

Early Life Lab

Keith Godfrey, University of Southampton, UK

Early Life Lab is an educational school-based intervention aiming to prevent the development of chronic diseases by teaching students to form healthy lifestyle choices that they will carry on in the future. It was

created in collaboration with the Department of Education and the Public Policy of Southampton. Educators have been involved in the research team and program evaluation. Although they currently do not have educational materials related to breastfeeding in their programs, they plan to include components of breastfeeding in their future programs. Their approach has been very successful and they plan to expand the program to other schools in England.

Human-Milk

Amy Brown (Swansea University), Natalie Shenker (Imperial London College), & Claire Czajkowska

This group collaborated on the “Human Milk” branding project that highlights the components of human milk in various lay-friendly videos, infographics, and products. They plan to co-create a module on the science of human milk for their GCSE and A Level Biology courses, targeting at 14-16 year old students. They are targeting “milk science” (rather than other aspects of breastfeeding) because it is less controversial.

The Breastfeeding Network

Amy Bryson and Sarah Fisher; Scotland, UK

This network piloted a project, funded by the Queens Nursing of Scotland fund, in two local schools in partnership with National Health Service (NHS) Ayrshire and Arran. The project piloted age-appropriate, interactive Breastfeeding Awareness Sessions devised for children aged 3 - 18 years in nurseries, primary, and secondary schools. The sessions were well-received by students and teachers, and the local Health Board, NHS Ayrshire and Arran, extended the funding for the project to continue.

3. Interviews with key Manitoban and Canadian stakeholders

We interviewed stakeholders from the Manitoba government and Education system, as well as the national organization Physical Health Education Canada. Key messages from these consultations are summarized in **Table 3**.

Table 3. Stakeholders consulted about breastfeeding in the Manitoba school curriculum.

Name Position and Organization	Type and date of consultation	Key messages
Leanne Boyd Director, Policy Development, Research & Evaluation, Healthy Child Manitoba , Government of Manitoba	Phone, email May 2017	<ul style="list-style-type: none"> • ROE is an approved and recognized program worldwide. It is offered in many Manitoba schools, and was originally implemented in a cluster randomized trial. (See above, Section 1) • Breastfeeding is discussed in the program and students have the opportunity to see a mother breastfeed her child (if the mother is comfortable doing so).
Stephanie Talsma, Tricia Zakaria Director, Campaigns, & Programs, Physical Health Education (PHE) Canada	Phone, email June 2017	<ul style="list-style-type: none"> • A new Physical Health curriculum is under development by PHE Canada. • Some programs developed by PHE Canada become implemented into the school curriculum at the provincial level. • They are cautious about the possible difficult conversations of mothers feeling guilty for not breastfeeding their babies.

Susan Lee Homeschooling & Independent Education Liaison, Human Ecology/Home Economics Consultant – Independent Education Unit, Manitoba Education and Training	Phone, email June 2017	<ul style="list-style-type: none"> •New Home Economics curriculum being beta-tested for the 2018-2019 school year. Curricula are not updated very frequently (e.g. every ~20 years). •Breastfeeding education resources including infographics, breastfeeding education toolkits, and educational websites were sent by us to supplement the new curriculum and will be under review in summer 2018.
Randy Duek Superintendent, Manitoba Association of School Superintendents	Phone January 2018	<ul style="list-style-type: none"> •Superintendents do not have a major impact on changing curricula, but they review and comment on proposed changes. •Recommends writing a letter to Manitoba Education & Training.
Patricia Krawchuk Nutrition Programs Manager, Nüton Dairy Farmers of Manitoba	In person December 2018	<ul style="list-style-type: none"> • Nüton is an optional program that trains early childhood educators and teachers to teach nutrition to students in grade levels from K-8. • Programs are focused on building healthy relationships with food using a Health at Every Size Approach. • Currently, breastfeeding is not directly addressed in Nüton's programs. • Suggested that breastfeeding could be incorporated with Indigenous teachings.

4. Focus Groups and Online Survey

Separate focus groups for education stakeholders (ie. teachers, curriculum developers) and health care providers (ie. nurses, dietitians, midwives, doulas) were conducted. Guiding questions for the focus groups are provided in **Appendix A and B**; 4 educators and 8 healthcare providers (HCP) attended separate focus groups. Online surveys were also administered to education stakeholders and health care providers (see **Appendix C and D**); 39 educators and 66 HCPs completed the online survey.

Participant characteristics are summarized in **Table 4**. The majority were female (98%) and many had personal experience with breastfeeding. Participating teachers represented multiple grade levels and subject areas, including science, home economics, social studies, and mathematics. Healthcare providers included nurses, lactation consultants, dietitians, and midwives. Responses from the focus groups and surveys (combined) are summarized in **Figures 1-7**. Selected quotes from participants are also provided.

Key Messages from Focus Groups and Surveys:

- Nearly all educators (97%) and HCPs (94%) **supported the idea** of teaching students about breastfeeding. There was roughly equal support for having teachers or HCPs provide this education (Figure 1).
- Primary **motivations** were normalizing breastfeeding, preparing students as future parents, providing accurate information about the benefits and challenges and choices associated with breastfeeding (Figure 2).
- Perceived **barriers and concerns** included lack of teaching time and resources, competing priorities in the curriculum, inadequate training/discomfort of educators, cultural and religious sensitivities,

stigmatization of non-breastfed students and exacerbation of maternal guilt and shaming mothers who choose not to breastfeed (Figure 4).

- Among responses to open-ended questions, many stated that if breastfeeding is **approached with confidence**, the topic of breastfeeding won't appear to be uncomfortable to students.
- Teachers like to have **resources developed for them** such as infographics (see Appendix E) and toolkits, to help relieve the burden of feeling like there are too many things to teach to students (Figure 7) and overcome perceived lack time and educational resources (Figure 5).

Table 4. Characteristics of participants in focus groups and surveys about breastfeeding education in Manitoba schools.

Overall	n/N	%
Female	103/105	98
Has children	85/105	81
Breastfed	82/105	78
Educators	39/105	37
Health Care Providers	66/105	63
Educators		
Teacher	29/39	74
Administrator	3/39	8
Other	7/39	18
Subject		
Math	7/39	18
English	9/39	23
Social Studies	13/39	33
Science	10/39	26
Physical Education	3/39	20
Home Economics	8/39	8
Other	13/39	33
N/A	8/39	20
Currently teaches students about breastfeeding		
Yes	12/39	31
No	27/39	69
Health Care Providers (HCP)		
Doctor	7/66	10
Dietitian	7/66	10
Nurse	30/66	45
Lactation Consultant	17/66	25
Midwife	3/66	4
Other	4/66	6

