

[translation from French into English]
[Québec Department of Health and Social Services publication]

BREASTFEEDING IN QUEBEC: GUIDELINES

September 2001

English Translation of:

L'Allaitement maternel au Québec: lignes directrices du Ministère de la santé et des services sociaux.

Dépôt légal, Bibliothèque nationale du Québec, 2001,
Bibliothèque nationale du Canada, 2001, ISBN
2-550-38046-0.

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Executive Summary

At the request of Quebec's Department of Health and Social Services (*Ministère de la Santé et des Services sociaux*, or MSSS), a group made up of specialists in the area of breastfeeding, as well as other persons interested in the subject, collaborated in the writing of the present document. It offers guidelines to direct the actions of MSSS and of regional authorities and public health administrations, facilities, healthcare professionals, support groups and community organizations with regard to breastfeeding in Quebec.

Breastfeeding is recognized as the best form of feeding for infants. It is now widely accepted that, even in our industrialized societies, it reduces the risk and seriousness of respiratory and gastrointestinal infections in infants. The literature on the subject has also confirmed many other benefits to the mother's health, to the health and intellectual development of the child, as well as to society as a whole. However, Quebec shows one of the lowest rates of breastfeeding in the country, as well as an average duration of breastfeeding that falls below current recommendations.

In addition to presenting an overview of breastfeeding's many benefits, this document seeks to present a general picture of the situation of breastfeeding in Quebec and of conditions that can promote it. It also offers objectives and principles to guide policy, as well as strategies and actions likely to promote breastfeeding. The goal of the proposed strategies is to provide every Quebec mother with the possibility of breastfeeding, as well as the opportunity to make an informed decision based on complete and pertinent information, and to ensure that families receive appropriate support and encouragement within a milieu that encourages breastfeeding.

General objective

Both a general objective and intermediate objectives have been specified. The general objective is as follows:

- ⇒ That by 2007, the rate of breastfeeding upon leaving maternity services will rise to 85% and that it be 70%, 60% and 50% respectively at the second, fourth and sixth month of the child's life, and 20% at one year.

Principles

Encouraging breastfeeding requires that it be protected, supported and promoted.

Protecting breastfeeding involves safeguarding already existing practices that favour breastfeeding against all outside interference; for example, every measure that establishes or improves social policies that facilitate breastfeeding contributes to its **protection**.

Supporting breastfeeding involves providing breastfeeding mothers with the skills, as well as the personal and community resources necessary to the success of their breastfeeding; every measure that aims to help mothers and their families achieve their objectives in the area of breastfeeding contributes to the **support** of breastfeeding.

Promoting breastfeeding, or encouraging women to breastfeed, involves favorably predisposing the population to breastfeeding; every measure that ensures a mother and her family's knowledge of breastfeeding and its benefits and encourages mothers to breastfeed contributes to the **promotion** of breastfeeding.

Strategies

Interventions aimed at making these principles a reality should take place throughout the perinatal period. The “Baby-Friendly Initiative” (BFI) is the principle strategy used to encourage breastfeeding in Quebec. Originally, it was jointly established by the World Health Organization (WHO) and UNICEF as the Baby-Friendly Hospital Initiative (BFHI). Internationally recognized, it has allowed numerous countries to increase the rate and duration of breastfeeding, and to improve the quality of care while reducing its cost. As practices in maternity services have a major influence on the breastfeeding experience of mothers, BFHI focuses primarily on this sector, ensuring that the services surrounding delivery and childbirth are conducive to breastfeeding and that they are connected with pre- and postnatal services, wherever those may be provided. In Quebec and elsewhere in the world, initiatives have expanded and became the Baby-Friendly Initiative (BFI) to order to include, in addition to maternity services, facilities (in Quebec, local community health centres) that play a role in encouraging and supporting breastfeeding in the community.

To facilitate the implementation of the BFI in Quebec, it is imperative for every group concerned to:

1. clearly state and implement a breastfeeding policy, taking into account the *Ten Steps to Successful Breastfeeding* (WHO/UNICEF, 1989) in the case of maternity services, or the *Seven Step Plan for the Protection, Promotion and Support of Breastfeeding in Community Health*¹ in the case of local community health centres;
2. see that their policy (practical care guide) is adopted by the board of directors, put into practice by professionals and all others concerned and made known to their partners;
3. respect the *International Code of Marketing of Breast-milk Substitutes*;
4. provide, as part of the work conditions for their employees, conditions (schedules, places and support) that will facilitate breastfeeding among their employees;
5. follow-up on the breastfeeding situation in their own milieu and evaluate the objectives that they have set for themselves in this regard.

Three other strategies are proposed. The first concerns the organization of breastfeeding support resources so that concrete assistance can be provided to women once they leave the hospital environment. The second deals with follow-up and evaluation. It is important that an effective system be established to follow up on breastfeeding rates in Quebec. Finally, the third strategy emphasizes the influence that the MSSS and the network should exert in order to incite other sectors to take an interest in breastfeeding and in its protection.

Overall, these strategies should allow a greater number of women to meet their breastfeeding objectives by finding help and tools adapted to their needs in their environment.

¹ Translator's note: Unofficial translation of *Sept étapes du plan pour la protection, la promotion et le soutien à l'allaitement maternel en santé communautaire*.

Introduction

Health-related patterns and behaviours are attracting an increasing amount of interest, leading a growing number of people to raise questions about breastfeeding. Now recognized as the infant feeding method *par excellence*, breastfeeding brings with it important benefits both for the health of the child and the mother, as well as for families and society in general.

Approximately half of Quebec mothers choose to breastfeed, but only for a short period. Desiring to improve this situation, the Quebec Department of Health and Social Services (MSSS) is taking a particular interest in breastfeeding in Quebec; in its *Priorités nationales de santé publique* [national priorities for public health] 1997-2002 it set out the following objective:

“That by 2002, the rate of breastfeeding in hospital has risen to 80% (it was 48.7% in 1993) and that it be 60% and 30% respectively at the third and sixth month of the child’s life.”

MSSS,
1997, p. 39

[translation]

A mandate was given to a work group made up of breastfeeding specialists and other people interested in this issue in order to gain a better understanding of the reality of breastfeeding in Quebec and to lay down guidelines to direct the policy of the MSSS and of regional authorities and public health administrations, facilities, health professionals, support groups and community organizations in regard to the protection, support and promotion of breastfeeding. This document plays a related role: it sets out the objectives, defines the means that will allow them to be reached, and proposes support mechanisms for the implementation of the strategies and their results. It is based upon up-to-date information, both at the scientific and strategic level.

In publishing this document, the MSSS takes a position in favour of breastfeeding; it affirms its intention to protect and encourage it, with the goal of continually improving the health of the Quebec population, and recommends promoting:

- exclusive breastfeeding¹ for the first six months of the infant’s life; this is the means of feeding that is most appropriate for the infant and is all that is needed to ensure optimal growth and development during the first six months of life;
- ongoing breastfeeding until at least the age of one year, and afterwards as long as the mother and child desire. Around the age of six months, complementary foods can be added.

1. See table 1.

Table 1

Some definitions	
Exclusive breastfeeding ¹	Means that no other food or drink, including water, is given to the nursing infant (with the exception of medication and vitamin or mineral drops; expressed breast milk is also acceptable.)
Predominant breastfeeding ²	Means that breast milk is the principal form of food, including expressed milk; it allows water, water-based liquids and fruit juices, as well as medication and vitamin or mineral drops, but does not include commercial infant feeding formula (artificial milk) nor food-based liquids.
Partial breastfeeding	Means that the child is sometimes breastfed and sometimes fed with breast milk substitutes, whether commercial formula, cereals or other foods.
Bottle-feeding ³	Means that the child is fed by bottle, which may contain various liquid foods, including expressed breast milk.
Artificial feeding	Means that the child is fed with commercial infant formula or cow's milk without any breastfeeding and without receiving any human milk at all.
Commercial infant feeding formula	Refers to artificial or industrial milk (the expression "humanized milk" is to be avoided)
Breast milk substitute ⁴	Refers to any food that is marketed or presented in any way as being a partial or total replacement for breast milk, whether or not it is appropriate for this use.
<p>1. Definition based on those of the World Health Organization (WHO, 1991). 2. <i>Idem.</i> 3. <i>Idem.</i> 4. Definition based on the <i>International Code of Marketing of Breast-milk Substitutes</i> (WHO, 1981).</p>	

The proposed guidelines are aimed at giving every mother the opportunity to breastfeed her child. Having the opportunity to breastfeed means, first of all, being able to make an informed decision on the subject after having obtained all necessary information. It also means receiving the required support and encouragement within an environment that encourages breastfeeding. These guidelines are not intended to blame mothers who decide not to breastfeed, but rather to ensure that they and their families make the decision with full knowledge of the consequences of their choice and the repercussions for the child, the mother and society. Furthermore, the *International Convention on the Rights of the Child*, ratified by Canada, emphasizes a child's right to enjoy the highest attainable standard of health. To this end, article 24 of the convention states that:

“States Parties [...] shall take appropriate measures:

[...]

- e) To ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of accidents;

International Convention on the Rights of the Child,
adopted by the United Nations General Assembly, November 20, 1989.

[original English version]

Three principles underlie the present guidelines: encouraging breastfeeding requires that it be protected, supported and promoted. The Baby-Friendly Initiative (BFI) is the principle strategy used to promote breastfeeding in Quebec.

Quebec has been successful in significantly reducing its infant mortality rate, moving from ninth to first place among Canadian provinces. Thirty years of interventions have caused infant mortality rates to fall from 29.47 per 1,000 live births in 1965 to 4.6 in 1996 (Dzakpasu *et al.*, 1999). Similar progress has been made in the area of perinatal mortality rates. We wish to achieve similar success in increasing breastfeeding rates in order to provide the next generation with the best possible development on the physical, psychological, affective and cognitive levels.

Breastfeeding at the dawn of the year 2000

The situation in Quebec

In the *National Population Health Survey* of 1996-97 (Health Canada, Statistics Canada and the Canadian Centre for Health Information, 1999), breastfeeding rates at birth were 60% in Quebec as compared with 79% for Canada overall, placing Quebec, with the Maritimes, at the lowest level among Canadian provinces.

It is also in Quebec and the Maritimes that breastfeeding duration is the shortest: in Quebec, according to the *Canadian Perinatal Health Report - 2000*, 34.8% of mothers who breastfed did so for less than three months (Statistics Canada, data from 1996-1997).

More recent data from the *Longitudinal Study of Child Development in Quebec*² (ELDEQ 1998-2002) show a recent improvement in the situation with close to three-quarters (72%) of Quebec infants having been breastfed at birth. The study's data also show that 47% were breastfed for at least three months and that 41% were breastfed for at least four months.

