Prenatal
**Encourage the pregnant mother to:**

- Share and discuss her goals for breastfeeding and infant feeding. Discuss and explore her attitudes with her partner, including verbalizing her feelings about breastfeeding and infant feeding.
- Seek information to support making an informed decision about how she wants to feed her baby, including:
  - Importance of exclusive breastfeeding for 6 months and continued breastfeeding for up to 2 years and beyond.
  - Benefits of breastfeeding for baby, mother, family, and community;
  - Health consequences of not breastfeeding for baby and mother;
  - Risks and costs of feeding artificial baby milk (ABM);
  - Contraception compatible with breastfeeding, including the Lactation Amenorrhea Method (LAM);
  - *Integrated Ten Steps & World Health Organization (WHO) Code Practice Outcome Indicators for Hospitals and Community Health Services: Summary* (BCC, 2011) (Appendix C);
  - Basic breastfeeding management, including:
    - position and latching
    - hand expression of breast milk
    - expected normal feeding behaviours (frequency of feeds, output)
    - benefits of skin-to-skin contact, especially for the premature infant
    - infant feeding cues
    - no separation of mother and infant, including 24-hour rooming-in (*Protocol #1: The Initiation of Breastfeeding; Protocol #2: Positioning and Latching; Protocol #3: Signs of Effective Breastfeeding; and Protocol #19: Expressing and Storing Breast Milk*).

- Medical indications for supplementation or cessation of breastfeeding;
- Difficulty of reversing the decision once breastfeeding is stopped;
- Supplementing with the mother’s own breast milk or human donor milk (where available) when possible;
- Use of pacifiers and artificial nipples;
- Importance of breastfeeding support programs;
- The right to be accommodated in the workplace during pregnancy and breastfeeding (*Ontario Human Rights Commission, 2011*).
- Develop an evidence-based plan to initiate breastfeeding.

- Initiation of breastfeeding immediately after birth. Place the infant skin-to-skin on the mother’s chest, uninterrupted, for at least an hour or until completion of the first feeding, or for as long as the mother wishes. The infant might only lick and smell the breast and may not necessarily actively suck in the early stages of breastfeeding. Most procedures can and should be delayed until after the first feeding is completed (*BFI Step 4, BCC, 2011*);
- Early feeding cues and cue-based feeding (*Protocol #1: The Initiation of Breastfeeding*);
- Baby-led latching (*Protocol #2: Positioning and Latching*).

- Understanding the importance of remaining together with the infant 24 hours a day at the hospital unless separation is medically indicated (*BFI Step 5, BCC, 2011*) (*Protocol #1: The Initiation of Breastfeeding*).

- Information about normal newborn feeding behaviours (frequency of feeding, output and signs of effective breastfeeding) and cue-based feeding (*Protocol #1: The Initiation of Breastfeeding and Protocol #3: Signs of Effective Breastfeeding*).
Information about the prevention of engorgement and sore nipples (*Protocol #4: Sore Nipples* and *Protocol #5: Engorgement*);

Information about physiological jaundice (*Protocol #14: Jaundice in a Breastfed Baby*);

Information about the importance of avoiding supplements, bottles and pacifiers (*Protocol #1: The Initiation of Breastfeeding*);

Importance of early assessment by a qualified health care professional;

Importance of support and linkage with community breastfeeding supports.

- If infant feeding decisions are based on inaccurate or incomplete information:
  - Offer information to clarify the inaccurate or incomplete information;
  - Reinforce messages related to informed decision-making (see *Informed Decision-Making about Infant Feeding*).

- If the mother lacks confidence in her ability to breastfeed or has a history of breastfeeding difficulties:
  - Reinforce key messages about the initiation of breastfeeding to promote breastfeeding success;
  - Offer specific information and support related to any past breastfeeding difficulties;
  - Offer specific information and support related to possible disclosures of partner abuse or mental health issues;
  - Offer information about community breastfeeding supports (see note on breastfeeding self-efficacy in *General Principles*).

- If the mother experiences a lack of breastfeeding support from significant others or is unaware of community breastfeeding supports:
  - Offer information about and facilitate linkage with community breastfeeding supports, including peer support (Dennis et al., 2002);
  - Offer information to significant others and family members about how to support the mother.

- If the mother is experiencing perceived or actual barriers to breastfeeding:
  - Offer support to explore the perceived or actual barriers to breastfeeding;
  - Suggest consultation with a primary health care provider and/or lactation consultant about the potential impact on breastfeeding.