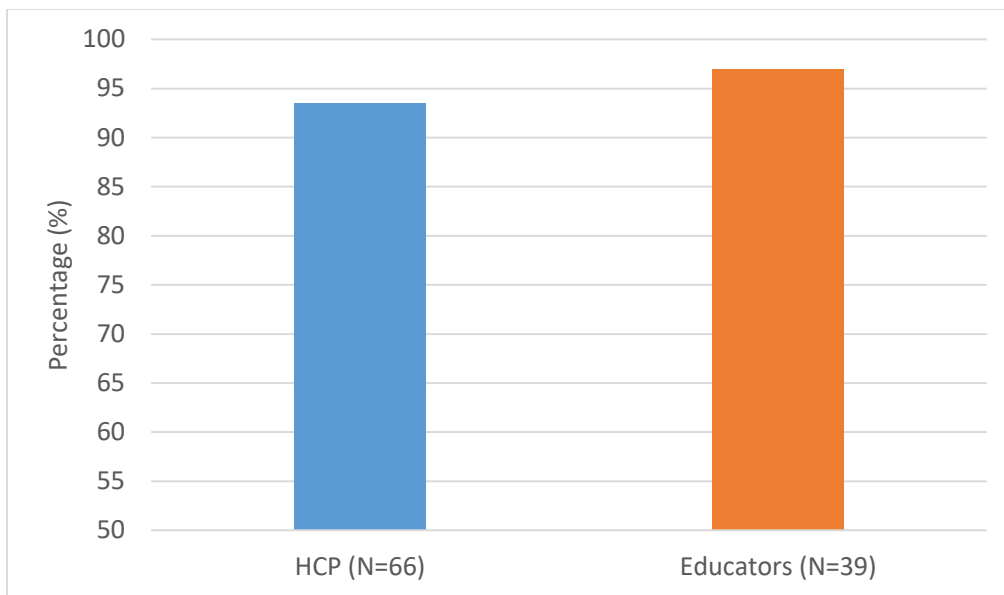


Figure 1. Proportion of participants who think that students should learn about breastfeeding at school.

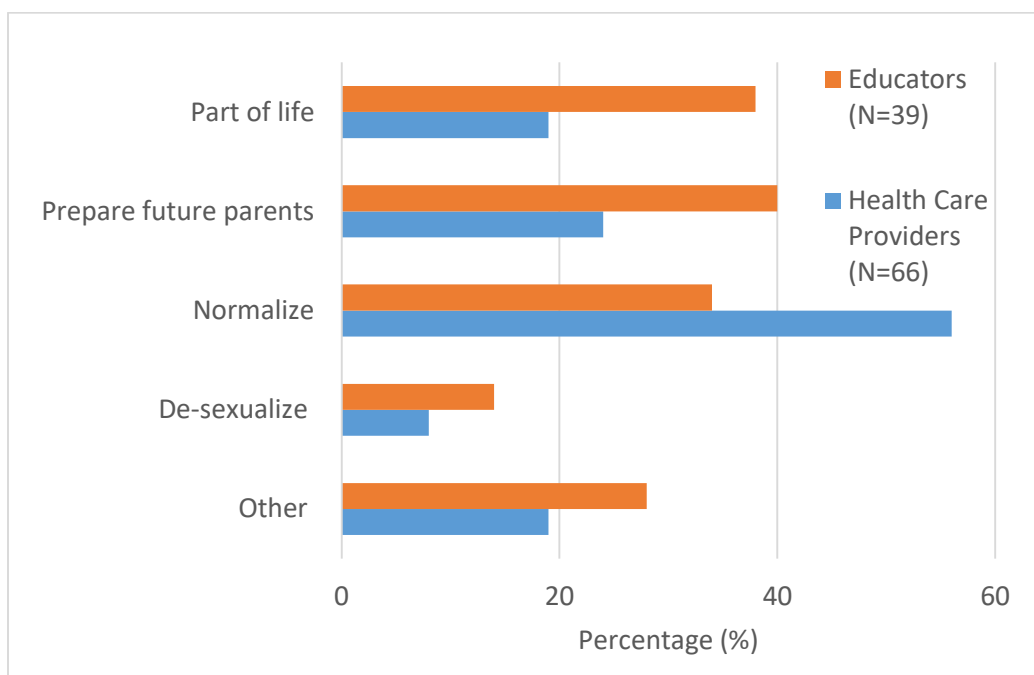


Figure 2. Common themes: why students should learn about breastfeeding

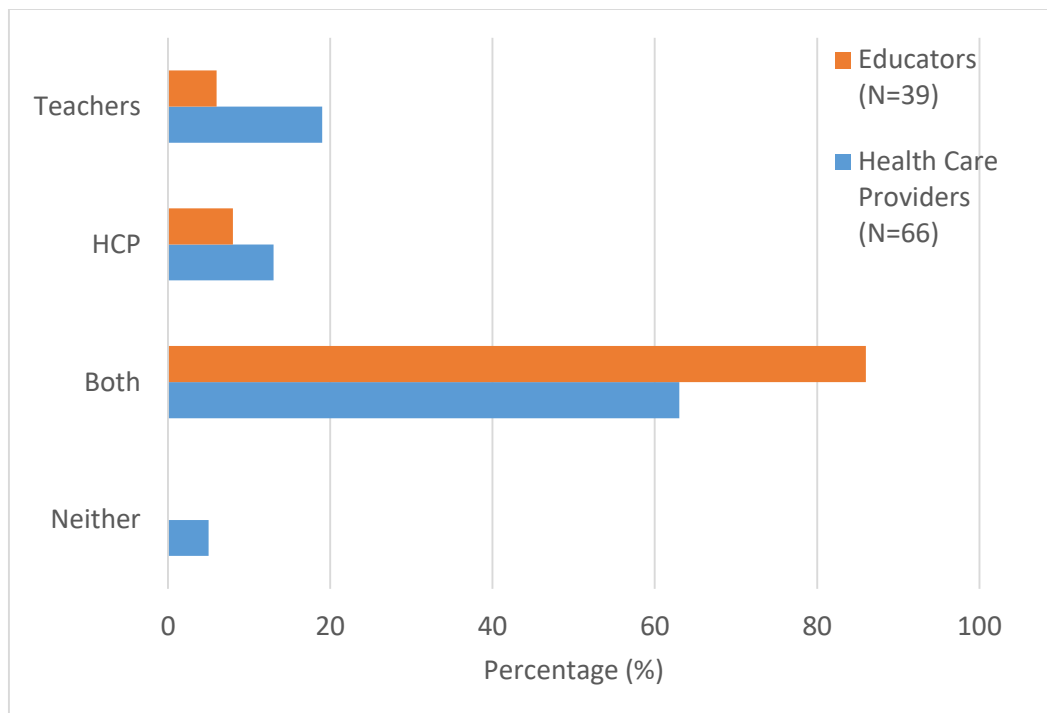


Figure 3. Should teachers themselves, or healthcare professionals deliver breastfeeding education?