According to some studies, however, numerous women are failing to reach the objectives they set for themselves in the area of breastfeeding duration. In the Lepage and Moisan study (1998), carried out in 1994 among first-time mothers in Quebec, only 41% of women who breastfed reached their goal. Yet, some industrialized countries with a standard of living similar to our own had much higher breastfeeding rates than those of Quebec: in Sweden and Norway, the rate was 98% at birth and 70% and 68% at 6 months (Hofvander, 1997; Nylander, 1997). More recently, the rates reported in Norway were 92% at 3 months, 80% at 6 months and 40% at 12 months (Brundtland, 2000).

Recommendations of national and international organizations³

In 1990, participants in a meeting of the WHO and UNICEF on "Breastfeeding in the 1990s: a Global Initiative" created and adopted the *Innocenti Declaration* which seeks to protect, promote and support breastfeeding. The declaration recommends that:

"[...] all women should be enabled to practise exclusive breastfeeding and all infants should be fed exclusively on breastmilk from birth to 4-6 months of age. Thereafter, children should continue to be breastfed, while receiving appropriate and adequate complementary foods, for up to two years of age or beyond."

Innocenti Declaration, 1990.

[original English version]

In 1998, the Nutrition Committee of the Canadian Paediatric Society, Dietitians of Canada and Health Canada released recommendations on nutrition for healthy term infants, from birth to 24 months:

² Translator's note: Unofficial translation of *Étude longitudinale du développement des enfants du Québec*.

³ See table 2.

"Breastfeeding is the optimal method of feeding infants. Breastfeeding may continue for up to 2 years of age and beyond.

Recommendations:

1. Encourage exclusive breastfeeding for at least the first 4 months of life [...]
2. Introduce complementary foods at 4 to 6 months to meet the infant's increasing nutritional requirements and developmental needs."

Canadian Paediatric Society, Dietitians of Canada and Health Canada,
1998, p. 3 and 5.

[original English version]

The American Academy of Pediatrics recommends exclusive breastfeeding for approximately the first six months:

"Exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first 6 months after birth.[...] It is recommended that breastfeeding continue for at least 12 months, and thereafter for as long as mutually desired."

American Academy of Pediatrics,
1997, p. 1037

[original English version]

Why breastfeed?

Effects of breastfeeding on mother and child

The literature on breastfeeding is filled with studies that show the benefits of breastfeeding on the health of mothers, and on the health, growth and development of infants, including those born premature. Breastfeeding reduces the incidence of numerous illnesses or lessens their seriousness. This is the case with diarrhea, respiratory infections and otitis media (Saarinen, 1982; Howie *et al.*, 1990; Duncan *et al.*, 1993; Paradise *et al.*, 1994, Beaudry *et al.*, 1995; Scariati *et al.*, 1997; Wright *et al.*, 1998), and necrotizing enterocolitis (Lucas and Cole, 1990). It may also provide protection for the infant against sudden infant death syndrome (Mitchell *et al.*, 1992), insulin-dependent diabetes mellitus (Mayer *et al.*, 1988; Gerstein, 1994), Crohn's disease (Koletzko *et al.*, 1989) and Hodgkin's disease (Davis *et al.*, 1988; Davis, 1998). In a follow-up of the cohort studied by Howie and collaborators in 1990, Wilson and collaborators (1998) reported that exclusive breastfeeding for 15 weeks was significantly linked to a reduced probability of infections of the respiratory tract during all phases of early childhood (up to age 7), which allows us to assume that breastfeeding also possesses beneficial long-term effects.

Table 2

Documents produced by some associations and organizations taking a position on breastfeeding	
Canadian Pharmacists Association (2001)	
Position statement - <i>Breastfeeding and Infant Nutrition</i>	
Ordre des infirmières et infirmiers du Québec (1998)	
Position statement - <i>Allaitement maternel</i> [Breastfeeding]	
Joint working group (1998):	Canadian Paediatric Society
	Dietitians of Canada
	Health Canada
<i>Nutrition for Healthy Term Infants</i>	
American Academy of Pediatrics (1997)	
<i>Breastfeeding and the Use of Human Milk</i>	
Breastfeeding Committee of Canada (1996)	
<i>The Breastfeeding Committee of Canada's Declaration on Breastfeeding</i>	
The College of Family Physicians of Canada (1996)	
<i>Resolution of the Board of Directors endorsing the Innocenti Declaration and the International Code of Marketing of Breast-milk Substitutes</i>	
Canadian Healthcare Association, formerly the Canadian Hospital Association (1994)	
<i>Policy statement on breastfeeding</i>	

Despite the difficulty in eliminating any bias arising from the differences between mothers who breastfeed and those who use commercial formula (artificial milk), studies and a recent meta-analysis show marked differences in the area of intellectual and cognitive development in favour of children who were breastfed (Lucas *et al.*, 1992; Lanting *et al.*, 1994; Horwood and Fergusson, 1998; Anderson *et al.*, 1999). These beneficial effects were linked to, among other things, the presence of certain long-chain polyunsaturated fatty acids, which are found naturally only in breast milk and which are essential to brain and vision development (Farquharson *et al.*, 1992; San Giovanni *et al.*, 2000).

A recent study gives reason to believe that breastfeeding allows children born underweight to grow more rapidly and to reach their normal weight more quickly than children fed with formula; similarly, a more marked growth in cranial circumference in children who are breastfed could reflect the more rapid growth of the brain during a critical period in the infant's development (Lucas *et al.*, 1997).

Breastfeeding also has benefits for the mother's health. In the short term, it stimulates the secretion of oxytocin, which in turn furthers the contraction of the uterus and reduces the risk of puerperal hemorrhages (Chua *et al.*, 1994). Breastfeeding has a contraceptive effect during the six months following childbirth when it is exclusive or almost exclusive, when it is practiced on request and when the mother still has not menstruated: it slows down ovulatory function and reduces the risk of a new pregnancy to under 2% (Kennedy and Visness, 1992; Labbok *et al.*, 1994). In the longer term, breastfeeding may help reduce the risks of breast cancer in premenopause (Chilvers, 1993; Brinton *et al.*, 1995; Enger *et al.*, 1997), ovarian cancer (Rosenblatt and Thomas, 1993), as well as the risks of osteoporosis (Alderman *et al.*, 1986; Melton *et al.*, 1993) and of hip fractures during postmenopause (Cummings and Klineberg, 1993).

On the psychological level, breastfeeding benefits the mother as much as the child. A special time of interaction between mother and child, it seems to facilitate and strengthen bonding (Watson-Driscoll, 1992; Kennel and Klaus, 1998). It may also reduce in women the level of hormones secreted in response to stress, such as cortisol and ACTH (Altemus *et al.*, 1995). It is not known how and why hormonal responses to stress change during breastfeeding, but it is possible that the change may occur to reduce the anxiety associated with caring for the infant, to conserve the energy necessary for the production of milk, or to increase immune response during the post-partum period.

Contraindications to breastfeeding are rare. Breastfeeding is contraindicated in the case of infants suffering from congenital galactosemia or in the case of mothers with HIV in industrialized countries. However, a recent study leads us to believe that exclusive breastfeeding during the early first months could protect the infant against transmission of HIV from the mother (Coutsoudis *et al.*, 1999). Research presently being carried out may confirm this hypothesis which would have extremely important consequences, particularly in countries where the population does not have access to recommended medications. In the case of mothers who take illegal drugs or abuse alcohol, it is necessary to carry out individual assessments in order to determine if they can breastfeed. An infant who cannot be breastfed should be fed with commercial infant formula (artificial milk) up to the age of 9 to 12 months (Canadian Paediatric Society, Dietitians of Canada and Health Canada, 1998). It is rare, however, that the use of medication be a contraindication to breastfeeding on either a temporary or definitive basis (American Academy of Pediatrics, 1997).

The results reported in this section, concerning the effects of breastfeeding on the health of the child and mother, are necessarily based upon observational studies (not experimental), because researchers cannot determine which mothers will breastfeed, nor for how long a duration.

Importance of exclusive breastfeeding and its duration

Studies from recent years show that the effects of breastfeeding on the health of the mother and child are often related to the duration and exclusivity of breastfeeding. The term "dose-response" appropriately describes this phenomenon: the greater the dose, the greater the effect or response. An American study showed the more breast milk an infant received during its first six months of life, the less it risked suffering from otitis or diarrhea (Scariati *et al.*, 1997). Another study shows that the risk of otitis is two times higher in six-month-old infants who are not breastfed, compared with those who have been exclusively breastfed for six months, while infants who received partial breastfeeding show a less marked difference when compared with non-breastfed infants (Duffy *et al.*, 1997). Furthermore, an effect related to the duration and exclusivity of breastfeeding has also been observed in a Danish study (Vestergaard *et al.*, 1999), in which the results seem to show that the longer children are exclusively breastfed, the more developed their motor and language skills.

An Australian study shows a reduced risk of asthma showing up in the child if it is exclusively breastfed up until the age of 4 months (Oddy *et al.*, 1999). It seems that it is the age at which

other foods, whatever they are, are added to breast milk that interferes with the protective mechanism attributed to exclusive breastfeeding rather than the overall duration of breastfeeding.

The risk of developing anemia or an iron deficiency is also relatively low in breastfed infants. Although iron is present in small quantities in breast milk, it has a high bioavailability and its absorption rate is high as long as breastfeeding is exclusive. Thus, iron is less readily absorbed when human milk is in contact with other foods in the small intestine (Saarinen and Siimes, 1979).

Several studies have also shown that, even in hot countries, the hydration level of exclusively breastfed infants was adequate, whether they were of normal weight (Sachdev *et al.*, 1991; Ashraf *et al.*, 1993) or underweight (Cohen *et al.*, 2000). Water supplements are therefore pointless and are even discouraged since they can decrease the supply of breast milk to the infant (Sachdev *et al.*, 1991).

Similarly, numerous benefits to the mother from breastfeeding are linked to its duration and exclusivity. The contraceptive effect (WHO, 1998; WHO, 1999) and the decreased risk of breast cancer in premenopause are two examples (Newcomb *et al.*, 1994; Lobbok, 1999).

The American Academy of Pediatrics and UNICEF have already recommended for several years that breastfeeding be exclusive for the first six months of the infant's life. For their part, the Canadian Paediatric Society, the Dietitians of Canada and Health Canada recommended in their 1998 statement that breastfeeding be exclusive for at least four months. In 2001 the WHO carried out a consultation of a group of experts on the optimal duration of exclusive breastfeeding. This group's recommendations (WHO, 2001), which apply to populations worldwide, were approved by the recent World Health Assembly: the recommendations conclude that exclusive breastfeeding for six months is to be recommended, while recognizing that some mothers will not be able to follow this recommendation or will decide not to do it. In such cases help should be given to mothers to improve the feeding of their baby.

