BREASTFEEDING PROTOCOL

Informed Decision Making: Infant Feeding

BABY-FRIENDLY INITIATIVE STRATEGY ONTARIO

best start
meilleur départ
by/par health nexus santé

Provincial Council for Maternal and Child Health
building a brighter future

MICHAEL GARRON HOSPITAL
TORONTO EAST HEALTH NETWORK

TORONTO Public Health

The Breastfeeding Protocols are based on the City of Toronto's Breastfeeding Protocols for Health Care Providers (2013) and are co-owned by the City of Toronto, Toronto Public Health Division (TPH) and the Toronto East Health Network, Baby-Friendly Initiative (BFI) Strategy for Ontario. Revised Protocols are being released as they are completed, and they are available at http://breastfeedingresourcesontario.ca/resource/breastfeeding-protocols-health-care-providers. All revised Protocols, as well as the complete set of 2013 Protocols, are available at www.toronto.ca/wp-content/uploads/2017/11/9102-tph-breastfeeding-protocols-1-to-21-complete-manual-2013.pdf. For more details on the revision process and terminology, please see the *Introduction to Breastfeeding Protocols for Health Care Providers*.

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Process

The process of revising and updating the Protocol followed a clear methodology based on *Evidence-Informed Decision Making in Public Health* www.nccmt.ca/pubs/FactSheet_EIDM_EN_WEB.pdf, developed by the National Collaborating Centre for Methods and Tools (NCCMT) and is described in the Introduction (linked above). Every effort has been made to ensure the highest level of evidence is reflected.

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Use of this Protocol

The BFI Strategy for Ontario and TPH encourage individuals and organizations to use this Protocol to support evidence-informed clinical practice. This Protocol may be copied or printed for the purpose of educating health care practitioners, provided the authors are acknowledged and content is not altered, nor used or reproduced for commercial gains.

Disclaimer

Every breastfeeding dyad and their circumstances must be assessed on an individual basis. In doing so, health care providers use their own professional judgement along with the evidence in assessing the care and support that the family needs. At times, consultation with another breastfeeding expert or advice from a medical practitioner, (e.g., physician, midwife, or nurse practitioner), will be required.

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Key Messages

1. Provide current, evidence-based information to facilitate informed decision making concerning infant feeding (breastfeeding, combined feeding, and formula feeding).
2. Provide support in a non-judgemental, unbiased manner and help parents meet their feeding goals, regardless of their feeding decision.
3. Provide information about the importance of breastfeeding.
4. Ensure parents are aware of the risks associated with not breastfeeding or with suboptimal breastfeeding and how to reduce those risks.
5. Support parents who are thinking of formula feeding or combination feeding to ensure their feeding plan is acceptable, feasible, affordable, sustainable and safe.
6. Support parents in exploring their beliefs and practices and help them to develop a plan of care that is suitable for them and their situation.
7. Ensure parents are aware of community services that can provide infant feeding information and support.

Starting the Conversation

Prenatal Conversations

During the first prenatal visit, the health care provider (HCP) can start the conversation about infant feeding with questions such as:

- Tell me your thoughts about feeding your infant?
- What have you heard about breastfeeding?
- What have you heard about the impact of giving infant formula on breastfeeding?
- Can you tell me about your previous feeding experiences (if any)?
- Do you have any questions about infant feeding?

Using the initial conversation as a foundation, it is important that the HCP continue to discuss bodily changes, how breasts are changing to prepare for breastfeeding, and the importance of breastfeeding. If the expectant parents are thinking of formula feeding, the HCP should review the risks, discuss options such as feeding expressed breast milk (EBM) or partial breastfeeding, and ensure the family has a feeding plan that is acceptable, feasible, affordable, sustainable and safe (AFASS).

It is important for HCPs to consider and assess any parental issues that may impact breastfeeding or require additional support, e.g., risk of perinatal mood disorders. See Protocol: *Prenatal*.

Postpartum Conversations

During postpartum visits, the HCP can start the conversation regarding infant feeding with questions such as:

- How are you currently feeding your infant?
- Can you tell me about your previous feeding experiences (if any)?
- How do you feel about your current feeding situation?
- What were your original feeding goals?
- Do you have any questions about feeding your infant?