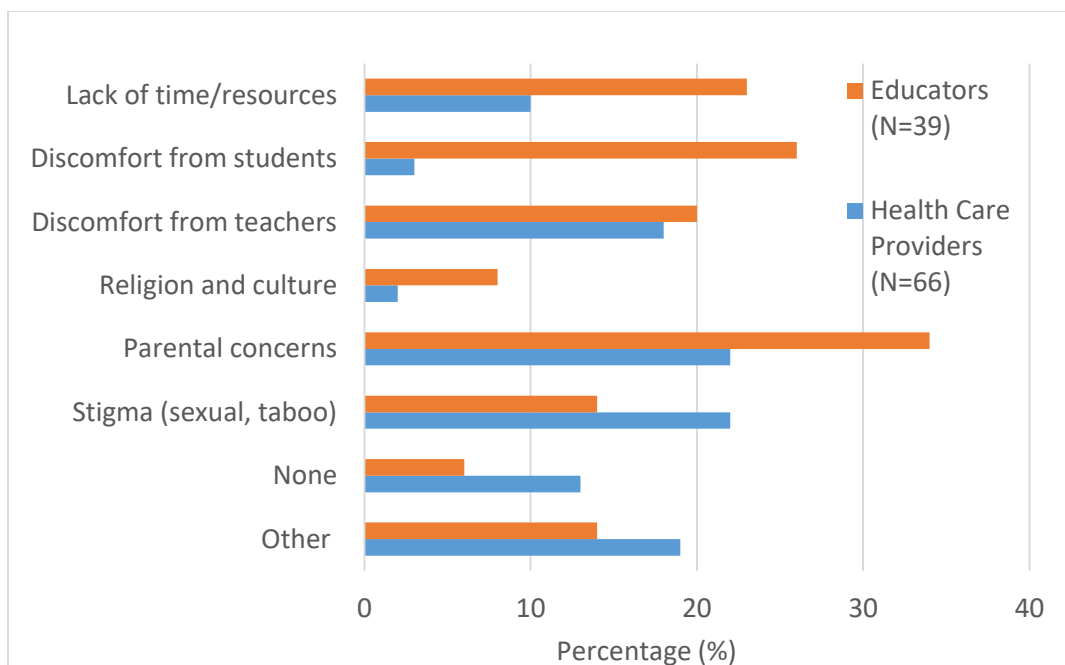


Figure 4. Common themes: anticipated barriers to teaching students about breastfeeding.

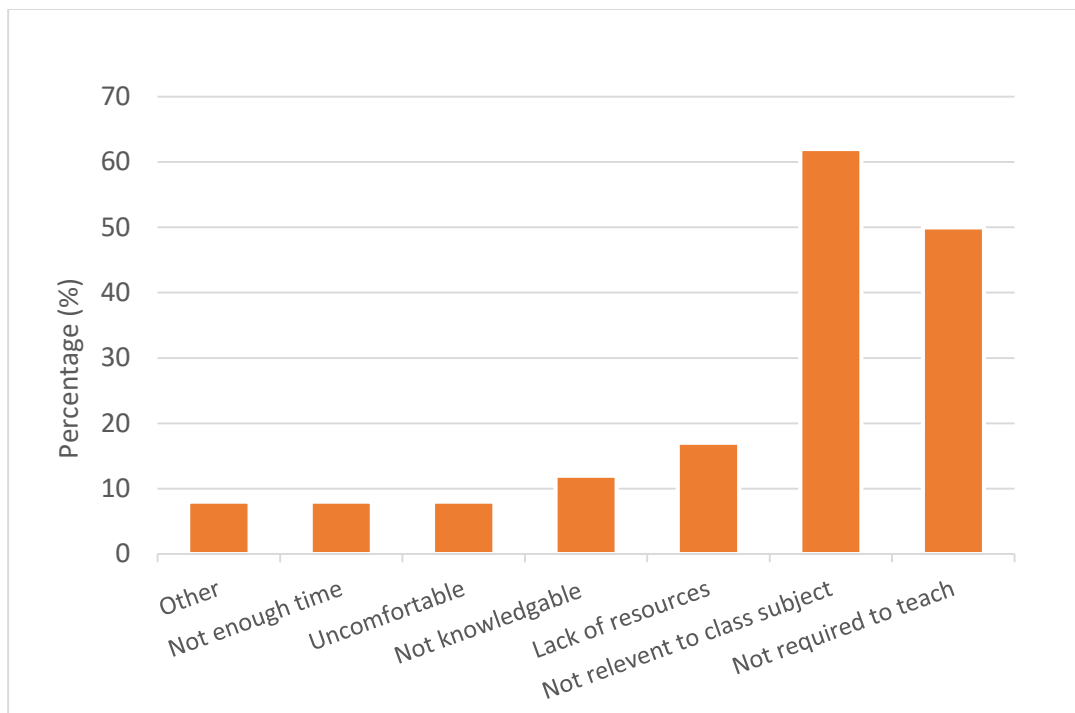


Figure 5. Why are students not learning about infant feeding in your class?
(N=27 Educators who do not teach about breastfeeding)

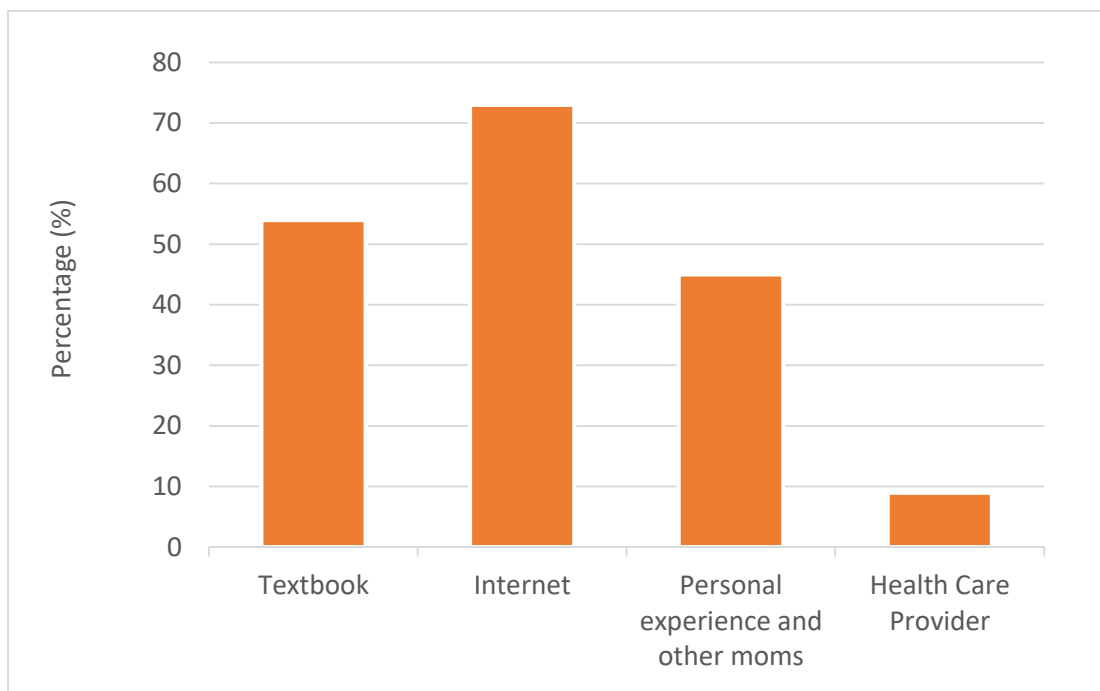


Figure 6. Where do teachers get information or resources about breastfeeding?
(N=12 Educators who do teach about breastfeeding)

Internet included Government of Canada, World Health Organization, Planned Parenthood websites.