Differences between breastfeeding and feeding with commercial infant feeding formula

Breast milk is unique, living and adapted to the infant depending on its age and the moment of nursing. Although producers try to put into commercial formula (artificial milk) the same quantities of nutrients (including proteins, fats and sugars) as are contained in human milk, the quality of the basic elements is not the same (e.g., amino acids, fatty acids).

Breast milk contains many constituents that it is impossible to include in commercial formula. Some actively contribute to protecting the baby against infections: antibodies, such as IgA immunoglobulins, protect the infant from microorganisms that could cause an infection in the early weeks or months of life, while host defense factors, such as lactoferrin, offer specific protection against pathogenic bacteria (e.g., *Escherichia coli*).

Besides providing elements essential to the growth and immunological protection of the newborn, breast milk may also bring about, because of its unique composition, a kind of biological programming to provide long-term protection against certain diseases (Barker *et al.*, 1989; Cunningham *et al.*, 1991).

The milk changes taste according to the mother's diet (Mennella, 1995). At a given time, this could facilitate, at least theoretically, the introduction of various foods into the baby's diet, since it has already been exposed to a range of tastes. The texture of the milk is also very variable: colostrum has almost the texture of a gel, the milk at the beginning of nursing is watery and the milk at the end of nursing is creamy. During approximately the first three days of its life, the breastfed baby receives colostrum, whose quantity and composition differ from mature milk. On average, the quantity of colostrum ingested during the first 24 hours of life is only 37 ml; this quantity can vary, however, from 7 to 123 ml (Hartmann, 1987). Colostrum constitutes the baby's

first immunization, because of its immunoglobulin content and other protective factors. As for commercial formula, its composition is uniform from the beginning of the feeding session to the end, from one hour to the next and from one day to the other.

The “container” is also unique: it is warm and soft. From the moment of birth, the healthy term baby, placed on its mother’s stomach, will typically move towards her breast and begin to nurse without assistance. This is a spontaneous behaviour, unless the mother has received medication during labour and childbirth and unless the baby has been separated from its mother after birth (Righard and Alade, 1990).

Moreover, breast milk is a safe and practical form of food since it is always ready, free and at the proper temperature, in any place and situation (e.g., floods or electricity blackouts).

“For the majority of infants, breastfeeding is the most important guarantee of food security. It ensures a safe, secure and nutritionally complete food source. Active support from all sectors of society will increase breastfeeding initiation and duration rates, will lead to more public institutions being recognized as baby-friendly and will improve the food security, nutrition, health and development of our infants.”

Agriculture and Agri-Food Canada,
1998, p. 15

[original English version]

Artificial food made from formula is nonetheless a common practice in our society, despite the fact that it increases the child’s risk of disease for several reasons. On one hand, numerous substances such as antibodies cannot be reproduced and added to these preparations. On the other hand, Walker (1993) emphasizes that distortions have been reported in these industrial preparations due to errors in measuring or ingredients, or even due to chemical or bacterial contaminants. Additional risks arise from potential errors on the part of users preparing products sold in concentrated form. As Professor Hambraeus said, as early as 1977:

“We must draw attention to the fact that the appearance and marketing of breast milk substitutes and the explosive expansion of artificial foods for infants are an extraordinary example of a huge *in vivo* experiment carried out without research protocol and without a control group.”

L. Hambraeus, 1977, p. 17.

[translation from French version]

Costs incurred by feeding with commercial infant feeding formula

Although implementing strategies designed to encourage and support breastfeeding bring with them certain expenses, such as those relating to the training of healthcare workers and financial assistance to support groups, it is important to mention that breastfeeding also brings about savings for the healthcare system, society and families. Since 1993 Norway has included in its annual report on food production an estimated value of the quantity of human milk produced across the country, thus making visible a non-commercial yet still very real food resource (Hatløy and Oshaug, 1997). Studies (Howie *et al.*, 1990; Beaudry *et al.*, 1995; Wright *et al.*, 1998) that show a reduced incidence and seriousness of certain illnesses in breastfed children, as well as a lower rate of hospitalization, lead us to believe that costs to the healthcare system could be reduced by increasing the initiation and duration of breastfeeding. Beaudry’s study, carried out in New Brunswick, shows moreover, after adjustments for misleading factors, that the

hospitalization rate for breastfed infants is 68% lower during the first six months of life. Ball and Wright in the United States had similar findings in 1999 in a study that examined the use of healthcare services over one year for three frequent problems (respiratory infections, otitis media and gastroenteritis). The study shows, after adjustments for misleading factors, that for these three health problems during the first year of life there were, for every thousand infants who were never breastfed, 2,033 more visits to the doctor's office, 212 more days of hospitalization and 609 more prescriptions per 1,000 infants who had never been breastfed, compared with 1,000 infants who had been exclusively breastfed for at least three months.

Similarly, Montgomery and Splett evaluated on a prospective basis a cohort of infants who were part of the WIC program⁴ in the state of Colorado. In 1993, they compared two groups of children over a six-month period: a first group of 406 infants exclusively breastfed for at least 3 months and a second group of 470 infants fed with commercial formula (artificial milk) beginning at birth. The WIC program, among others, provides commercial infant feeding formula and food for mothers and children. If the administrative costs of the program itself and healthcare costs are considered, breastfeeding would have led to savings of \$161 per child over this 6-month period, of which \$102 were healthcare costs. The authors estimated that if 75% of infants enrolled in the WIC program in the United States were breastfed for only 3 months, a monthly savings of approximately \$4 million (US) could be achieved.

Questions are also starting to be raised about the costs associated with the growing rate of absenteeism at work due to parents who have to stay home to look after sick children (Cohen *et al.*, 1995). In this quasi-experimental study carried out in two American companies, 75% of one-day absences from work occurred among mothers who were using commercial infant formula.

Even taking into account the costs associated with breastfeeding, including the increased food needs of the woman who is nursing, the cost of commercial infant formula and bottles represents a considerable additional expense for Quebec families. On the ecological level, breastfeeding, which is a natural practice, also has the advantage of contributing to a reduction in greenhouse gas emissions and in the use of non-biodegradable packaging (Radford, 1992).

Factors associated with the decision to breastfeed and the duration of breastfeeding

Mothers and fathers believe that the method of feeding for their newborn is a matter of choice: breast or bottle. The majority of today's parents were bottle-fed and companies that market formula often present the product as a preparation almost equivalent to human milk: "almost like mother's milk," "more like breast milk than ever before," etc. But in order to make an informed choice, women and their families need to receive information that is both accurate and sufficient, based on valid scientific research. They must also be familiar with the demands of breastfeeding, problems that can arise during this period, and ways of remedying them. The decision not to breastfeed is not easily reversible: when a mother has begun to feed her infant with commercial formula, it is very difficult to change to breastfeeding, even in cases where there is a problem using commercial preparations.

The decision to breastfeed

The decision to breastfeed and to continue breastfeeding arises from several factors. With regard to socio-demographic factors, it is reported that in industrialized countries, mothers from middle and upper classes, with a fairly high level of education, who are married and are non-smokers, are more likely to breastfeed (Bergman *et al.*, 1993; Gilbert and Lepage, 1996; O'Leary *et al.*, 1997). Psychosocial factors associated with the mother, such as her knowledge of breastfeeding, her attitude towards this form of feeding and her degree of self-confidence, also

⁴ WIC: Women, Infant, Children (a food aid program for children and mothers from disadvantaged regions of the United States).

seem to be linked to the decision to breastfeed, the expected duration of breastfeeding and the degree of motivation. The decision to breastfeed is made early in pregnancy, and often even before conception (Bergman *et al.*, 1993; Lepage and Moisan, 1998).

Social support is also related to the decision to breastfeed. One survey shows that mothers who have made the decision to breastfeed are those who have received more support on an informative level (Matich and Sims, 1992). The husband also plays an important part. He can influence the decision of the future mother and can be a source of support from the start of nursing and throughout the breastfeeding period. Fathers should be informed of the advantages of breastfeeding and of the risks associated with the use of commercial infant formula. It is important to correct sometimes erroneous beliefs that men hold with regard to breastfeeding or their perceptions of it as a barrier to the establishment of a relationship with their newborn (Giugliani *et al.*, 1994; Bromberg Bar-Yam and Darby, 1997). In an American survey, fathers who had already had one breastfed child, those who had taken part in prenatal classes and those who had received information on breastfeeding from healthcare professionals showed more knowledge of breastfeeding (Giugliani *et al.*, 1994). Women whose husbands approve of breastfeeding have a greater chance of beginning and continuing breastfeeding (Littman *et al.*, 1994).

Continuing to breastfeed

Certain factors can also influence the duration of breastfeeding. For example, women who make the decision to breastfeed early in their pregnancy seem to have a greater chance of reaching their objectives in the area of breastfeeding duration (O'Campo *et al.*, 1992; Losch *et al.*, 1995). The proposed hypothesis holds that, if a woman is well informed, prepared and encouraged, her confidence in her ability to breastfeed will be increased, thus strengthening her motivation, which can in turn influence the duration of breastfeeding (O'Campo *et al.*, 1992; Quarles *et al.*, 1994). Several programs aimed at women in general (Dumas *et al.*, 1999) or at mothers with lower levels of education from disadvantaged backgrounds (Hartley and O'Connor, 1991; Michaels, 1993; Carroll, 1994; Sciacca *et al.*, 1995; Cyr and Chagnon, 1996) might encourage the initiation and continuation of breastfeeding, but methodological problems in some studies do not allow us to draw definite conclusions on this subject.

Social support is also an influence. It is reported that encouragement provided by those close to the mother, in particular the support of the husband, influences the duration of breastfeeding (Matich and Sims, 1992; Giugliani *et al.*, 1994; Littman *et al.*, 1994; Gilbert and Lepage, 1996).

The support offered to mothers experiencing problems in breastfeeding should be given a higher profile, as recommended in the provincial study on infant feeding among Quebec first-time mothers⁵ (Lepage and Moisan, 1998), that reports that 44.5% of the 1285 mothers who breastfed experienced at least one problem during the breastfeeding period.

The present document encourages breastfeeding up to the age of one year and beyond, and emphasizes that it can continue until age 2 and beyond, which is in accordance with the official recommendations of health organizations, while recognizing that the majority of Quebec women will breastfeed for a much shorter time. Women most often abandon the practice of breastfeeding once the child has begun to take solid food, and even research on the subject is rare. According to a study by Reamer and Sugarman published in 1987, 74% of women who breastfeed longer than one year say that the social stigma and society's negative attitude in general towards prolonged breastfeeding are the main difficulties that they had to face.

