



### Why are we discussing breastfeeding?

Because...

1. Breastfeeding is good
2. It saves lives and is cost-effective.
3. Your support makes a difference.



St. Michael's  
Inspired Care. Inspiring Science.

### Shifting Paradigms

- Breastfeeding is the normal and natural way of feeding.
- "Benefits of breastfeeding" vs "risks of non-breastfeeding"
- Are breastfed babies at an "advantage", or are formula-fed babies at a "disadvantage"?

St. Michael's  
Inspired Care. Inspiring Science.

### Human milk is species-specific

Human milk is for  
human babies

Cow's milk is for  
cow babies

Dynamic living fluid produced by the mother to address the changing needs of an infant in its environment.

St. Michael's  
Inspired Care. Inspiring Science.

### Breastfeeding really saves lives!



Photo: UNICEF

- 10.9 million annual deaths worldwide among children < 5 years
- 60% caused by malnutrition
- 1.3 million lives could be saved annually by "optimal breastfeeding"

*Use my picture if it will help,*  
said this mother at the Children's Hospital, Islamabad, Pakistan.

St. Michael's  
Inspired Care. Inspiring Science.

### And closer to home...

Formula-feeding is associated with a **1.3 fold** higher risk of infant mortality compared to ever breastfeeding

(Stuebe 2009).

St. Michael's  
Inspired Care. Inspiring Science.

### Risks of formula-feeding for infant (Stuebe A. 2009)

- Double the risk of otitis media in the 1<sup>st</sup> yr of life
- 3.6-fold increase in risk of hospitalization for lower resp tract infection in the 1<sup>st</sup> yr of life (compared to exclusive bfing x 4 months)
- 2.4-fold risk of necrotizing enterocolitis
- Increased likelihood of obesity and diabetes type 2 in future

St. Michael's  
Inspired Care. Inspiring Science.

### Risks of formula-feeding for mothers (Stuebe A. 2009)

- Higher risk of breast and ovarian cancer
- Higher risk of obesity, type 2 diabetes, cardiovascular disease and metabolic syndrome

St. Michael's  
Inspired Care. Inspiring Science.

### Risks of various outcomes in formula-fed infants (USA Surgeon General, 2011)

Outcome among full-term infants	Excess risk (%)
Acute otitis media	100
Eczema	47
Diarrhea+vomiting (GI infection)	178
Hospital for lower resp tract infection	257
Asthma	67 (w/fam hx), 35 (w/o fam hx)
Childhood obesity	32
Type 2 diabetes	64
Acute lymphocytic leukemia	23
Acute myelogenous leukemia	18
SIDS	56
NEC in preterms	138
Breast and ovarian cancer in mothers	4 and 27 respectively

[www.surgeongeneral.gov](http://www.surgeongeneral.gov)

St. Michael's  
Inspired Care. Inspiring Science.

### WHO Recommendations

- Exclusive breastfeeding for the first **6 months** of life, with the addition of complementary foods and breastfeeding continuation until **2 yrs** and beyond.

*What do you  
recommend to  
your patients?*

- Endorsed by all major medical organizations CFPC, CPS, AAP, ACOG, CNA.

St. Michael's  
Inspired Care. Inspiring Science.



Dobrich

### No need for supplementation unless...

Infant issues	Maternal issues
Certain inborn errors of metabolism, i.e., Galactosemia, PKU.	Maternal illness causing separation from infant.
Inability to feed at breast due to i.e. illness or congenital malformation.	Medications contraindicated in breastfeeding, i.e. Antineoplastic agents.
Hypoglycemia unresponsive to frequent unrestricted breastfeeding.	Certain infections HIV in developed countries and active untreated TB.
Significant dehydration or excessive weight loss (>10%) unresponsive to frequent unrestricted breastfeeding.	Inadequate milk production or delayed lactogenesis II.
	Intolerable breast/nipple pain unresolved by interventions.

St. Michael's  
Inspired Care. Inspiring Science.

### How to supplement a lactation device at the breast



Photo: Goldfarb Breastfeeding Clinic

### dropper feeding



Photo: Malorie Gings, IBCLC

### cup feeding



Photo: Goldfarb Breastfeeding Clinic



### spoon



### bottle



St. Michael's  
Inspired Care. Inspiring Science.