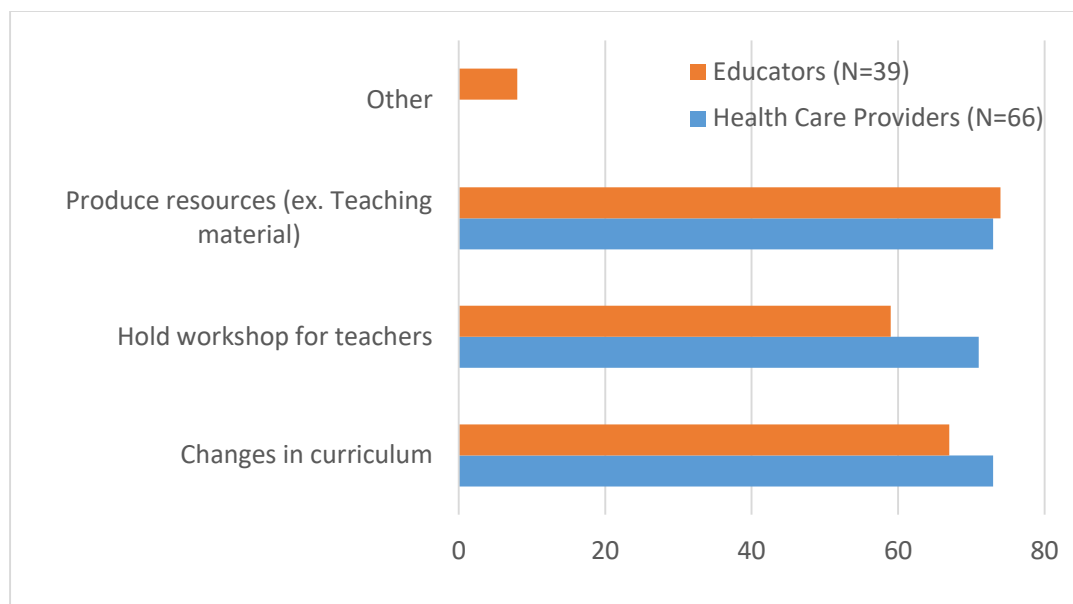


Figure 7. Which of the following would be the most effective for promoting education about breastfeeding in schools?

Selected quotes from focus group and survey participants:

- “...I came to visit my students with my 2 month old baby. He became hungry and was crying. Rather than nurse him in front of my students I scurried away to a secluded closet in the school and sat alone. **It was this moment that made me realize I had missed an opportunity.** I had the opportunity to talk openly about breastfeeding with young children who likely were very curious as to how babies are fed. **If nursing mothers cover up and sit in secluded spaces to breastfeed, its teaching children that breastfeeding is not something we talk about.**” – *Elementary school teacher*
- “As a new mother who has had my own struggles with breastfeeding **I now am able to see the importance** of destigmatizing breastfeeding and educating children on its importance.” – *Elementary school teacher*
- “I think it's important to teach about breast feeding and all of the benefits. However, **I think there's a difference between informing and promoting.** I think we also have to be careful that we are not promoting it to students so much, that they think mothers who don't breastfeed are bad mothers. I know a few mothers who weren't able to breastfeed for a long time. I think it's easy for the promotion to swing the other way and shame mothers who can't / don't breastfeed. So I think there's just a fine line that we would need to be aware of. I do think it would be really great to inform students and teach about the benefits of breastfeeding.” – *Teacher*
- “There are **many priorities for students** of Manitoba. The burden of poor mental health and limited life skills teaching (e.g. lack of curriculum on food skills, nutrition promotion, mental health first aid) should be prioritized in schools (rather than solely breastfeeding).” – *Public Health Nurse*

- “I have heard many times - 'if I knew what breastfeeding could do, I would have breastfed, or I would have breastfed longer'. **Not enough education about all the benefits of breastfeeding** is done. Alongside of this, there needs to be more education that **breastfeeding is a process**, and that it does not always just 'happen' - sometimes moms and babes have to work at it before it gets well established. Often new mom's think that it should just happen, and when it doesn't, they get very discouraged and can feel like a failure.” - *Nurse*
- “I feel that **breastfeeding could be taught in all subjects as small nuggets of information**. Like for math, students can do calculations on how much money a family can save in a year if they breastfed, the science part of breastfeeding can be taught in science, the barriers women face when breastfeeding in public can be discussed in social studies, and so on...” - *Dietitian*
- “It would need to be framed as infant feeding choices = a fed baby is better than a hungry baby. It could be a social sciences case example in high school to illustrate the impacts of social workplace policies (e.g., parental leave, work hours, breaks), industry (e.g., formula given to hospitals etc), a social influences (e.g., mommy blogs that pit mothers against each other and describe only "one way" to parent/feed children); increase understanding of why parents would choose other options than breastfeeding etc.” – *Health promotor*

Limitations & Challenges

We were unable to connect with a few developers (ex. Leicestershire) of the breastfeeding toolkits and other stakeholders for further comment on the development of their toolkits and curriculum.

The majority of participants in the focus groups and online surveys were female (98%), and many had personal experience with breastfeeding (**Table 4**). This selection bias could influence the generalizability of our findings. Despite using a central location with free parking, offering snacks and incentives (\$25 gift cards), and attempting to select convenient days/times, our focus groups suffered from low turn-outs, with many last-minute cancellations and no-shows. It was challenging to determine what approvals were required, and from whom. Approvals were ultimately required from the school divisions and the Winnipeg Regional Health Authority (WRHA), in addition to the University of Manitoba Research Ethics Board (REB). The process of obtaining approval, particularly from the WRHA, was lengthy and unclear which led to cancellation and rescheduling of the focus groups.

Overall Findings

1. Currently in the Manitoba K-12 curriculum, breastfeeding is not explicitly mentioned, but there are several potential areas where information about breastfeeding could be incorporated (Table 1, 3).
2. Internationally, there are a few examples of existing toolkits and programs for school-based education about breastfeeding (Table 2), but it is unclear how widely they are used, and whether they are effective. Generally, the toolkits and programs with the best uptake were those that involved educators in the development process. We developed relationships with several key education stakeholders and stakeholder groups locally (e.g. MTS PD Day; Healthy Child Manitoba Office; Manitoba Education and Training) and nationally (e.g. Physical Health and Education Canada).
3. Key stakeholders in Manitoba from the Education and Healthcare sectors generally agree and support the idea that students should learn about breastfeeding (Figure 1). Various opinions were expressed regarding when and how to do this, and some concerns were raised regarding cultural and personal sensitivities. Importantly, it is clear that there are many competing priorities within the Manitoba curriculum and adding breastfeeding as a new element would be difficult. Instead, it would be more feasible to find ways of incorporating breastfeeding within existing mandated objectives of the curriculum.

Recommendations

1. **Provide updated information and educational materials** about breastfeeding to educators that they could use in their classrooms (for example, at PD Day). As noted in Figure 6, teachers that currently discuss breastfeeding in their classrooms seek information through the internet. The internet may not be a reliable source and can provide inaccurate information on breastfeeding.
2. **Form a working group** of teachers and health care providers to compile, enhance and modify activities from existing breastfeeding toolkits (Table 2) and find ways to integrate them with the existing Manitoba school curriculum goals and objectives. Many participants from the Focus Groups and Surveys were enthusiastic about such activities and agreed to be contacted for this purpose.
3. **Implement and evaluate** these new resources in a small number of Manitoba schools. This could be done in partnership with Healthy Child Manitoba and/or the Manitoba Dairy Farmers Nutrition Education program (Nuton). Both organizations regularly pilot and evaluates new nutrition-themed educational resources in Manitoba schools.

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- [16] P. J. Martens, "The Effect of Breastfeeding Education on Adolescent Beliefs and Attitudes: A Randomized School Intervention in the Canadian Ojibwa Community of Sagkeeng," *J. Hum. Lact.*, 2001.