For a more comprehensive breastfeeding assessment, especially if there is a feeding concern, the HCP can observe a feeding. See Protocols: *Initiation of Breastfeeding and Signs of Effective Breastfeeding*.

- Observe parent and infant comfort.
- Observe parent's responsiveness to the infant.
- Observe positioning and latch.
- Observe infant suck and listen for infant swallowing.
- Observe infant's behaviour during the feeding. If infant is showing stress cues, support parent in alleviating stress cues.
- Observe infant's state of satiation and parent's nipples and breasts at the end of the feeding.

1. Provide current, evidence-based information to facilitate informed decision making concerning infant feeding

Family-centred maternity and newborn care is about increasing the participation of families in the decision-making process during pregnancy, birth, and early postpartum experiences. The overarching goal is to promote optimal health and well-being for both mother and infant in a participatory manner. Participation of parents is sustained by an environment that promotes collaboration, partnership, respect, and information-sharing between parents and their HCPs (Public Health Agency of Canada, 2017).

Have family-centred conversations by using these steps (UNICEF UK, 2014):

- **Agree on an agenda**. Find out what parents wants to talk about and address their needs first. Consider saying, "Thank you for telling me your thoughts about that. It is my job to provide you with information. Is it okay for me to tell you what current research shows about that?" (Continue with factual information about the identified concern).
- **Ask open-ended questions.** This helps explore what parents know already, e.g., "Tell me what you've heard about breastfeeding and we'll take it from there." It can also help to learn about their feelings, "How do you feel about…" or "Tell me about…"
- **Listen actively.** Make eye contact, smile, nod. Can say, "a-hah", "yes", "really".
- **Reflect back.** This shows that you heard what they said and helps clarify any misunderstanding, e.g. "What I hear you saying is that you're not sure about…" or "you seem anxious that…".

- **Find out and build on information they know.** Try to tailor the information to their needs, e.g., "You've got a great understanding of some possible feeding challenges. Here are a few additional facts to consider around formula feeding."
- **Show empathy**. It is important to walk in other people's shoes. Do not dismiss bad experiences or fears. Example, "Feeding your previous baby sounds like it was really hard. I can see why you have some concerns with this baby."
- **Remain unbiased.** Avoid being judgemental, even if you do not agree with what is being said. "I hear you saying that..." or "I understand your point of view".

- **Present the evidence for all options.** We sometimes want to agree with client's views even when information is not factual, e.g., "It does not matter how you feed your baby; they will be just as healthy either way." It is not ethical to agree if the information is inaccurate. Try something like, "I hear you saying your baby will grow no matter how they are fed. Here are a few additional facts to consider".

2. Provide support in a non-judgemental and unbiased manner

- Recognize there needs to be an assessment of what is best for the parents and infant in the context of their situation.
- If a parent chooses not to breastfeed, there are many reasons and experiences that will have led to this decision. Listen, support and ensure that the parent has all the information they require to keep them and their infant as healthy as possible (Ludlow et al., 2012).
- Once an informed decision has been reached, families need to be supported in their infant feeding decision and receive appropriate information and guidance to promote the health and well-being of their infant and the breastfeeding parent.

3. Provide information about the importance of breastfeeding

- Education about infant feeding ideally begins before conception and continues during pregnancy when expectant parents gather information, take time for questions, and are open to new learning (McFadden et al., 2017).
- Educate families regarding the importance of exclusive breastfeeding for 6 months and continued breastfeeding for up to two years and beyond (Health Canada, 2018a; Health Canada 2018b).

- Provide timely, evidence-informed information tailored to the individual situation and the opportunity to discuss decisions with their support network. Ensure parents have a sense of control over the decision-making process (Jackson, Cheater & Reid, 2008).
- Assist families to gain knowledge and supports to successfully achieve their breastfeeding goals.
- For more information on the importance of breastfeeding and health consequences of not breastfeeding, see Appendix 1, *Risks of Not Breastfeeding and Risks of Suboptimal Breastfeeding* and the *Prenatal Protocol.*

4. Ensure parents are aware of the risks associated with not breastfeeding or with suboptimal breastfeeding and how to reduce those risks

Suboptimal breastfeeding is defined as not meeting the recommendation of exclusive breastfeeding to 6 months (Bartick & Reinhold, 2010). This section also talks about direct breastfeeding versus feeding expressed breast milk. More information on the risk is included in Appendix 1, *Risks of Not Breastfeeding and Risks of Suboptimal Breastfeeding*.