The majority of these factors reflect cultural and social norms to which mothers, fathers and their families are exposed.

⁵ *Étude provinciale sur l'alimentation du nourrisson chez les femmes primipares du Québec.*

Cultural norms

Representations, both real and imaginary, of infant feeding reveal a great deal about our cultural context: the baby bottle, symbol of the newborn's nourishment, appears in children's books, on wallpaper and toys. The image of the baby fed by a bottle is also conveyed in advertising and television programs and is used to identify baby-changing stations. An experiment involving 75 primary level students conducted by the committee to encourage breastfeeding in Quebec's eastern townships⁶ in 1996 speaks volumes on the subject: when asked to draw a newborn baby being fed, 70 of the children taking part in the experiment drew a baby being bottle-fed.

Giving a baby its bottle remains the action that first comes to mind when involving fathers in the care of their newborn children, though they have a much bigger role to play. Furthermore, for numerous men and for some women, breasts are the man's property: to reconcile "erotic" breasts with "nourishing" breasts is not always easy for couples.

Breastfeeding is also influenced by factors related to the social environment. The presence of role-models for breastfeeding women, acceptance of breastfeeding in public and of the breastfeeding of toddlers, as well as the elimination of advertising by companies that make breast milk substitutes are all factors that would create a more favourable environment for breastfeeding.

Socio-demographic characteristics can cross cultural barriers. Thus, women sharing a similar socioeconomic status and living in a similar environment, though belonging to different cultural groups, often share similar beliefs and behaviours in the area of healthcare (Health Canada, 1997).

Feminism and breastfeeding

The topic of breastfeeding is often approached from the angle of nutrition, health or even anthropology, but rarely is much attention paid to it from a feminist perspective.

"Contrary to what has taken place in some countries, a substantial number of the leaders of Norwegian feminist movements were also in favour of promoting breastfeeding, given the fact that: yes, women want the same opportunities in employment and wages, but they also want the right to enjoy all the biological potential of their bodies, including the right to breastfeed their children without being hindered by rules and routines coming from the medical community."

Gro Nylander, 1997, p. 24

[translation from French]

Some feminist groups see breastfeeding as an obstacle to women's autonomy. The argument is made that prolonged breastfeeding is harmful to the child's socialization by making it too dependent upon the mother. There is no factual evidence to back up this fear. On the contrary, it appears breastfeeding provides an enriching experience, which gives the mother a feeling of control over her life and the care of her child. It can increase feelings of self-esteem and empowerment (Locklin and Naber, 1993). Empowerment has been defined as:

"... a process by which persons who find themselves in more-or-less incapacitating life circumstances develop, through the means of concrete actions, the feeling that it is possible to exert greater control over the aspects of their psychological and social reality that are important to them and those close to them. This feeling can lead to the exercise

⁶ *Comité d'encouragement à l'allaitement maternel des Cantons de l'Est.*

of real control. The process of empowerment is frequently begun by one form of reaction or another (crisis, revolt, etc.) to the life conditions to which the person is subjected. The development of the process depends on the implementation or acquisition of psychological attitudes (i.e., self-esteem, motivation to action, awareness, etc.) and on particular environmental conditions (i.e. which facilitate the process)."

Le Bossé and Lavallée, 1993, p. 17

[translation]

Once the necessary learning period for breastfeeding has passed, the automatic nature of the act allows the mother to fully appreciate the bond developing between her and her child and the pleasure of satisfying its needs in such a simple way, at any place and any time. Successful breastfeeding in the family context may increase the husband's assistance and involvement in household tasks (Van Esterik, 1994).

Furthermore, while it was popular in the 60's and 70's to talk of equality at any price and in every area while classifying pregnancy and breastfeeding as barriers to personal growth and fulfillment, new trends in the feminist movement are now seeking compromises that take into account the status of women as a whole. In short, these new tendencies remind us that equality of the sexes and identity of the sexes are not to be confused.

"Another preconception also has detrimental effects: 'Bottle-feeding is preferable since it puts the mother and father on equal footing.'

'On equal footing...'. This phrase once again confuses equality of the sexes with identity of the sexes. In our country, people no longer oppose equality in wages, law, finances, education, marriage or career. But unfortunately a great deal of confusion remains around identity."

Bayot, 1998, p. 20

[translation]

Pregnancy, childbirth and breastfeeding are integral parts of a woman's uniqueness that cannot be ignored. In the interest of everyone, we want breastfeeding to be seen as the logical physiological step to follow conception, pregnancy and childbirth.

Numerous people are concerned by the guilt felt by women who have decided to use artificial feeding methods. It is important that all women and their families be provided with an environment that assists them in making an informed, free and conscious decision. That is why it is necessary to provide complete and relevant information on breastfeeding, including the benefits for the health of the mother and for the health and development of the child, but this in no way means that those who decide to act otherwise should be blamed or penalized.

Work and breastfeeding

The ability to reconcile work and breastfeeding seems to be a major factor in the mother's decision to continue breastfeeding or not (Van Esterik, 1996). Mothers, who breastfed as long as they wished, gave returning to work as the main reason for weaning their child. (Beaudry and Aucoin-Larade, 1989).

Moreover, in a study that examined the main factors previously associated with breastfeeding duration in the literature, the compatibility of work and breastfeeding was revealed to be one of two main factors that allowed predictions to be made regarding the duration of breastfeeding in a group of first-time mothers (the other factor was the mother's knowledge of breastfeeding), and this held true for every cultural and socioeconomic milieu.

Some studies lead us to believe that specific breastfeeding support programs in the workplace contribute to an improvement in the duration of breastfeeding (Katcher and Lanese, 1985) and that women who work and breastfeed may have lower rates of absenteeism than other women (Cohen *et al.*, 1995). Given the significant proportion of women of reproductive age who are part of the Quebec labour market (76% in 1998, according to Statistics Canada) and the present recommendations (breastfeeding recommended up to 1 year and beyond), it is important to recognize women's contribution during the perinatal period through social and economic measures that will allow them to strike a balance between work and breastfeeding (e.g., extended maternity leave, flexible hours and appropriate places to express milk). In this way we could put into action the mother and child's right to breastfeed.

“Society recognizes that pregnancy, childbirth and breastfeeding are natural physiological phenomena and that only women have the biological capacity needed to bring a pregnancy to term and to nourish their child. Numerous studies and schools of thought consider breastfeeding a privileged means of establishing the critical bond between mother and child. Paradoxically, the recognition of the time and energy that women must devote to pregnancy, childbirth, breastfeeding and education of their children is not as obvious. And it is indeed a question of recognition: women are in no way turning their backs on their roles as mothers; what they are refusing is an identity based *solely* on their roles as wives and mothers...”

“With women playing an ever-increasing role in the labour market, the difficulty in balancing their family and paid work responsibilities becomes not only every working mother's problem, but also society's problem.”

Quéniart and Bourgault, 1999, p. 2-3

[translation]

Indeed, breastfeeding cannot be a ground for discrimination according to Quebec's Charter of Human Rights and Freedoms. The right to breastfeed is a human right that implies an obligation on the part of the employer or the institution to make reasonable accommodation, which might be expressed in a workplace breastfeeding policy. It should include three elements: time (flexible schedule, breaks), space and proximity (daycare in the workplace or a comfortable place to nurse, a refrigerator to store the expressed milk), and support.

Poverty and breastfeeding

“The relationship between poverty and illness has been clearly shown, but it is all the more tragic in the case of young children. Indeed, we see in children from poor families twice the number of deaths in the first year of life, twice the number of hospitalizations and 50% more premature births.”

Le Médecin du Québec, December 1998, p. 112

[translation]

According to 1997 data, Quebec leads the nine other provinces in the per capita number of low income families and single persons (Mayer and Morin, 2000). Children are those most likely to suffer the effects of poverty. Rates for premature births, low birth weights, iron deficiency anemia and respiratory illnesses are higher in children from disadvantaged backgrounds (Martin and Boyer, 1995). Breastfeeding, while providing the child with the best possible food source, also protects it against some of these problems, or reduces their intensity. It is probable that the

benefits of breastfeeding would be most greatly felt in this sector of the population (Kramer, 1991).

Some concrete initiatives have already been implemented to encourage breastfeeding among mothers receiving income security benefits. A new program from Quebec's Department of Labour and Social Solidarity entitles mothers who are breastfeeding a baby under one year of age to receive a special breastfeeding benefit of \$55 per month. In 1995, only 18% of recipients requested this benefit (Martin and Boyer, 1995).

As it was reported in a new survey carried out in Quebec in 1994 that 54% of low-income first-time mothers breastfed their newborns as compared to 66% of the overall group of first-time mothers included in the survey (Lepage and Moisan, 1998), the promotion and support of breastfeeding ought to be part of programs aimed at these women. For example, the *Naître égaux - Grandir en santé* [to be born as equals - to grow up in health] program, a comprehensive program of preventive perinatal intervention designed for pregnant women and families with young children from disadvantaged backgrounds (Martin and Boyer, 1995), takes its inspiration from the principle of empowerment defined previously. Now, breastfeeding one's baby can be a way of building self-esteem, and of drawing on one's own inner resources (including breast milk) to act on a situation (in this case, the health of one's children).

The role of healthcare professionals and perinatal care practices

Because of the large number of healthcare visits necessitated by pregnancy, and the very unequal accessibility to prenatal classes in public facilities, the doctor and midwife occupy a special position that allows them to promote awareness and to support mothers and families. They represent an important link in the continuity of services, particularly during the prenatal period.

The Canadian Task Force on the Periodic Health Examination (1994) recommends to doctors that they conduct prenatal and postnatal counseling in the area of breastfeeding and that they adopt perinatal measures that promote breastfeeding. This is a type A recommendation, meaning one for which there is sufficient data, enough that the physician should show an express interest in this measure as part of a periodic medical examination.

However, mothers often report that the advice they receive from healthcare professionals, including from physicians, is not consistent and may even be contradictory (Andersen and Geden, 1991; Valaitis and Shea, 1993; Courville, 1995; Freed *et al.*, 1995), although in Lepage and Moisan's study (1998), only 8% of mothers mention contradictions in the information received. Moreover, they seldom mention healthcare professionals as a source of support (Séguin *et al.*, 1998), or say that this topic has not been discussed, or discussed very little, with them (Izatt, 1997; Séguin *et al.*, 1998).