APPENDIX A - FOCUS GROUP QUESTIONS FOR EDUCATION STAKEHOLDERS

Teaching breastfeeding questions:

1. Are students currently learning about infant feeding in your class?
 - 1.1. Yes- what has it looked like/how do the students react?
 - 1.2. Yes- where do you get your BF teaching resources?
 - 1.3. Yes- What do you focus on BF (science, economics, barriers, etc)
 - 1.4. Yes- Have gender dynamics been a barrier for teaching BF education?
 - 1.5. No – why?
2. Should ALL students learn about breastfeeding in schools? Why/why not?
 - 2.1. Yes- when (in which grade level(s)) should students learn about breastfeeding and why?
 - 2.2. Yes- where could breastfeeding “fit” within the existing school curricula? (ex. Phys ed, science, family studies)
3. Have you had discussions with colleagues about BF education? What do they think?
4. What barriers do you perceive or anticipate regarding teaching students about infant feeding / breastfeeding / “human milk science” in schools?
5. Should teachers themselves, or health professionals (nurses, lactation consultants) deliver breastfeeding education?
6. In other cities/countries, people have created toolkits for teachers to use for teaching about breastfeeding. Would this approach work for you? (Distribute toolkits.)
 - 6.1. Do you think teachers would use them?
 - 6.2. Should they be adapted for Manitoba? How?
 - 6.3. What do you like/dislike about the toolkits?

Curriculum questions:

7. If you’ve had experience with curriculum developing:
 - 7.1. What is the process for changing or developing a new curriculum in Manitoba?
 - 7.2. How long does it normally take to change/develop a curricula?
 - 7.3. Who is involved?
 - 7.4. How to get involved?
8. If there are changes to the curriculum, where/how do you get information of the updates?
9. Where do suggestions for curriculum changes typically come from? (Researchers, teachers, parents, public health?)
10. Do teachers have to follow what has to be taught OR do they have the freedom to teach certain things in class?
 - 10.1. Do you have to ask permission to teach things that are not in the curriculum?

Miscellaneous questions:

11. In continuation of this project, what would you like to see? How can we build a good uptake from stakeholders? (Changing the curriculum? Making resources?)

12. Are we missing any key stakeholders to engage with for this project? (Other than teachers, principals, school administrators, curriculum consultants, education policymakers)

13.1. Do you recommend any specific people, within any of these categories, that we should connect with? (Record contact info)

APPENDIX B - FOCUS GROUP QUESTIONS FOR HEALTH CARE PROFESSIONALS

General questions:

1. What are the current roles of healthcare providers in breastfeeding education, in general?
2. What are the current roles of health care providers in schools?
3. When you educate people about breastfeeding what do you focus on? (ex. Health benefits, troubleshooting BF, saving money, time, etc).
4. Are HCP's ever consulted with curriculum development?

Teaching breastfeeding questions:

5. Should ALL students learn about breastfeeding in schools? Why/why not?
 - a. Yes- when (in which grade level(s)) should students learn about breastfeeding and why?
 - b. Yes- where could breastfeeding "fit" within the existing school curricula? (ex. Phys ed, science, family studies)
6. What barriers do you perceive or anticipate regarding teaching students about infant feeding / breastfeeding / "human milk science" in schools?
7. Should teachers themselves, or health professionals (nurses, lactation consultants, midwives) deliver breastfeeding education? Anyone else? (La Leche League leaders? Healthy Baby staff?)
8. Do you think it would be possible for nursing/nutrition/medical students to educate school-age children about breastfeeding? (ex. Practicum rotation)
9. In other cities/countries, people have created toolkits for teachers to use for teaching about breastfeeding. Would this approach work for you? (Distribute toolkits.)
 - a. What do you like/dislike about it?

Miscellaneous questions:

10. Are we missing any key stakeholders to engage with for this project? (Other than teachers, principals, school administrators, curriculum consultants, education policymakers, HCPs)
 - a. Do you recommend any specific people, within any of these categories, that we should connect with? (Record contact info)

APPENDIX C - ONLINE SURVEY QUESTIONNAIRE FOR EDUCATION STAKEHOLDERS

Breastfeeding Education Survey for Educators

****PLEASE READ BEFORE COMPLETING SURVEY****

The study "Stakeholder Engagement to Inform Strategies for Improving Breastfeeding Education in Manitoba Schools" is being conducted to engage with appropriate stakeholders. The main purpose of this study is to explore opportunities and barriers to breastfeeding education, and to gain insight on how to best integrate breastfeeding education in the Manitoba school curriculum.

All personal information, such as your name will be removed from the data we collect. Your name will not be used at all in the study records. A list of names will be kept in a secure file so we can send you a summary of the results of the study.

The survey should take you approximately 30 minutes to complete, and you will have the chance to win a \$50.00 gift card for your participation. The entire survey must be completed prior to entering the draw. All personal information will not be linked to survey data and will be deleted after the draw has been made.

Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice. If you would like to contact the study team to discuss this research, please e-mail lam3@myumanitoba.ca

By clicking the button below and entering your name, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

For questions about your rights as a research participant, you may contact The University of Manitoba, Bannatyne Campus Research Ethics Board Office at (204) 789-3389

***Required**

1. Email address *

2. We may wish to quote your words directly in reports and publications resulting from the survey. With regards to being quoted, please select one of the following statements: * *Mark only one oval.*

☐ I agree to be quoted directly if my name is not published [I will be identified as an education stakeholder (ex. teacher, principal)]

☐

Do not quote my words

3. **Please type your name to indicate that you have read and understood the above statements to proceed to the survey:**

Information Questions

- 4 **Why are you interested in participating in this study?**

5. **What type of education stakeholder do you self-identify as? (Select all that apply)** *Tick all that apply.*

- ☐ Teacher
- ☐ Administrator
- ☐ Curriculum consultant
- ☐ Curriculum writer
- ☐ Education policy maker
- ☐ Education student
- ☐ Other:

6. **If you are a teacher, what grades do you teach?**

Tick all that apply.

- ☐ Grades K-2
- ☐ Grades 3-5
- ☐ Grades 6-8
- ☐ Grades 9-12
- ☐ N/A

7. **Which school division do you work at? (Leave blank if not applicable)**

8. **What subjects do you specialize in?** *Tick all that apply.*

- ☐ Math
- ☐ Science
- ☐ English
- ☐ Social Studies
- ☐ Physical Health
- ☐ Home Economics
- ☐ N/A

Other: _____

9 **What is your gender?**

Mark only one oval.

- ☐ Female
- ☐ Male
- ☐ Prefer not to say

10. **Do you have any children?** *Mark only one oval.*

- ☐ Yes
- ☐ No

11. **How many children do you have?** *Mark only one oval.*

0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. **What year was your first child born?**
(Leave blank if N/A)

13. **Gender of child(ren)?** *Mark only one oval.*

- ☐ Female
- ☐ Male
- ☐ Both
- ☐ N/A

14. **Did/Do you or your partner breastfeed any of your children?** *Mark only one oval.*

- ☐ Yes
- ☐ No (proceed to next section)
- ☐ N/A (proceed to next section)

15. **How would you rank your (or your partners) experience with breastfeeding your child(ren)?** *Mark only one oval.*

	1	2	3	4	5	
Very negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very positive

Teaching Breastfeeding in Schools Questions

16 **Do you feel that students should learn about breastfeeding in schools?** *Mark only one oval.*

- ☐ Yes
- ☐ No (proceed to question 19)

17. **Yes - please provide rationale why students SHOULD learn about breastfeeding in schools**

18. **Yes - in which grade(s) do you think students should be taught about breastfeeding?**

19. **No - please provide rationale why students should NOT learn about breastfeeding in schools**

20. **Are students currently learning about breastfeeding in your class?** *Mark only one oval.*

- ☐ Yes
☐ No (proceed to question 25)

21. **Yes - what areas of focus are taught regarding breastfeeding?**

Tick all that apply.