- Educate parents about supplementation with infant formula and the potential impact on the initiation and duration of breastfeeding. Even a small amount of infant formula given on a regular basis can reduce a breastfeeding parent's milk supply. A small amount of infant formula can also change the infant's gut microbiome and impact future health (Forbes et al., 2018).
- If supplementation is medically needed, support parents to consider feeding options and to resume full breastfeeding, whenever possible (Wambach & Riordan, 2015). For more information see *Indications for Supplementation* and *Cessation of Breastfeeding* Protocol.
- If supplementation with infant formula is used because parents have decided to combination feed, they need to be informed that giving infant formula can impact the breastfeeding parent's breast milk supply (Wambach & Riordan, 2015).

- It is important to offer parents who are considering formula feeding, or have started supplementing their babies with infant formula, individual support to explore their infant feeding decision, knowledge of the safe use of infant formula, pacifiers and artificial nipples, and understanding of the difficulty of reversing the decision not to breastfeed (BCC, 2017). Information about the safe preparation, storage and use of infant formula must be provided to parents who have decided to feed infant formula on a one-to-one basis and not in a group situation. For more information on pacifiers or soothers see *Prenatal Protocol.*
- Educate parents about the difficulty of reversing the decision once breastfeeding is stopped. Ensure parents understand that it is easier to switch from breastfeeding to formula feeding than the other way around. Though not impossible, it is often difficult to return to breastfeeding after formula feeding if breast milk supply has decreased, or it was never well established (BCC, 2017).
- Provide information regarding supplementing with the breastfeeding parent's own breast milk or human donor milk where available, see *Indications for Supplementation* and *Cessation of Breastfeeding* Protocol.
- When appropriate, educate mothers about the importance of providing breast milk to a preterm or medically compromised infant, even if the mother was not planning on breast-feeding, as it can provide significant health benefits. Breast milk is protective against necrotizing enterocolitis which can be life threatening to a premature infant. Mothers who decide to express breast milk for a preterm or medically compromised infant may require additional support and information (Colaizy et al., 2016).
- Provide information regarding informal milk sharing upon request see *Expressing, Collecting, and Storing of Human Milk* Protocol. Some parents consider using other women's breast milk. Health Canada advises families to be aware of the potential health risks associated with consuming human breast milk obtained through the internet or directly from individuals (Health Canada, 2014). Milk that is informally shared may cause illness. If parents are considering (or engaged in) informal milk sharing, provide them with factual information. Support parents who have made an informed decision to use informally shared milk. Some organizations may ask parents to sign a waiver. See *Informal (peer-to-peer) milk sharing: The use of unpasteurized donor human milk* (Perinatal Services BC, 2016).
- Provide information about alternative methods to provide supplementation (i.e., cup, lactation aid, etc.) that may have less of a negative impact on breastfeeding.
- In order for the HCP to provide parents with the information necessary to make an informed decision about infant feeding, the HCP must be aware of and understand how and when to present benefits, risks, and options related to their individual situation. HCPs need to keep in mind that exclusive breastfeeding for a minimum of 6 months has been shown to promote infant health (Kramer & Kakuma, 2012).

Direct Breastfeeding versus Feeding Expressed Breast Milk

Expressing breast milk and feeding by bottle has become more common in some societies, and this may be of concern. Expressed breast milk (EBM) has important nutritive properties and is healthier than infant formula, yet it is not the same as direct breastfeeding (Moossavi et al., 2019).

Parents can do both direct breastfeeding and feeding of EBM. However, the more direct breastfeeding occurs, the better. Ensure that parents who plan to exclusively breast milk feed using a non-direct-breastfeeding method make an informed decision.

There are differences between direct breastfeeding and breast milk feeding and these differences are explored further in the following areas:

- **Milk production**
  - A breastfeeding parent who hold their infant skin-to-skin enjoys increased milk production, oxytocin release, parent-baby bonding, and more parental confidence. Infants also cry less (Moore et al., 2016).
  - Evidence suggests that parents who exclusively feed their infants EBM, are at risk of ceasing to provide breast milk to their infant earlier than those who exclusively breastfeed (Pang et al., 2017). Parents who fed their infants by breastfeeding directly at the breast and providing EBM were not at higher risk.