### General Principles

In order to improve breastfeeding outcomes for mothers and infants, it is important to discuss infant feeding in the prenatal period. Early pregnancy is an ideal time for pregnant women and their partners to explore their attitudes towards breastfeeding. Expectant parents need to verbalize and address the feelings involved in the decision to breastfeed. Myths and false information need to be explored and clarified (RNAO, 2003);

- During pregnancy, women need to be encouraged to share their goals and perceived barriers about breastfeeding. Providing information, reassurance and assistance to resolve perceived difficulties will help build confidence (RNAO, 2003).

- Health care providers should explore with the pregnant woman her decision about infant feeding.

- The health care provider will provide comprehensive information to support the development of a plan for the initiation of breastfeeding.

- Benefits of breastfeeding and health consequences of not breastfeeding include:
  - Infant: decreased risk of Sudden Infant Death Syndrome (SIDS), otitis media, gastroenteritis, childhood Type 1 Diabetes, childhood leukemia, obesity in adolescence and adulthood, as well as a reduced risk of lower respiratory tract infections in exclusively breastfed full-term infants (TPH, 2010)

  - Maternal: decreased risk of Type 2 Diabetes in women with no history of gestational diabetes, decreased risk of breast cancer and ovarian cancer (TPH, 2010)

- Feeding ABM and associated risks and costs include:
  - Increased expense and equipment for preparation and storage;
  - A reduction in the supply of breast milk, decreased confidence in a mother’s ability to exclusively breastfeed and a decrease in the duration of breastfeeding;
- Potential contamination of ABM with bacteria from the manufacturing process, and unsafe handling, storage or preparation (WHO, 2007);
- Illness due to improper dilution of ABM (WHO, 2007);
- An increased risk of various infections (e.g., ear, gastrointestinal, respiratory, diarrhea), chronic diseases and certain cancers among infants and children who are fed ABM (Guise et al., 2005; Ip et al., 2007);
- An increased risk of Type 2 Diabetes and certain cancers (Ip et al., 2007), as well as an increased risk of osteoporosis and a slower return to pre-pregnancy weight among women who fed their infants ABM (American Academy of Pediatrics, 2005).

The prenatal period is an important time for a mother to learn about contraception compatible with breastfeeding, including the LAM, and its relationship to supplementation and exclusive breastfeeding. The health care provider can support the mother in understanding that possible supplementation in hospital can interfere with the contraceptive effect of breastfeeding, and potentially put the mother at risk of an unplanned pregnancy.

**Prenatal assessment by a health care provider should include:**

- Inquiry about breast changes and breast anatomy.
- Inquiry about plans for infant feeding, i.e., “Have you thought about how you want to feed your baby?”
- Inquiry about confidence related to breastfeeding ability, support for breastfeeding from significant others and awareness of community breastfeeding supports.
- Assessment of any perceived or actual barriers to breastfeeding, including:
  - Past history of breastfeeding difficulties
  - Flat or inverted nipples
  - Unusual breast lump
  - Previous surgery or trauma to the breast
  - Thyroid, pituitary or endocrine issues, including fertility issues
  - Human immunodeficiency virus (HIV) positive status
  - Medication(s) contraindicated during breastfeeding
  - Disclosure of partner abuse or past history of physical or sexual abuse.

**Provide information about normal breast changes and breast anatomy during pregnancy:**

- Breasts enlarge and may be tender.
- Areola and nipples darken in pigmentation.
- Blood vessels of the breast enlarge, and may shine blue through a seemingly transparent, more translucent than usual chest wall (Jarvis, 2004).
- Montgomer’s tubercles, located within the areola, contain openings of lactiferous and sebaceous glands that enlarge during pregnancy and lactation in order to lubricate and protect the areola and nipple (Lawrence, 2011; Jarvis, 2004). The secretions also provide olfactory stimuli for infants, playing a key role in establishing behavioural and physiological processes related to breast milk transfer and production (Doucet et al., 2009).
- The hormones estrogen and progesterone are responsible for the increased size and sensitivity of the breasts or mammary glands during pregnancy (see *How the Breast Works*).
- Breastfeeding self-efficacy is the confidence that a mother has in her ability to breastfeed her infant (Dennis, 1999). The mother must believe that she is capable of implementing any technique or strategies that might be suggested (Bowles, 2011). Prenatal breastfeeding education increases breastfeeding self-efficacy (Noel-Weiss et al., 2006).
- Health care providers can enhance a mother’s breastfeeding self-efficacy and exclusive breastfeeding by helping her to:
  - Identify barriers and offer strategies to overcome them.
  - Identify and maximize strengths and sources of support.
  - Envision success and persevere through difficulties (Bowles, 2011).
References