- ☐ Science of human milk
☐ Barriers to breastfeeding
☐ Economics of breastfeeding
☐ Environmental benefits to breastfeeding
☐ All of the above
☐ Other: _____

22. **Yes - where do you get information or resources about breastfeeding?**

Tick all that apply.

- ☐ Textbook
☐ Internet
☐ Other: _____

23. **Yes - what websites do you access for information or resources regarding breastfeeding?** *Tick all that apply.*

- ☐ World Health Organization (WHO)
- ☐ Government of Canada
- ☐ Centers for Control Diseases
- ☐ Other: _____

24. **Yes - how do the students react to breastfeeding education?**

25. **No - why aren't students learning about infant feeding in your class?** *Tick all that apply.*

- ☐ Not enough time
- ☐ Not knowledgeable to teach
- ☐ Not required to teach
- ☐ Uncomfortable to teach
- ☐ Not relevant to my class or subject
- ☐ Not enough readily available resources and teaching materials
- ☐ All of the above
- ☐ Other: _____

26 **Where do you think breastfeeding could "fit" within the existing school curricula?** *Tick all that apply.*

- ☐ Physical Health & Education
- ☐ Family studies
- ☐ Food and nutrition
- ☐ Social Studies
- ☐ Math
- ☐ Language Arts
- ☐

All of the above

Other: _____

27. **What barriers do you perceive or anticipate regarding teaching students about infant feeding / breastfeeding / “human milk science” in schools?**

28. **Should teachers themselves, or healthcare professionals deliver breastfeeding education? Tick all that apply.**

- ☐ Teachers
- ☐ Healthcare professionals (ex. nurses, lactation consultants, midwives, doctors)
- ☐ All of the above
- ☐ None - breastfeeding education should NOT be taught in schools
- ☐ Other: _____

Statement Questions

Below are statements regarding breastfeeding. Please select how strongly you agree/disagree with each statement.

29. **It is important to teach students about breastfeeding in order to help normalize breastfeeding in society**

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

- 30 **It is important to teach students about breastfeeding so they will be able to make an informed choice about breastfeeding their own children when they become parents**

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

31. **Breastfeeding should not be addressed in school because it is too controversial** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

32. **Breastfeeding is a personal choice so there is no need to promote it at school** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

33. **Breastfeeding provides health benefits to infants** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

34. **Breastfeeding provides health benefits to mothers** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

35. **Infant formulas are just as good as breast milk** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

Curriculum Questions

36. **If there are changes to the curriculum, where/how do you get information of the updates?** *Tick all that apply.*

- ☐ Email
- ☐ Website
- ☐ Meetings
- ☐ Colleagues
- ☐ Other: _____

37. Where do suggestions for curriculum changes typically come from?

Tick all that apply.

- ☐ Teachers
- ☐ Parents
- ☐ Researchers
- ☐ Public
- ☐ Others _____

38. Do you have to follow the curriculum OR do you have the freedom to teach certain things in class?

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
No freedom at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Complete freedom

39. Which of the following would be the most effective for promoting education about breastfeeding in schools?

Tick all that apply.

- ☐ Changes in the curriculum
- ☐ Hold workshops for teachers
- ☐ Produce resources for teachers (ex. infographics, worksheets, posters)
- ☐ Other: _____

Miscellaneous Questions

40. Do you recommend any stakeholder groups or individuals that we should connect with? Please leave their contact information (if any).

41 **Would you be interested in participating in a focus group regarding breastfeeding education in schools?** *Mark only one oval.*

- ☐ Yes
- ☐ No

Additional comments

42. **If you have any comments regarding the study that you think would be helpful, please write them below in the comment box.**

Draw

By completing this survey, you are eligible to win a \$50.00 gift card. Under federal law, it is necessary that you answer a skill-testing question correctly in order to qualify for a chance to win the prize. If you wish to be considered for this prize, then please answer the following question. (Write your answer in the blank space provided.)

You may leave this question blank if you do not want to be entered for the draw.

43. **$(13 + 17) \times 2 =$**

APPENDIX D - ONLINE SURVEY QUESTIONNAIRE FOR HEALTH CARE PROVIDERS

Breastfeeding Education Survey for Health Care Providers

****PLEASE READ BEFORE COMPLETING SURVEY****

The study "Stakeholder Engagement to Inform Strategies for Improving Breastfeeding Education in Manitoba Schools" is being conducted to engage with appropriate stakeholders. The main purpose of this study is to explore opportunities and barriers to breastfeeding education, and to gain insight on how to best integrate breastfeeding education in the Manitoba school curriculum.

All personal information, such as your name will be removed from the data we collect. Your name will not be used at all in the study records. A list of names will be kept in a secure file so we can send you a summary of the results of the study.

The survey should take you approximately 30 minutes to complete, and you will have the chance to win a \$50.00 gift card for your participation. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice. If you would like to contact the study team to discuss this research, please e-mail lam3@myumanitoba.ca

By clicking the button below and entering your name, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

For questions about your rights as a research participant, you may contact The University of Manitoba, Bannatyne Campus Research Ethics Board Office at (204) 789-3389

***Required**

1. Email address *

2. We may wish to quote your words directly in reports and publications resulting from the survey. With regards to being quoted, please select one of the following statements: * Mark only one oval.

☐ I agree to be quoted directly if my name is not published [I will be identified as a health care provider (ex. nurse, lactation consultant, dietitian)]

☐ Do not quote my words

3. Please type your name to indicate that you have read and understood the above statements to proceed to the survey:

Information Questions

4 Why are you interested in participating in this study?

5. What type of education stakeholder do you self-identify as? (Select all that apply) *Tick all that apply.*

- ☐ Nurse
- ☐ Doula
- ☐ Lactation consultant
- ☐ Dietitian
- ☐ Doctor
- ☐ Midwife
- ☐ Other: _____

6. What is your gender? *Mark only one oval.*

- ☐ Female
- ☐ Male
- ☐ Prefer not to say

7. Do you have any children? *Mark only one oval.*

- ☐ Yes
- ☐ No

8. How many children do you have? *Mark only one oval.*

0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. What year was your first child born? (Leave blank if N/A)

10 Did/Do you or your partner breastfeed any of your children?

Mark only one oval.