- **Acute and chronic illness prevention**
  - Maternal and infant infections stimulate a quick immune response in breast milk composition (Hassiotou et al., 2013a).
  - Research suggests that through the act of suckling, infants who have contact with viruses before their breastfeeding parent does, will cause the parent's breasts to develop antibodies (Riskin et al., 2012).
  - Recent studies show direct breastfeeding to be more protective against childhood asthma, compared to breast milk feeding or formula feeding (Azad et al., 2017).
  - Breast milk cells are live during breastfeeding, suggesting benefits far beyond what is currently known (Hassiotou et al., 2013b).
  - Weight gain velocity and BMI are inversely associated with breastfeeding, meaning that direct breastfeeding is important for normal weight gain patterns (Azad et al., 2018).

- **Oral motor development**
  - Infants who were breastfed for at least 12 months, regardless of occasional bottle or pacifier use, had higher quality muscle function related to eating (Pires et al., 2012).
  - There is an increased risk of dental carries in infants that are not breastfed (Tham et al., 2015).
  - There are fewer incidents of dental malocclusions in breastfed infants (Peres et al., 2015).

- **Other**
  - Infants fed at the breast have different appetite-regulating hormones (Breij et al., 2017). For more information see *How the Breast Works* Protocol.
  - Skin-to-skin contact soon after delivery, more likely and more frequently occurring during direct breastfeeding, helps to line the infant gut, also known as seeding the gut and direct breastfeeding fuels the infant microbiome. About 40% of bacteria found in the breastfed infant's gut in the first month of life are from the breastfeeding parent's skin and milk (Pannaraj et al., 2017).

5. Advocate for all parents to ensure that their feeding plan is acceptable, feasible, affordable, sustainable, and safe (WHO, 2007).

Breastfeeding is free, readily available, sustainable, and safe for an infant. If at any point a parent is considering infant formula, work with them to ensure their plan is:

- **Acceptable**: The parents perceive no problem in formula feeding. Potential problems may be cultural, social, or fear of stigma and discrimination. For example, "Can you think of any problems that may make formula feeding difficult for you?"
- **Feasible**: The parents (or family) have adequate time, knowledge, skills, resources, and support to correctly mix infant formula and feed the infant based on hunger cues and in a responsive manner. For example, "Have you thought about what supplies you will need and the amount of time you will need to prepare infant formula?"
- **Affordable**: The parents and family, with community or health system support if necessary, can pay the cost of replacement feeding without harming the health or nutrition status of the family. For example, "Are you aware of the cost of infant formula over a year, and how does this fit into your budget?"
- **Sustainable**: A continuous supply of safe infant formula will be available for up to one year of age or longer. For example, "Are you able to continue with the purchase of infant formula for the first year of your baby's life?" "Is it usually available at your local store?"
- **Safe**: Infant formula can be correctly and hygienically prepared and stored and fed in a safe and responsive manner. For example, "Can you tell me how you would prepare infant formula?" See *Infant Formula: What You Need to Know*

6. Support parents in exploring their beliefs and practices and help them to develop a plan of care that is best for the mother, her infant, and her situation.

- Parents brings their own thoughts and expectations to their decision about infant feeding, based on their knowledge and past experience, as well as family and cultural norms. It is important for HCPs to explore these with the parents and support them in understanding how these may impact their breastfeeding experience and success, and to offer accurate information and clarification so that they can make a fully informed decision (Meedya, Fernandez, & Fahy, 2017).
- Invite parents to ask for additional information or to consult other professionals and family members or friends before making a decision.
- Provide further support if the parents lack confidence in their ability to breastfeed or have a prior history of breastfeeding difficulties:
  - Explore parents' thoughts and feelings.
  - Reinforce key messages about the initiation of breastfeeding to promote breastfeeding success.
  - Encourage the breastfeeding parent to access breastfeeding peer support (e.g., La Leche League, Breastfeeding Buddies, etc.)
  - Provide specific information related to any past breastfeeding difficulties.
  - Peer support may be beneficial to parents in exploring their past experience.
  - Some parents decide to feed infant formula to their infants. Studies show that if parents have made an informed decision, they usually feel no regret for not breastfeeding (Lawrence & Lawrence, 2015; Ludlow et al., 2012).