For their part, healthcare professionals say that they received little training dealing specifically with breastfeeding during their education. Therefore they often depend on their own personal beliefs and experiences to counsel mothers (Barnett *et al.*, 1995; Freed *et al.*, 1995). Thus, the attitudes and beliefs of some professionals are sometimes not favourable to breastfeeding (Patton *et al.*, 1996; Barnett *et al.*, 1995), and are revealed in a lack of interest in the difficulties experienced by mothers and in the limited empathy shown towards those who choose to breastfeed (Courville, 1995). It is therefore important that professionals have the knowledge, skills and techniques necessary to help mothers who experience difficulties during the breastfeeding period. Several informational and training tools now exist, and many of them are available on the Internet.

Maternity care practices also have an important influence on the breastfeeding experience of mothers. For example, rooming-in (Yamauchi and Yamanouchi, 1990; Pérez-Escamilla *et al.*, 1994) and early contact with the newborn (Bernard-Bonnin *et al.*, 1989; Pérez-Escamilla *et al.*,

1994), the absence of food supplements or complements (Nylander *et al*, 1991; Hill *et al*, 1997; Martin-Calama *et al*, 1997) and breastfeeding on request (Pérez-Escamilla *et al*, 1994) all have a positive effect on breastfeeding duration. On the other hand, the distribution of infant formula (artificial milk) samples or discount coupons seem to have a negative effect on the continuation of breastfeeding (Pérez-Escamilla *et al*, 1994; Wright *et al*, 1996).

For several years, we have seen a change in the way care is provided to mother and infant. The mother-infant “rooming-in” process throughout the hospital stay, including at night, and the assignment of one nurse to provide the care they require are part of Health Canada’s most recent recommendations (Health Canada, 2000).

“Combined mother/baby postpartum nursing care, also known as dyad care, is a nursing strategy that promotes the family’s role as primary caregiver for the newborn [...] The emphasis is on providing maternal and newborn care that fosters family unity while maintaining physical safety.”

Phillips, 1996 and 1997, in Health Canada, 2000.

[original English version]

Single or private rooms for the postnatal care offered to mother and infant are therefore preferable, but the fact that they are unable to occupy a private room in some facilities should not deprive families of the advantages related to rooming-in.

It seems that the short stay of mothers in hospitals or birthing centres can be compensated for by the follow-up provided after returning home, as long as the mother has breastfed at least twice without assistance and has learned to recognize the signs that her baby is feeding well before they are discharged (Canadian Paediatric Society and The Society of Obstetricians and Gynaecologists of Canada, 1996). This recommendation is also emphasized by the Quebec council for the assessment of healthcare technologies⁷ in its December 1997 report:

“The literature analyzed does not permit us to link early discharge to effects on the duration of breastfeeding or on patient satisfaction. As to the quality of the breastfeeding, which is directly related to the most frequent causes of the newborn’s being re-admitted, **it is essential to emphasize pre and postnatal training as well as the post-discharge follow-up in order to ensure that breastfeeding is adequate.**”

Quebec Council for the assessment of healthcare technologies, 1997, p. 45.

[translation]

A good start to breastfeeding is a determining factor in reducing the risk of re-admission of newborns due to jaundice or dehydration - hence the importance of improving the training of staff who should encourage mothers to express their milk and give it to the baby during its first days if it does not actively nurse.

A phone call should be made to all mothers the day after they return home, in order to:

“[...] check on the needs and concerns of the mother and the needs of the baby, as well as to provide the necessary referrals, particularly when there are difficulties involved in breastfeeding. It must also allow a home-visit to be arranged, to be carried out in the two

⁷ Unofficial translation of *Conseil d'évaluation des technologies de la santé du Québec*.

days following the phone call in cases of early discharge.¹ **The home-visit should never occur later than the third day after the mother and infant have left the hospital.”**

*Ministère de la Santé et des Services sociaux (Quebec),
1999, p. 24.*

[translation]

¹ Early discharge: a stay of 48 hours or less following vaginal delivery; 96 hours or less following a caesarian section.

Healthcare professionals working in environments that have established a protocol for systematic home visits for all women following delivery note that readmissions due to complications related to breastfeeding have not increased with the reduction in the length of hospital stays, whether discharge is early or not (Bélanger and Mercier, 1997).

Interventions and initiatives that encourage breastfeeding

Even though an increasing number of interventions are taking place to encourage breastfeeding, very few cover the whole perinatal period, and few have been evaluated. When they have been evaluated, the method used has not always been strict enough to allow convincing conclusions to be drawn. Despite this fact, we do possess some data on particular interventions that have had a positive effect on breastfeeding rates and duration, such as training programs for professionals or educational programs aimed at mothers (Wilmoth and Elder, 1995), as well as changes in some hospital practices (Wilmoth and Elder, 1995; Pérez-Escamilla *et al.*, 1994) and improvement in postnatal home support (Serafino-Cross and Donovan, 1992; Cyr and Chagnon, 1996). In the United States, the “Best Start” program makes use of various interventions throughout the perinatal period, including basic training for all practitioners, training aimed at families, and a support mechanism for the time of the mother and infant’s return home. An evaluation of the program leads us to believe that, in the group who took the program, there was a higher rate of women who began breastfeeding (Hartley and O’Connor, 1991).

In the Brome-Missisquoi region of Quebec, a program akin to Best Start, but also including an important revision of hospital practices, was set up by the nurses of the Brome-Missisquoi-Perkins hospital, in collaboration with doctors from private clinics, the nurses of La Pommeraie (Centre local de services communautaires CLSC) (Local Community Health Centres LCHC) and a support group (Jetté, 1997). The program includes three spheres of action: prenatal care, hospital care, and postnatal care. A formative assessment of the program showed an increase in the rate of breastfeeding at the time of leaving the hospital, which rose from 47% in 1994 to 80% in 1997. Nonetheless, the concomitant reduction in the length of the hospital stay may have favorably influenced the breastfeeding rates, since breastfeeding is higher on day 1 than on day 3 or 4. The program evaluation report does not allow us to attribute the results observed to the program itself, but the extent of the results leads us to believe that it has significantly contributed to an increase in breastfeeding rates (Jetté, 1999).

In Quebec, a number of interdisciplinary committees on breastfeeding have been established and hospitals, birthing centres, local community health centres and breastfeeding support groups have begun steps to improve the breastfeeding situation in their region. Birthing centres in general and a few hospitals in or near large centres are already reaching their goal of an 80% breastfeeding rate upon leaving the facility, though numerous inequalities still exist in breastfeeding rates between different regions, in care practice and in the support provided to mothers.

Global initiatives to protect, promote and support breastfeeding

The Baby-Friendly Hospital Initiative (BFHI)

On the global level, in 1991, the WHO and UNICEF proposed the Baby-Friendly Hospital Initiative (BFHI), which seeks to create environments where breastfeeding is the norm, in order to give

each child the best possible start in life by protecting, promoting and supporting breastfeeding (WHO/UNICEF, 1992). The title “baby-friendly” is given to facilities that pass an external evaluation approved by an accredited committee. A re-evaluation mechanism is also provided, to ensure that the criteria recommended by the Initiative are maintained. This is, in effect, a quality assurance for mothers and their newborns. The Initiative includes clearly stated criteria based on the *Ten conditions for successful breastfeeding* put forward by the WHO and UNICEF in 1989. Over 171 countries are working to certify baby-friendly facilities. In November 2000, 15,030 facilities in 141 countries throughout the world were recognized as baby-friendly (WHO, 2000). In July 1999, the Brome-Missisquoi-Perkins Hospital in Cowansville, Quebec became the first baby-friendly hospital in Canada. In several countries, implementation of the Initiative is linked to an increase in breastfeeding initiation and duration, as well as in an improvement of the quality of care and the health of newborns. In Sweden, the BFHI was established in 1992 and all facilities where childbirth takes place now have the baby-friendly accreditation. In that country, the rate of exclusive breastfeeding at 6 months was 50% in 1992, a level at which it had remained constant since 1980. However, in 1995, the rate of exclusive breastfeeding at 6 months had reached 70% (Hofvander, 1997).

A recent random study (Kramer *et al*, 2001), probably the biggest ever carried out in the field of breastfeeding, assessed the effects of an intervention model based on the BFHI in maternity services. These maternity services were compared with a control group of maternity services that maintained the usual policies and practices in the area of infant feeding. The study, carried out in Belarus, included a total of 17,046 mother-infant dyads. The maternity services of the experimental group implemented the BFHI's *Ten conditions*, slightly adapting the tenth condition since no breastfeeding support group existed in Belarus when the project began. The results showed an increase in the duration of breastfeeding during the first year of the child's life and an increase in exclusive breastfeeding at 3 and 6 months, as well as a lowered risk of gastrointestinal infection and infantile eczema during the first year of life.

The International Code of Marketing of Breast-milk Substitutes

Faced with the large-scale promotion of breast milk substitutes and a decline in breastfeeding everywhere in the world, in 1974, the World Health Assembly emphasized the need to take action with respect to baby food advertising, with proposed measures that included codes of advertising practice as well as appropriate legislation. In 1978, the Assembly recommended banning the abusive promotion of baby foods used as a replacement for breast milk and in 1980 it recommended that a code be drawn up. The *International Code of Marketing of Breast-milk Substitutes* was adopted by 118 countries, including Canada, in 1981 (WHO, 1981).

The aim of the code, and the World Health Assembly's subsequent resolutions relating to it, is to contribute to providing safe, healthy and adequate nutrition to infants, while protecting and encouraging breastfeeding. It ensures the correct use of breast milk substitutes when these are necessary, based on adequate information and using appropriate marketing and merchandizing methods (WHO, 1981); table 3 presents a summary of the code.

Table 3

Overview of the <i>International Code of Marketing of Breast-milk Substitutes</i> and of the World Health Assembly's subsequent resolutions
1. To ban the promotion of infant formula, feeding bottles and nipples to the general public.
2. To ban the distribution of free samples to pregnant women or parents.

3. To ban the promotion of these products in the healthcare system (no free samples or supplies).
4. To ban the use of personnel paid by manufacturers to counsel parents.
5. To ban the distribution of personal samples or gifts to healthcare professionals.
6. To ban the promotion of commercial baby foods such as canned solids, cereals, juices and bottled water so as not to harm the practice of exclusive breastfeeding.
7. To require that all labels and packaging clearly mention the superiority of breastfeeding and include a warning about the risks and costs associated with artificial foods.
8. To ensure that manufacturers and distributors provide healthcare professionals with scientific information limited to the facts.
9. To ensure that all products are of good quality, that the expiry date is clearly indicated, and that the packaging does not include terms such as “humanized” or “maternalized.”
10. In order to avoid conflicts of interest, to ensure that healthcare professionals working with infants and young children do not receive any financial compensation from baby food manufacturers (e.g., vacations, invitations to conventions, etc.)