- ☐ Yes
☐ No
☐ N/A

11. How would you rank your (or your partners) experience with breastfeeding your child(ren)? Mark only one oval.

	1	2	3	4	5	
Very negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very positive

Teaching Breastfeeding in Schools Questions

12. Do you feel that students should learn about breastfeeding in schools? Mark only one oval.

- ☐ Yes
☐ No (proceed to question 15)

13. Yes - please provide rationale why students SHOULD learn about breastfeeding in schools

14. Yes - in which grade(s) do you think students should be taught about breastfeeding?

15. No - please provide rationale why students should NOT learn about breastfeeding in schools

16 **Do you educate your patients and/or clients on breastfeeding?** *Mark only one oval.*

- ☐ Yes
- ☐ No (proceed to question 19)

17. **Yes - what areas of focus are taught regarding breastfeeding?** *Tick all that apply.*

- ☐ Science of human milk
- ☐ Barriers to breastfeeding
- ☐ Economics of breastfeeding
- ☐ Environmental benefits to breastfeeding
- ☐ All of the above

Other: _____

18. **Yes - how do your patients and/or clients typically respond to breastfeeding?**

19. **No - why is breastfeeding not discussed with your patients and/or clients?** *Tick all that apply.*

- ☐ Not enough time
- ☐ Not knowledgeable to educate
- ☐ Not required to consult with patient and/or client
- ☐ Uncomfortable to consult with patient and/or client
- ☐ Not relevant to my practice
- ☐ Not enough readily available resources and teaching materials
- ☐ All of the above
- ☐ Other: _____

20 **Where do you think breastfeeding could "fit" within the existing school curricula?** *Tick all that apply.*

- ☐ Physical Health & Education
- ☐ Family studies
- ☐ Food and nutrition
- ☐ Social Studies
- ☐ Math
- ☐ Language Arts
- ☐ All of the above
- ☐ Other: _____

21. **What barriers do you perceive or anticipate regarding teaching students about infant feeding / breastfeeding / "human milk science" in schools?**

22. **Should teachers themselves, or healthcare professionals deliver breastfeeding education?** *Tick all that apply.*

- ☐ Teachers
- ☐ Healthcare professionals (ex. nurses, lactation consultants, midwives, doctors)
- ☐ All of the above
- ☐ None - breastfeeding education should NOT be taught in schools
- ☐ Other: _____

23. **Which of the following would be the most effective for promoting education about breastfeeding in schools?**

Tick all that apply.

- ☐ Changes in the curriculum
- ☐ Hold workshops for teachers
- ☐ Produce resources for teachers (ex. infographics, worksheets, posters)

Statement Questions

Below are statements regarding breastfeeding. Please select how strongly you agree/disagree with each statement.

24. **It is important to teach students about breastfeeding in order to help normalize breastfeeding in society** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

25. **It is important to teach students about breastfeeding so they will be able to make an informed choice about breastfeeding their own children when they become parents** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

26. **Breastfeeding should not be addressed in school because it is too controversial** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

27. **Breastfeeding is a personal choice so there is no need to promote it at school** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

28. **Breastfeeding provides health benefits to infants** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

29. **Breastfeeding provides health benefits to mothers** *Mark only one oval.*

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

30. **Infant formulas are just as good as breast milk**
Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

Miscellaneous Questions

31. **Do you recommend any stakeholder groups or individuals that we should connect with? Please leave their contact information (if any).**

Additional comments

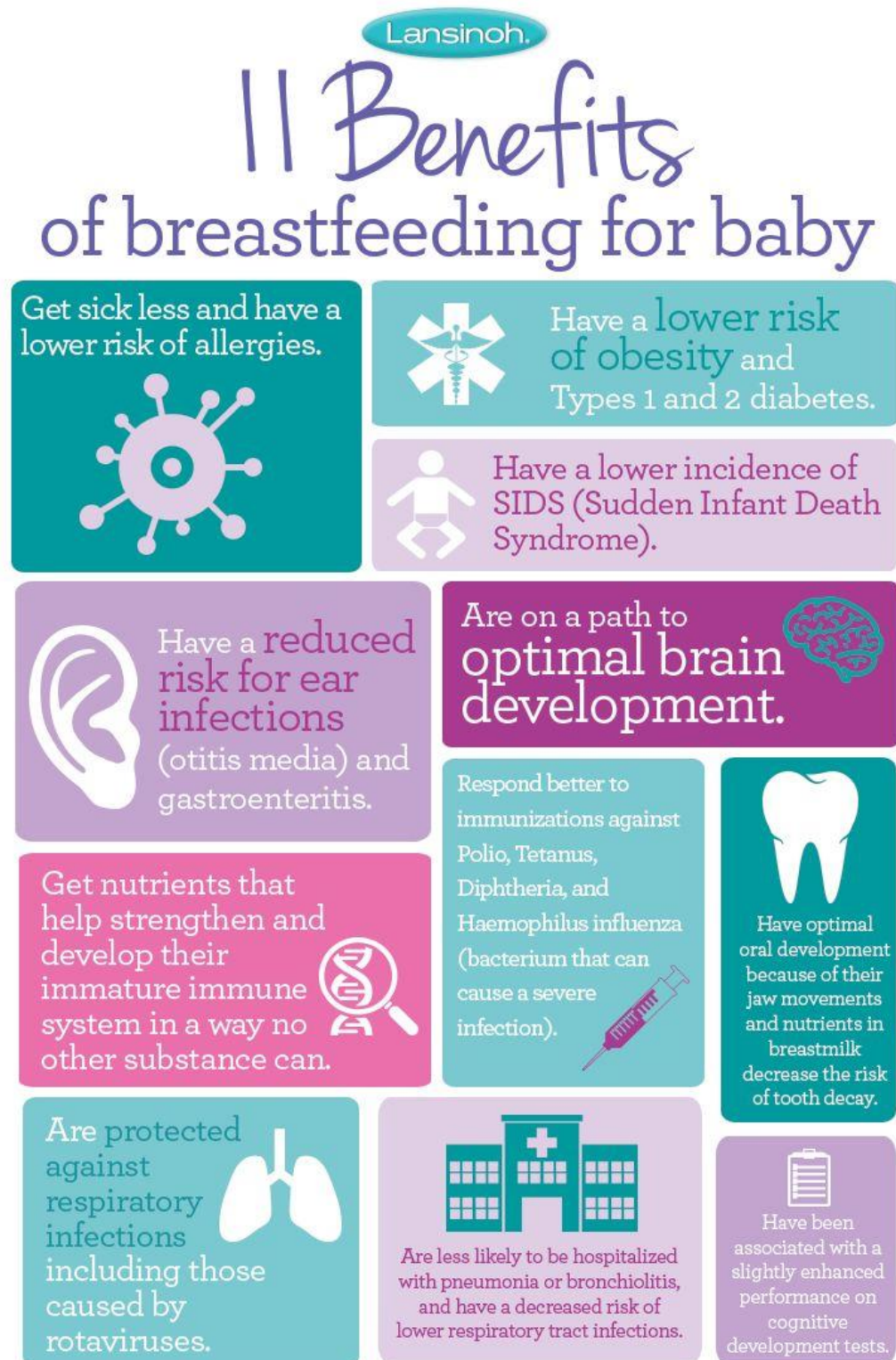
32. **If you have any comments regarding the study that you think would be helpful, please write them below in the comment box.**

Draw

By completing this survey, you are eligible to win a \$50.00 gift card. Under federal law, it is necessary that you answer a skill-testing question correctly in order to qualify for a chance to win the prize. If you wish to be considered for this prize, then please answer the following question. (Write your answer in the blank space provided.)

You may leave this question blank if you do not want to be entered for the draw.