7. Ensure parents are aware of community resources that can provide infant feeding information and support.

- All parents can benefit from support. Research supports that breastfeeding parents often breastfeed for longer if they receive helpful peer support (Shakya et al., 2017).
- If feeding plans change, a mother needs to be connected to individuals that can support her wishes and assist her to feed her infant in the way that is best for her, her infant, and her situation.

See Appendix A: Potential Risks of Not Breastfeeding and of Suboptimal Breastfeeding

Key Resources

Best Start by Health Nexus
Ontario Prenatal Education Program Key Messages – www.ontarioprenataleducation.ca/

Best Start by Health Nexus
Safely Preparing Infant Formula for Your Baby - video and tip sheets.
https://resources.beststart.org/product/b42e-safely-preparing-infant-formula-for-your-baby-video-fact-sheets/

BFI Strategy for Ontario
Infant Formula: What You Need to Know. An evidence-based resource to guide conversations with parents on the safe use of formula and the impact of using formula when breastfeeding.
www.beststart.org/resources/breastfeeding/B19/FormulaBooklet_B19-E.pdf

BFI Strategy for Ontario and Toronto Public Health
Breastfeeding Protocols for Health Care Providers
https:// breastfeedingresourcesontario.ca/resource/breastfeeding-protocols-health-care-providers

Breastfeeding Committee for Canada
The revised BFI 10 Steps and WHO Code Outcome Indicators for Hospitals and Community Health Services provide information on medical reasons for supplementation and the principles of AFASS.
www.breastfeedingcanada.ca/BFI.aspx

Breastfeeding Resources Ontario
- Informed decision-making resources regarding infant feeding
- A Parent's Guide to Soothers

https://breastfeedingresourcesontario.ca/

Canadian Pediatric Society
A screening guideline to give direction in managing infants at risk for low blood glucose
www.cps.ca/en/documents/position/newborns-low-blood-glucose

Champlain Maternal Newborn Regional Program
An aid for prenatal providers to facilitate infant feeding and care discussions with expectant parents.
www.cmnrp.ca/en/cmnrp/BreastfeedingHealth_Care_Providers_p4872.html

Children's Hospital of Eastern Ontario
Be Sweet to Babies videos in multiple languages: 1) *Be Sweet to Babies During Painful Procedures* and 2) *Breastfeed to Minimize Vaccination Pain*.
www.breastfeedingresourcesontario.ca. Videos also on www.YouTube.com

Find a Health Unit Near You – www.health.gov.on.ca/en/common/system/services/phu/locations.aspx

Medications and Lactation Information Sources
- Infant Risk Centre www.infantrisk.com In addition.
- Hale's Infant Risk Centre: *Medications and Mother's Milk* book for purchase online
- LactMed https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm

Perinatal Services BC
An evidence-based document providing HCPs with essential knowledge and tools to facilitate an informed discussion and decision-making process around informal milk sharing.
https://breastfeedingresourcesontario.ca/resource/informal-peer-peer-milk-sharing-use-unpasteurized-donor-human-milk

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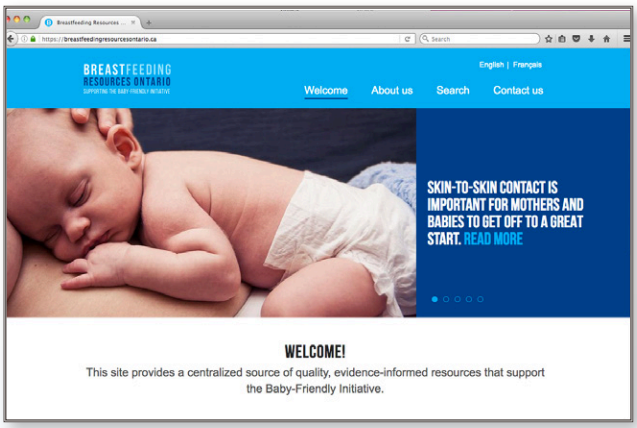

Find all Breastfeeding Protocols and other resources at **Breastfeeding Resources Ontario**.