Nonetheless, violations of the *International Code of Marketing of Breast-milk Substitutes* are reported regularly to organizations that are involved with the protection of breastfeeding, such as INFACT Canada, which is the North American branch of the International Baby Food Action Network (IBFAN). For example, parents are invited to become members of clubs sponsored by infant formula companies and are given artificial milk samples even before their baby is born. Employees of these companies give training on baby feeding to the future parents in places such as hotels or pharmacies. These same companies have even sponsored various events on television. These are only a few examples that show that these companies do not respect the Code, despite article 11.3, which reads as follows:

“Independently of any other measures taken for implementation of this Code, manufacturers and distributors of products within the scope of this Code should regard themselves as responsible for monitoring their marketing practices according to the principles and aim of this Code, and for taking steps to ensure that their conduct at every level conforms to them.”

WHO, 1981, p. 23.

[original English version]

Furthermore, in 1993, when Quebec’s MSSS modified its circular concerning the supplying of milk for infants in hospitals, it established a system of product availability or rotation that some companies did not appreciate. In case no. 500-05-007439-944, involving Mead Johnson, Judge Pierre Tessier of the Quebec Superior Court saw through the financial interest of formula manufacturers and their marketing strategies:

“Some 92,000 children were born in Quebec in 1992-1993. Approximately 2% of the total infant milk production is intended to supply hospitals, while 98% goes to the food trade (food stores, pharmacies, etc.) The overall Quebec market for this product represents approximately 45 million dollars, with the overall Canadian market representing 135

million dollars. Because of this circular, Mead fears losing 10 million dollars a year in sales.

“These figures are indicative of Mead Johnson’s interest in this case.”

Mead Johnson Canada v. Robillard et al. (1995), Superior Court, March 15, Pierre Tessier, J.S.C., p. 6.

[translation]

“Mead Johnson, we should recall, claimed that the rotation system, as an alternative to the system of making products freely available, will reduce its share of births, and consequently the ‘market’ share it holds in hospitals and, because of the loyalty factor on the part of mothers to a product used in a hospital setting, eventually its retail market share and therefore its sales revenue.”

Mead Johnson Canada v. Robillard et al. (1995), Superior Court, March 15, Pierre Tessier, J.S.C., p. 72.

“The court cannot help drawing a parallel with the sponsorship of a cultural or sporting event by a commercial business, with a view to gaining a subsequent advantage on the commercial consumer market.”

Mead Johnson Canada v. Robillard et al. (1995), Superior Court, March 15, Pierre Tessier, J.S.C., p. 73.

[translation]

It should be pointed out that in 1999, the MSSS once again modified its supply circular to allow hospitals that so wished to be recognized as baby-friendly and to completely respect the Code.

Objectives, principles and strategies

Because it recognizes that breastfeeding provides the best nutrition and health for every child in the world, the World Health Assembly, of which Canada is a member, adopted in 1981 the *International Code of Marketing of Breast-milk Substitutes* whose goal is to protect this essential, though very fragile, resource. The World Health Organization and UNICEF published in 1989 the joint declaration *Protecting, Promoting and Supporting Breast-feeding: The Special Role of Maternity Services* in an effort to make the international community aware of the essential role played by maternity services in promoting and supporting breastfeeding. In 1990, the *Convention on the Rights of the Child*, adopted by the United Nations General Assembly, came into force. It stipulates that the States have a legal obligation to provide families with necessary information and support in the matter of breastfeeding. Finally, the WHO and UNICEF in 1991 launched the Baby-Friendly Hospital Initiative, aimed at providing maternity services with universal recommendations to protect, promote and support breastfeeding. In 1997, the MSSS adopted, among others laid out in Quebec's *Priorités nationales de santé publique* [national priorities for public health], an objective to raise the rate and duration of breastfeeding in Quebec. These objectives have been revised in accordance with the latest information on the situation of breastfeeding in Quebec.

The general objective

That by 2007, the rate of breastfeeding, when leaving maternity services, has risen to 85%, and that it be 70%, 60% and 50% respectively at the second, fourth and sixth month of the child's life, and 20% at one year.

Intermediate objectives

1. That by 2003, a system be in place to follow up on exclusive and partial breastfeeding rates for mothers and infants when leaving maternity services, and at 2, 4, 6, and 12 months, for the province of Quebec and for each socio-health region.
2. That by 2003, the MSSS and its facilities have established the necessary conditions (time, space and support) to promote breastfeeding among its employees.
3. That by 2004, all maternity services and all local community health centres have begun the process of obtaining "baby-friendly" designations.
4. That by 2005, each region include a sufficient number of breastfeeding support groups, to which every maternity service and local community health centre can refer mothers.
5. That by 2007, at least 20 maternity services and 40 local community health centres in Quebec be recognized as "baby-friendly."
6. That by 2007, the rates of exclusive breastfeeding be 75%, 40%, 30 %, and 10% after leaving maternity services and at 2, 4 and 6 months of the child's life, respectively.

Principles

Encouraging breastfeeding requires that it be protected, supported and promoted.

Numerous mothers already wish to breastfeed. It is especially important in their case to protect this desire against all outside interference or against anything that could compromise it; every

measure that serves to introduce or advance social measures such as maternity leave, workplace daycare, the employer's obligation to accommodate breastfeeding women, and respect for the *International Code of Marketing of Breast-milk Substitutes* contributes to the **protection** of breastfeeding.

Support for breastfeeding aims at providing breastfeeding mothers with the skills and the community and personal resources necessary for successful breastfeeding; every measure aimed at helping mothers and families reach their objectives with regard to breastfeeding contributes to the **support** of breastfeeding.

The promotion and encouragement of breastfeeding seeks to favorably predispose the population towards breastfeeding; every measure that aims to provide women and their families with a greater familiarity and understanding of breastfeeding and its advantages, and that aims to motivate mothers to breastfeed contributes to the **promotion** of breastfeeding.

Priority should be given to the protection and support of breastfeeding, and to a lesser degree, to promotional programs. The best encouragement to breastfeed comes from women who have breastfed happily and successfully and who can thus act as role models for women around them. As Ted Greiner emphasizes:

"In general, protective programs put pressure on government and industry, supportive strategies put pressure on the health care system, on networks of women and on employers, while promotive strategies only with difficulty can avoid putting pressure directly on women themselves."

Ted Greiner's Breastfeeding Website.

[original English version]

Strategies

Strategy 1 - The Baby-Friendly Initiative (BFI)

The Baby-Friendly Initiative (BFI) offers both a framework and tools to protect, support and promote breastfeeding and serves as a starting point for the improvement of the breastfeeding situation in Quebec. Moreover, respecting the *Ten Steps to Successful Breastfeeding*, which serves as the basis for this strategy, was already recommended in the *Politique de périnatalité du Québec* [Quebec perinatal policy] (MSSS, 1993), and the implementation of BFI-type interventions was recommended by the Committee of administrators of regional health and social service authorities of Quebec⁸ in a document entitled "Preventative interventions for children from 0 to 5 years and their families to implement promotional/preventional policy at the local and regional level,"⁹ published in 1997.

In Canada, the Baby-Friendly Hospital Initiative was modified to become the Baby-Friendly Initiative, in order to emphasize the desire to influence changes not only in maternity services, but also in other environments frequented by mothers, fathers and families. Ultimately, this was also a way of acknowledging that breastfeeding and the care of mother and child are not limited to the hospital context. The *Seven Step Plan for Protecting, Promoting and Supporting Breastfeeding in the Community* was in fact drawn up with this philosophy in mind, since supporting local

⁸ Unofficial translation of *Comité des directrices et directeurs généraux des régions régionales de la santé et des services sociaux du Québec*.

⁹ Unofficial translation of *Interventions à visée préventive auprès des enfants de 0 à 5 ans et de leur famille pour concrétiser le virage promotion/prévention aux niveaux local et régional*.

community health centre employees is essential, for example, if we wish women to choose breastfeeding and to continue it upon their return home.

The official launch of the BFHI/BFI in Canada took place in November 1998; the first “baby-friendly” hospital in Quebec received its designation in 1999 and several other facilities are preparing to be certified. Nonetheless, a survey carried out in 1993 among Canadian hospital representatives showed that only 4.6% of respondents (21 out of 454) had a policy that conformed with the WHO’s and UNICEF’s *Ten Steps*, and that this figure fell to 1.3% (6 out of 453) when the application of the *International Code of Marketing of Breast-milk Substitutes* was factored in (Levitt *et al.*, 1995).

In wanting to introduce the process leading to the “baby-friendly” certification in healthcare facilities in Quebec, we do not expect every mother to breastfeed her baby, but desire instead that all women have the possibility of making an informed decision and of benefiting from an environment that is favourable to breastfeeding. This often requires that changes be made to practices in maternity services and local community health centres, and that the training of various practitioners be updated. The Initiative also offers advantages to mothers who decide not to breastfeed. Several of the recommended care practices are favourable both to bottle-fed babies and breastfed babies, as well as to their mothers: early skin-to-skin contact, proximity of parents and newborn, rooming-in, feedings on request, personalized instruction for parents and referrals to local community health centres upon leaving the hospital. The BFI constitutes both a development guide and a guide for evaluating progress, and is part of an overall concern with the quality of care offered to clients. A facility bringing its practices in line with the spirit of BFHI/BFI conditions, even without obtaining the official certification, can have only positive effects on breastfeeding and on healthcare in Quebec. If, for whatever reasons, some facilities cannot meet a condition, the efforts made towards respecting the other conditions will have already largely improved the encouragement for breastfeeding, support for mothers and the quality of care provided to mothers and newborns.

To be recognized as “baby-friendly,” a hospital or birthing centre must:

1. meet the requirements of the *Ten Steps to Successful Breastfeeding*;
2. respect the *International Code of Marketing of Breast-milk Substitutes*;
3. have a 75% rate of exclusive breastfeeding among mothers and infants leaving maternity services, or a rate equal to the national average if the latter is greater than 75%;
4. successfully undergo the evaluation and certification process.

To be recognized as baby-friendly, a local community health centre must:

1. meet the criteria laid down in the *Seven step plan for protecting, promoting and supporting breastfeeding in the community*;
2. respect the *International Code of Marketing of Breast-milk Substitutes*;
3. successfully undergo the evaluation and certification process.

In Canada, the Breastfeeding Committee for Canada (BCC) is responsible for the accreditation of facilities, but each province and territory should, for local evaluations, be able to rely on a committee whose results will be sent on to the BCC.