33. **$(13 + 17) \times 2 =$**



BREASTFEEDING – ONE OF THE SMARTEST INVESTMENTS A COUNTRY CAN MAKE

Breastfeeding leads to healthier families and a stronger workforce. Yet, fewer than 40% of children under six months of age are fed only breastmilk. Led by UNICEF and WHO, in collaboration with many partners, the Breastfeeding Advocacy Initiative calls upon governments, donors and development partners to:

INCREASE FUNDING



TO REACH THE 2025 WORLD HEALTH ASSEMBLY TARGET TO RAISE THE RATE IN THE FIRST 6 MONTHS OF EXCLUSIVE BREASTFEEDING TO AT LEAST 50%

FULLY IMPLEMENT THE INTERNATIONAL CODE OF MARKETING OF BREASTMILK SUBSTITUTES



TRACK THE PROGRESS



OF POLICIES, PROGRAMS & FUNDS TOWARDS ACHIEVING NATIONAL & GLOBAL BREASTFEEDING TARGETS

ENACT PAID FAMILY LEAVE AND WORKPLACE POLICIES TO SUPPORT MOTHERS



STRENGTHEN LINKS BETWEEN

HEALTH FACILITIES & COMMUNITIES

TO PROTECT, PROMOTE, AND SUPPORT BREASTFEEDING



IMPROVE ACCESS TO SKILLED LACTATION COUNSELING



IMPROVE BREASTFEEDING PRACTICES IN MATERNITY FACILITIES

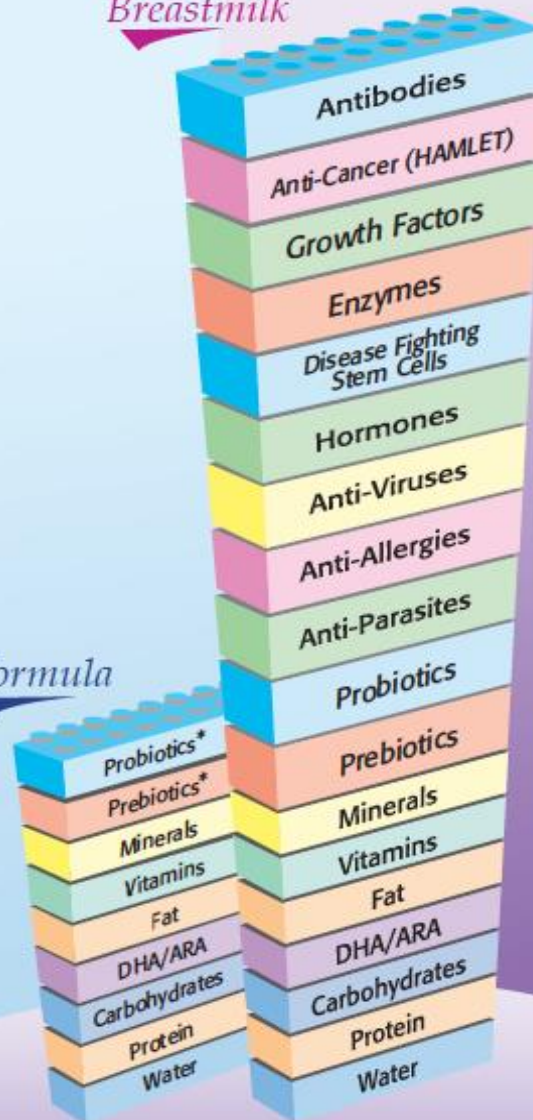


TO JOIN THE INITIATIVE AND FOR FURTHER INFORMATION: [BREASTFEEDING@UNICEF.ORG](mailto:breastfeeding@unicef.org).

Breastmilk has **MORE**
of the Good Things Babies Need
See for Yourself!

Breastmilk

Formula



*Not all formulas have prebiotics and probiotics.

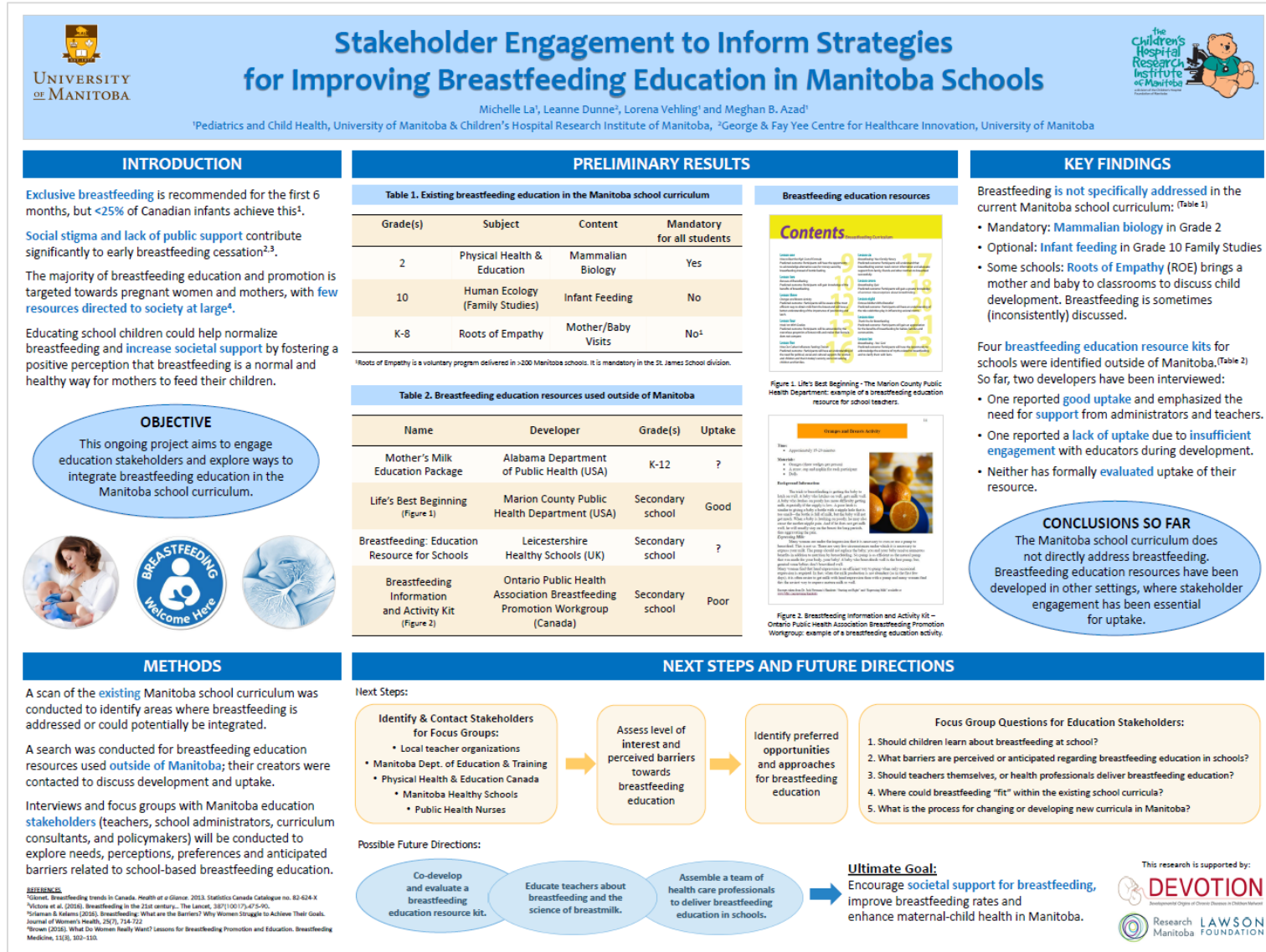


This institution is an equal opportunity provider.
California WIC Program,
California Department of Public Health,
1-800-852-5770
Formula vs. Breastmilk - English (06/12) IC# 920095
PHOTO



APPENDIX F - POSTER 1

Presented at the 2017 Children's Hospital Research Institute of Manitoba Child Health Research Day. Available on our [website](#).



This research is supported by:



Research Manitoba LAWSON FOUNDATION

APPENDIX G – POSTER 2

Presented at the 2018 Children's Hospital Research Institute of Manitoba Child Health Research Day. Available on our [website](#).