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Appendix 1

Potential Risks of Not Breastfeeding and of Suboptimal Breastfeeding

Table 1: Risks Associated with Infant Feeding and How to Reduce the Risks (this table addresses method of feeding as well as how it is being fed). Suboptimal breastfeeding is defined as not meeting the recommendation of exclusive breastfeeding to 6 months (Bartick & Reinhold, 2010).

Adapted from BFI Strategy for Ontario (2017). *Informed Decision Making: Having Meaningful Conversations Regarding Infant Feeding*.

For information on medical reasons for supplementation, see *Indications for Supplementation* or *Cessation of Breastfeeding* Protocol.

Full references for this appendix are included in the *Informed Decision Making: Infant Feeding* Protocol.

Potential Risk Associated with Not Breastfeeding	Reduce the Potential Risk When Possible, by Encouraging the Following Practices	References
Increased risk of illness to infant who is not breastfeeding or receiving breast milk. This includes feeding infants with formula, or other fluids or solids such as homemade formulas, animal milk, milk beverages, teas, juice, cereal or any other substance not recommended and not appropriate according to the age of the infant.		
• Childhood leukemia. • Acute Otitis Media. • Atopic dermatitis. • Obesity. • Decreased performance in intelligence tests. • Type 2 Diabetes. • Diarrhea/gastrointestinal infection. • Pneumonia/lower respiratory tract infections. • Hospitalization risk. • Asthma. • Infectious morbidity and mortality. • Dental carries. • Dental Malocclusions. • Sudden Infant Death Syndrome (SIDS). • Increased risk of kidney injury in very low birth weight infants.	• Offer infant as much breast milk as possible and return to full breastfeeding as soon as possible. • Hold infant skin-to-skin to optimize exposure to her microbes to colonize the infant's gut and produce a healthy microbiome and to promote physiological benefits to the infant. • When not breastfeeding, ensure infant receives safely prepared commercial infant formula. • Prepare, store and transport infant formula safely to reduce the risk of food and water-borne illnesses.	Amitay & Keinan-Boker, 2015; Avila et al., 2015; Bowatte et al., 2015; Ginovar, Gieh, & Verd, 2016; Giugliani et al., 2015; Gross et al., 2014; Horta et al., 2013; Horta, De Mola & Victora, 2015b Ip et al., 2009; Lamberti et al., 2011; Lindsay, et al., 2018; Lodge et al., 2015 Maines, et al., 2017; Peres et al., 2015; Riskin et al., 2012; Sankar et al., 2015; Victora et al., 2016;

Potential Risk Associated with Not Breastfeeding	Reduce the Potential Risk When Possible, by Encouraging the Following Practices	References
Increased risk of illness to mother who is not breastfeeding.		
• Type 2 diabetes. • Breast cancer. • Ovarian Cancer. • Decreased lactational amenorrhea. • Decreased birth spacing. • May increase risk of Postpartum Mood Disorders.		Aune et al., 2014; Chowdhury et al., 2015; Dias & Figueiredo, 2015; Ip et al., 2009; Victora et al., 2016;
Increased risk of reduced breast milk supply with combination and/or bottle feeding.		
• Infants who are given infant formula supplements, take in less breast milk over time	• If infant formula or a bottle is going to be used and the breastfeeding parent would like to return to full breastfeeding at the breast, consider the following: – Assist the breastfeeding parent in planning to establish and maintain their milk supply. This may include hand expressing, pumping, or both. – Assist the parents in choosing an alternate way of feeding their infant. This could include cup or spoon feeding or the use of a lactation aid to avoid bottle use. – Refer the parents to a knowledgeable professional who can assist the parents to return to their original feeding plan.	Hill et al., 1997; Hren et al., 2009;
Increased risk of illness or under nutrition due to under or over dilution of infant formula.		
A lower quality study from 1973 showed hypernatremic dehydration and poor nutrition status from over and under dilution of infant formula. Even in 2008, parents showed considerable confusion and inaccurate preparation of infant formula, especially when using powdered infant formula.	Refer parents to reliable resources such as *Infant Formula: What You Need to Know or Safely Preparing Infant Formula for Your Baby* (video and tip sheets) available at https://resources.beststart.org/product-category/resources/nutrition/.	Carletti & Cattaneo, 2008; Oates,1973;