Strategy 2 - Organizing support for breastfeeding

The support for breastfeeding provided in hospitals and birthing centres should allow a large number of women to begin and continue breastfeeding. However, in order for women to reach their breastfeeding objectives, the support of local community health centres, breastfeeding support groups, community perinatal organizations and the milieu in which the families live is essential. Such support provides concrete help and should be readily accessible after a mother and infant leave the hospital or birthing centre.

A recent systematic review of randomized clinical trials dealing with postnatal support offered to breastfeeding mothers shows that those who receive help from a professional trained in the area of breastfeeding are more likely to breastfeed their baby up to the age of two months and that, of those mothers, a greater number practice exclusive breastfeeding (Sikorski and Renfrew, 2000).

In addition to the postnatal support offered during the perinatal period, breastfeeding can also be supported within the framework of various programs such as vaccination, individual follow-ups of children from disadvantaged backgrounds and infant stimulation programs, as well as through Info-Santé services and information intended for mass circulation, such as the book *Mieux vivre avec son enfant* [living better with your child], published by the *Institut national de santé publique du Québec*.

Beginning with the prenatal or postnatal period, women could be directed towards support groups or community organizations. Such examples of non-professional mother-to-mother support have been shown to increase breastfeeding rates and duration rates to varying degrees (Shaw and Kaczorowski, 1999; Schafer *et al.*, 1998). Thus, access to breastfeeding support groups or to community perinatal organizations ought to be assured in every region of Quebec. The implementation of concrete measures aimed at helping mothers, families and the various people working with them should be accompanied by varied tools adapted to the particular regional, cultural, linguistic and organizational realities within the province.

Furthermore, the workplace can also offer - or fail to offer - crucial support for breastfeeding. Given the large number of Quebec women in the job market, combined with the still-common belief among employers and women that work and breastfeeding are incompatible, it is important to ensure that actual conditions in the workplace are conducive to breastfeeding, and that women experience solid support when they wish to continue breastfeeding after returning to work. The benefits of measures such as breastfeeding breaks, flexible schedules, workplace daycare, a comfortable room for expressing milk and a refrigerator in which to store it have already been shown, both for mothers and employers.

Strategy 3 - Follow-up and evaluation

It is recommended that the impact of the measures implemented be regularly evaluated, so that measures and support can be more effectively directed towards particular segments of the population (e.g., by age group, region or educational levels). Provincial or regional surveys represent substantial costs as well as considerable investments of time and human resources, and can be carried out only from time to time. It is therefore important that other means be found to ensure a regular follow-up of breastfeeding rates.

A follow-up of breastfeeding rates upon leaving maternity services might be carried out by means of the live birth registration (schedule SP-1) which is filled out for every child born in Quebec. Information on breastfeeding rates could be collected at 2, 4, 6 and 12 months, which would allow the duration of breastfeeding to be known. These particular ages have been chosen since they correspond to vaccination intervals. As 50% of children in Quebec are vaccinated in local community health centres, and the "Vaccination" application of the health centres' "Intégration CLSC" software package allows data to be compiled, it would be possible to assess on an on-going basis the effectiveness of these measures within this group. Furthermore, a follow-up of breastfeeding rates at 2, 4 and 6 months would allow us to know whether the objectives for

exclusive breastfeeding are being met. These data also allow us to compare ourselves to other countries where the same periods are used. In the long term, we should look into the possibility of adding data concerning child feeding to the vaccination forms filled out by doctors, in order to have information on the entire Quebec infant population.

It would also be interesting to carry out provincial, regional or local studies in order to evaluate mothers' satisfaction levels with the services received and to learn more about attitudes and beliefs. These data are particularly important when it comes to setting up programs aimed at behavioural change, as is the case with breastfeeding.

Finally, gathering figures at the provincial level on the number of baby-friendly hospitals, birthing centres and local community health centres will allow us to know if the first proposed strategy has been implemented. Moreover, the various centres and facilities will have to conduct a follow-up of the objectives that they set for themselves with regard to protecting, promoting and supporting breastfeeding.

Strategy 4 - The power of influence

The MSSS, facilities and practitioners must use their influence to interest other sectors in promoting and protecting breastfeeding (e.g., other government departments; education, justice, social services and labour sectors; businesses and unions.)

A shared responsibility

Attaining the above-mentioned objectives requires implementing different measures at various levels. Establishing networks that bring together the various partners concerned will promote the exchange of ideas and the collaboration necessary to reach these goals. The following pages lay out the specific measures targeted for each milieu concerned, as well as suggestions for steps that could be taken to achieve them.

All healthcare professionals and volunteers from support groups and community organizations who work with women and families have a role to play in encouraging women to breastfeed and in ensuring their success. They need to provide information to women and families, prepare them for the experience, support and encourage them, and do conduct follow-ups in particular cases. These actions are the responsibility of the attending physician (general practitioner, gynecologist, pediatrician), prenatal class instructor, nurse, midwife and dietitian, and they are particularly important during pregnancy and during the postnatal period. All of them also have a role to play in making environments frequented by young parents more conducive to breastfeeding, whether in network facilities, workplaces, or other public places.

Healthcare professionals working in private practice and in facilities can also take an active part in revising practices in order to encourage breastfeeding.

Responsibilities of Quebec's Department of Health and Social Services (MSSS)

The MSSS holds a firm and unequivocal position in favour of breastfeeding and makes known its position both within the network as well as in the general population. Such an affirmation provides a fundamental point of reference for on-site practitioners.

Priority measures

- State its positions on breastfeeding, in conformity with perinatal policy, and make them known and applied at every level. To this end, the department will have to:
 - appoint a person to be in charge of the breastfeeding portfolio at the provincial level;
 - integrate breastfeeding into all government programs relating to child health;
 - ensure that information on breastfeeding and infant feeding is harmonized and updated in provincial documents or services to which parents and professionals refer, by instructing the organizations responsible (e.g., Info-Santé, *Mieux vivre avec son enfant* [Living Better with Your Child]);
 - add information on breastfeeding, including the department's position, to its website;
 - ensure the creation and updating of a directory of tools relating to breastfeeding and ensure that it is distributed throughout the healthcare system.
- Establish a breastfeeding publicity strategy aimed at the general population.

- Promote the implementation of the Baby-Friendly Initiative (BFI) by encouraging the establishment of a provincial committee whose mandate would include:
 - making known the *Ten Steps to Successful Breastfeeding* and the *Seven Step Plan for the Protection, Promotion and Support of Breastfeeding in Community Health* to health care facilities;
 - seeing that the BFI is put into place (providing documentation, logistical assistance and, if necessary, the support of a person specialized in breastfeeding);
 - assuming responsibility, in collaboration with the organizations concerned (e.g., WHO, UNICEF, the Breastfeeding Committee for Canada, etc.), for the certification of baby-friendly facilities and for recommendations made to the department for the granting of the designation.
- Encourage the application of the *International Code of Marketing of Breast-milk Substitutes*, which implies:
 - including in policy relating to ministerial publications, both written and audio-visual, the obligation to respect the Code, while emphasizing that breastfeeding is the appropriate way to feed a baby. Images representing bottle-feeding, baby bottles, nipples or commercial infant feeding formula (artificial milk) should not be used unless absolutely necessary;
 - ensuring that policies relating to governmental publications are respected, and using influence on other departments to ensure that the Code is respected.
- Develop training tools and activities, and support regional authorities in implementing training.
- Ensure that social policies (interdepartmental and cross-sectoral) that promote breastfeeding are maintained and improved.
- Encourage all professional bodies to ensure that universities and vocational colleges offer students who will be future health professionals an adequate theoretical and practical training in the area of breastfeeding.
- Distribute to facility administrators appropriate information concerning programs aimed at protecting, promoting and supporting breastfeeding (e.g., BFI).
- Put into place the conditions (time, space and support) necessary to facilitate breastfeeding among its employees.
- Ensure a follow-up of the breastfeeding situation at the provincial, regional and local levels with regard to breastfeeding rates when leaving the hospital or birthing centre and at 2, 4 and 6 months, and with regard to the number of facilities that have been designated baby-friendly, which implies:
 - including in the provincial computer system the data and information necessary to do a follow-up of the breastfeeding situation, that is, at least including information on the prevalence of breastfeeding when leaving the hospital or birthing centre (e.g., the live birth registration, schedule SP-1);

- providing for the collection, in the short term, of the data necessary to follow up on the rates of exclusive and partial breastfeeding when leaving maternity services and at 2, 4, 6 and 12 months, for each region. It will also be necessary to provide for the systematic collection, in the medium term, of information at the time of vaccination in order to know the rates of exclusive and partial breastfeeding at 2, 4, 6 and 12 months, using the “Vaccination” application of local community health centres’ “Intégration CLSC” software package, *Guichet santé*,¹⁰ or any other means that will provide an overview of the situation of breastfeeding in Quebec;
- gathering figures on the number of baby-friendly facilities (hospitals, birthing centres and local community health centres) as well as those that have initiated steps towards obtaining the designation.

Responsibilities of public health administrations and regional authorities

Priority measures

- Implement the MSSS’s positions on breastfeeding, and take steps to see that they are adopted by the board of the facility and made known to the partners concerned, which implies:
 - appointing a person to be in charge of the breastfeeding portfolio, whose role will be to launch and support the operations of a regional cross-sectoral committee on breastfeeding, responsible for defining the mobilization and intervention strategies for the region or, if applicable, working with a pre-existing perinatal committee and incorporating into it a component related to breastfeeding;
 - establishing a profile (by region or local community health centre) of existing resources and services relating to the protection, promotion and support of breastfeeding, in order to draw up a plan for developing resources and organizing services adapted to needs.
- Ensure leadership in setting up the BFI program in healthcare facilities and support implementation and development strategies in the region, which implies:
 - providing support to facility administrators;
 - allocating the necessary financing for the training of staff and for the purchase of commercial infant feeding formula (artificial milk) in the case of maternity services that become baby-friendly;
 - supporting, coordinating and evaluating liaison and discussion mechanisms among facilities and organizations with a view to carrying the program to completion;
 - ensuring the availability of a specialized resource person (e.g., international board certified lactation consultant [IBCLC] or specialized nurse clinician) able to respond to the needs of hospitals, birthing centres, local community health centres, support groups and community organizations in matters relating to

¹⁰ [Translator’s note]: Guichet Santé is a subsidiary of Logibec, the developer of the Intégration CLSC software, and provides support and upgrades to the local community health centres using this system.

the training and support offered to practitioners as well as the development of tools.