Potential Risk Associated with Not Breastfeeding	Reduce the Potential Risk When Possible, by Encouraging the Following Practices	References
Increased risk of infant formula contamination.		
• Due to manufacturing errors. • Due to impure or non-sterile water. • Due to dirty equipment. • Risk of contamination with antibiotic resistant bacteria.	• Be knowledgeable and inform parents about where to access information about infant formula recalls. • The Government of Canada website, Healthy Canadians, lists safety concerns and recall alerts. • Parents may sign up for alerts and compare the lot numbers of their infant's formula cans to the lot numbers on the website. • Be knowledgeable and inform parents about safe water selection when preparing infant formula. Know that bottled and tap waters are not sterile. See *Infant Formula: What You Need to Know*. Review with parents. • Inform parents about avoiding using automatic baby formula makers as their safety has not been confirmed and some safety issues have been reported.	Carignan et al., 2015; Hou et al., 2015; Kalyantanda, Shumyak, & Archibald, 2015; Kent et al., 2015; Parra-Flores et al., 2015; Simmons et al., 1989;
Increased risk of less responsive feeding with bottle feeding.		
• Infants who are formula fed are at increased risk of less bonding and more maternal maltreatment. • Increased risk of less responsive feeding, especially in older infants. • Bottle feeding and even more so, bottle propping or using devices that make feeding "hands free" increase the likelihood of pooling in the mouth, which can increase the risk for otitis media, aspiration, and dental caries.	• Be familiar with cue-based feeding which helps in responding to signs of hunger, stress and satiation. • Offer a bottle in response to early feeding cues by gently inviting her infant to take the bottle nipple. • Be responsive to the infant's cues throughout the feeding, pausing the feeding as needed, and ending the feeding when infant shows signs of satiety. • Use eye-to-eye contact with her infant to build early communication and responsiveness to one another. Include smiles and vocalization. • Always hold infant when feeding. • Hold infant close and alternate which arm is used to hold her infant while feeding.	Avila et. al., 2015; Golen & Ventura, 2015; Strathearn et al., 2009; Ventura & Teitelbaum, 2017;

Potential Risk Associated with Not Breastfeeding	Reduce the Potential Risk When Possible, by Encouraging the Following Practices	References
Increased risk of illness from direct breastfeeding in the following situations.		
• Maternal HIV. • Herpes simplex virus type 1 (HSV-1). Direct contact between lesions on the parent's breasts and the infant's mouth. • Using medication that is contraindicated while breastfeeding. • Infants with classical galactosemia. • Infants with maple syrup urine disease (MSUD). • Infants with phenylketonuria (PKU).	• Refer to up-to-date recommendations for breastfeeding with any of these conditions. • When possible, use pasteurized human donor milk. If pasteurized human donor milk is unavailable, use or infant formula. • Ensure that the parent's feeding plan is acceptable, feasible, affordable, sustainable, and safe. • For safety of medications and herbal products when breastfeeding: see LactMed, Infant Risk Centre, or Thomas Hale's *Medications and Mother's Milk*. • Maternal HIV: If able to formula feed safely, this is the recommended choice in Canada. If unable to fully formula feed, exclusive breastfeeding is preferable to combination feeding due to increased transmission risk of HIV. • HSV-1 (cold sore) &HSV-2 (genital tract) have been known to cause neonatal herpes infection. Direct contact between HSV (cold sore) lesions and an infant must be avoided, even if contact is indirect via a breast or bottle nipple. This may include a parent sucking on a bottle nipple to test the temperature of the bottle if they have cold sores, or if someone with cold sores sucks on a breastfeeding parent's breast. • MSUD: – If a breastfeeding parent has MSUD, they are encouraged to breastfeed their infant, while closely monitoring the parent's nutritional and clinical status. – If infant has MSUD, breast milk can be considered a source of intact protein, while closely monitoring anthropometric, clinical, and laboratory monitoring of the infant. The breastfeeding parents must have a good milk supply. – PKU: When PKU positive, continued breastfeeding and giving phenylalanine-free amino acid-based protein substitutes are recommended. Continue clinical and laboratory monitoring of the infant to ensure Phenylalanine levels remain within normal limits.	Frazier et al., 2014; Horvath et al., 2009; Kose et al., 2018; Pinninti & Kimberlin, 2018; Welling et al., 2016;

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