- Ensure that breastfeeding is integrated into all regional programs relating to child health.
- Put a mechanism into place to ensure that Circular 1999-007 concerning the purchase of commercial infant feeding formula (artificial milk) is respected, until measures are implemented to respect the *International Code of Marketing of Breast-milk Substitutes* in its entirety.
- Ensure that the Code is followed in health facilities (hospitals and local community health centres).
- Put into place the conditions (time, space and support) necessary to facilitate breastfeeding among the employees of public health administrations and regional authorities.
- Ensure a follow-up of the breastfeeding situation in the region, which implies:
 - collecting data on breastfeeding practices (rates and duration) in the region as well as on the progress of BFI/BFHI program implementation;
 - ensuring that results are distributed to the partners concerned on a regular basis.

Responsibilities of hospitals

Priority measures

- Implement the MSSS's positions on breastfeeding, and take steps to see that they are adopted by the hospital board and made known to the partners concerned.
- Have a written policy (care practice guide) concerning breastfeeding and see that it is adopted by the hospital board, put into practice by practitioners and made known to all those using the facility.
- Appoint a person to be in charge of the breastfeeding portfolio in the facility that will make the policy known and who will facilitate implementation of the BFI, and relations with all network partners as well as the follow-through of interventions that favour breastfeeding.
- Develop an implementation strategy for becoming a baby-friendly hospital, which implies:
 - having a theoretical and practical training plan for all employees working in the perinatal field and in pediatrics, if applicable, including physicians;
 - seeing to the training of staff specializing in lactation (e.g., international board certified lactation consultants [IBCLC] or nurse clinicians specialized in breastfeeding) to counsel staff and mothers who are having particular difficulties in breastfeeding;

- ensuring that care practices are put into place that support breastfeeding (e.g., rooming-in, feedings on request) in the perinatal unit, in pediatrics and in family medicine units, in collaboration with obstetrician gynecologists, delivering physicians, pediatricians and nurses;
 - ensuring, before the mother leaves the hospital, that she has breastfed at least twice without assistance, that she has learned to recognize the signs that her baby is nursing well and that the family knows where and when to find assistance if needed;
 - establishing a memorandum of understanding (MOU) with local community health centres to provide guidance (by fax or telephone) to every breastfeeding mother. This MOU should also set out that a phone call to be made by the local community health centre in the first days following the mother's return home from the hospital, as well as a systematic home visit by the health centre no later than three days after the mother's return home, firstly for cases of early discharge, but if possible for all mothers;
 - making known support groups and community organizations offering breastfeeding support, and encouraging mothers to make use of these groups and organizations.
- Respect the *International Code of Marketing of Breast-milk Substitutes*.
 - Put into place the conditions (time, space and support) necessary to facilitate breastfeeding among hospital staff.
 - Ensure a follow-up is conducted regarding the breastfeeding situation in the hospital, which will require the collection of data on the method of feeding newborns at the time they leave the hospital on the Live Birth Registration (schedule SP-1) or on any other tool used to gather information.

Responsibilities of local community health centres that have birthing centres

Priority measures

- Implement the MSSS's positions on breastfeeding and see that they are adopted by the board of the local community health centre overseeing the birthing centre, and made known to the partners concerned.
- Have a written policy (care practice guide) concerning breastfeeding and see that it is adopted by the board of the health centre overseeing the birthing centre, put into practice by practitioners and made known to all those using the facility.
- Appoint a person to be in charge of the breastfeeding portfolio in the birthing centre that will make the policy known and who will facilitate implementation of the BFI, relations with all network partners and the follow-through of interventions that favour breastfeeding.
- Develop an implementation strategy for becoming a baby-friendly birthing centre, which implies:
 - having a theoretical and practical training plan for all employees working in the perinatal field;

- seeing to the training of staff specialized in lactation (e.g., international board certified lactation consultants [IBCLC] or midwives) to counsel staff and mothers who are having particular difficulties in breastfeeding;
 - ensuring that care practices are put into place or maintained that support breastfeeding (e.g., rooming-in, feedings on request) in the birthing centre;
 - ensuring that, if the mother is discharged in the first hours following the birth, that she has successfully breastfed at least once without assistance or else knows how to express her milk and give it to the baby, and that she has learned to recognize the signs that her baby is nursing well and that the family knows where and when to find assistance if needed;
 - making provision for a systematic home visit in the 24 hours following the birth, as well as two other visits in the following days;
 - establishing a memorandum of understanding with local community health centres in order to be able to refer (by fax or telephone) any breastfeeding mother;
 - making known community organizations that provide breastfeeding support and encouraging mothers to make use of these organizations.
- Respect the *International Code of Marketing of Breast-milk Substitutes*.
 - Put into place the conditions (time, space and support) necessary to facilitate breastfeeding among employees of the birthing centre.
 - Ensure a follow-up is conducted of the breastfeeding situation in the birthing centre. To this end, the birthing centre will collect data on the method of feeding newborns at the time they leave the facility on the Live Birth Registration (schedule SP-1) or on any other tool used to gather information.

Responsibilities of local community health centres

Priority measures

- Implement the MSSS's positions on breastfeeding and see that they are adopted by the local community health centre and made known to the partners concerned.
- Have a written policy (care practice guide) concerning breastfeeding and see that it is adopted by the local community health centre, put into practice by practitioners and made known to all those using the facility.
- Appoint a person to be in charge of the breastfeeding portfolio in the local community health centre that will make the policy known and who will facilitate implementation of the BFI, relations with all network partners and the follow-through of interventions that favour breastfeeding.
- Develop an implementation strategy for becoming a baby-friendly local community health centre, which implies:
 - having a theoretical and practical training plan for all employees working in the perinatal field;

- informing pregnant women and their families of the advantages of breastfeeding and its realities in order to allow them to make an informed decision concerning the feeding of their child;
 - informing pregnant women and their families of practices that are favourable to breastfeeding in the hospital or birthing centre (e.g., rooming-in) and once they return home (e.g., feedings on request);
 - directing all women and their families, in the pre- and postnatal periods, towards breastfeeding support groups or community organizations able to assist them, and to play a part in creating such groups if none exists in the region;
 - ensuring that a visit from a local community health centre nurse take place no later than the third day following the return home from hospital to check on the mother and baby and the progress of breastfeeding in the case of early discharge; if possible such a visit should be made to all mothers
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- Support continued breastfeeding by conducting repeat visits to women who require a closer follow-up because of problems with breastfeeding, and by directing them as necessary to competent persons (international board certified lactation consultants, breastfeeding clinics, physicians, nurses and dietitians with expertise in breastfeeding.)
 - Compile a list of breastfeeding clinics and breastfeeding support groups in the region and distribute it to all practitioners working in the perinatal field.
 - Integrate the promotion and follow-up of breastfeeding into intensive support programs during pregnancy and during the first two years of the child's life for disadvantaged sectors of the population, teen mothers or heads of single parent families (e.g., the *Naître égaux - Grandir en santé* [To be Born as Equals - To Grow Up in Health] program of the *Fondation OLO*).
 - Respect the *International Code of Marketing of Breast-milk Substitutes*.
 - Put into place the conditions (time, space and support) necessary to facilitate breastfeeding among local community health centre employees.
 - Ensure a follow-up is conducted of the breastfeeding situation in the region. To this end, the local community health centre will collect at the time of vaccination the information needed to know the rates of exclusive and partial breastfeeding at 2, 4, 6 and 12 months with the assistance of the "Vaccination" module of the "Intégration CLSC" software package, from the *Guichet santé*, or by any other means that apply.

Responsibilities of healthcare professionals in private practice and in facilities

Priority measures

- Provide information to pregnant women and their spouses on the differences between human milk and commercial infant formula (artificial milk), the benefits and realities of breastfeeding, and practices which favour the initiation of breastfeeding, and direct them as needed to community breastfeeding support resources during the prenatal period.

- Make a concrete contribution to changing care practices surrounding delivery and childbirth in order to facilitate mother-child bonding and breastfeeding (e.g., apply *Ten Steps to Successful Breastfeeding*.)
- Support and assist mothers who have difficulties breastfeeding, and direct them towards support groups and, if necessary, to qualified people who can assist them in resolving their problems (e.g., international board certified lactation consultants [LBCLC], breastfeeding clinics, physicians, nurses and dietitians with expertise in breastfeeding.)
- Update their training in regard to breastfeeding and its practice.
- Respect the *International Code of Marketing of Breast-milk Substitutes*.
- Put into place the conditions (time, space and support) necessary to facilitate breastfeeding among the employees of private clinics and facilities.

Responsibilities of support groups and community organizations

Priority measures

- Have a written policy (care practice guide) concerning breastfeeding and see that it is adopted by the board, that it is made known to members of the support group or the community organization as well as to service users, and that it is put into practice by members of the group or organization.
- Collaborate on a strategy to implement the BFI in the region, which requires that groups and organizations:
 - inform women and their families of the advantages of breastfeeding and of care practices that favour breastfeeding in the hospital or birthing centre and in the first weeks following the return home (e.g., rooming-in, feedings on request);
 - have a theoretical and practical training plan addressed to all members of the group or organization working in the perinatal field (volunteers, sponsors and caregivers).
- In the pre- and postnatal periods, help mothers who choose to breastfeed, direct them towards appropriate resources and, if necessary, collaborate with qualified people to resolve their problems (e.g., International Board Certified Lactation Consultants [ILBC], breastfeeding clinics, physicians, nurses, and dietitians with expertise in breastfeeding).
- Respect the *International Code of Marketing of Breast-milk Substitutes*.
- Put into place the conditions (time, space and support) necessary to facilitate breastfeeding among the employees of the groups and organizations.

Conclusion

Quebec has made enormous progress in the area of perinatal and infant mortality and morbidity. However the health and development of children and families could still be improved by increasing the rate and duration of breastfeeding.

The WHO and UNICEF, two internationally recognized organizations, have proposed the Baby-Friendly Hospital Initiative, which has spread in Quebec to facilities such as local community health centres. This international strategy, adopted by numerous countries, is linked to improvements in the breastfeeding situation and in the quality of care surrounding birth. Why not here as well?

In order for breastfeeding to once again become the cultural norm, a concerted action needs to be carried out by all those working in this field, and the entire community must be called on to contribute. In places where breastfeeding is common practice, it is an accepted part of popular culture: women desire to breastfeed, and parents are familiar with the realities and benefits of breastfeeding and are wholeheartedly supported by healthcare professionals, breastfeeding support groups, community organizations working in the perinatal field and the surrounding environment.

All of the measures proposed in this document, including the certification of baby-friendly facilities, are means of improving the health and development of our children and of reaching the objective of increasing the rate and duration of breastfeeding in Quebec by 2007. Let us all take on this challenge together.