### Signs of adequate hydration in infant

- **Urines:** 1 wet diaper for each day of life, until day 6 then at least 6 heavy wet diapers/24 hrs.
- **Stools:** yellow, soft stools by day 5 of life.
- **Activity:** alert baby, waking up at least every 1-4 hrs to feed.
- **Breast:** fullness vs. softness after feeds.
- **Weight:** 7-10% weight loss regained by day 10-14, then 20-30g/d.

St. Michael's  
Inspired Care. Inspiring Science.

### First visit

- Address any concerns.
- Confirm appropriate weight gain:
  - up to 8% loss of birth weight, regained by 2 weeks.
  - acceptable weight gain 20 - 30 g/day.
- Observe breastfeeding and latch.
- Examine infant.

St. Michael's  
Inspired Care. Inspiring Science.

### Breastfeeding resources

- Initial breastfeeding assessment by community clinic nurse at home visit within a few days postpartum (in Quebec).
- Support groups
  - La Leche League ([www.la lecheleague.org](http://www.la lecheleague.org), [www.allaitement.ca](http://www.allaitement.ca)).
  - Other community-based groups in various provinces.
- Private lactation consultants [www.clca-accl.ca](http://www.clca-accl.ca)
- Specialized lactation clinics

St. Michael's  
Inspired Care. Inspiring Science.

### For more information on medications and breastfeeding

- Motherisk: [www.motherisk.org](http://www.motherisk.org)
- Medications and Mothers Milk by Dr Thomas Hale, as well as Dr. Hales website: <http://neonatal.ttuhs.edu/lact/>
- Lactmed: <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT>
- Available as app for iPhone!!

St. Michael's  
Inspired Care. Inspiring Science.

### The Breastfeeding Friendly Office

St. Michael's  
Inspired Care. Inspiring Science.



Photo: Goldfarb Breastfeeding Program

### How to make your office breastfeeding-friendly:

- Breastfeeding protocol communicated to all staff.
- Adequate staff training to implement breastfeeding protocol.
- Promote breastfeeding-friendly hospital policies and insurance plans.
- Inform all pregnant patients and new parents about breastfeeding, and risks of using artificial infant formula without proper medical indications.

St. Michael's  
Inspired Care. Inspiring Science.

### How to make your office breastfeeding-friendly cont' d:

- Refer to breastfeeding support groups.
- Use lactation consultants liberally.
- Find out whether your community offers nurse home visits for postpartum mothers.
- Encourage mom to seek help early if breastfeeding is not going well, i.e. community health clinic, doctor's office, lactation consultant.
- Schedule office visit early postpartum to evaluate lactation.

St. Michael's  
Inspired Care. Inspiring Science.

### Being breastfeeding-friendly = respecting the Code

- The [International Code for the Marketing of Breastmilk Substitutes](#) was adopted by the World Health Assembly in 1981.

It was an agreement between various groups, including infant formula companies.

- The Code was signed by many countries including ours, and is endorsed by most major medical associations.

It is a tool to protect and promote breastfeeding and to ensure appropriate marketing of breastmilk substitutes, feeding bottles, and teats. (IBFAN).

St. Michael's  
Inspired Care. Inspiring Science.

### What products does the Code apply to?

Breastmilk substitutes, infant formula, complementary foods for use before 6 months, feeding bottles and artificial nipples.



St. Michael's  
Inspired Care. Inspiring Science.

### The Code stipulates the following:

- 1) The provision of clear information
- 2) No promotion to the public
- 3) No gifts to mothers or health workers
- 4) No promotion to health care facilities
- 5) No promotion to health workers
- 6) No free samples or supplies
- 7) No promotion of complementary foods before they are needed
- 8) Adequate labels: clear information, no promotion, no baby pictures
- 9) Companies must comply with the International Code

St. Michael's  
Inspired Care. Inspiring Science.

### The Code: patient education

- Educational materials for pregnant women:
  - Should explicitly address the benefits and superiority of breastfeeding, and the drawbacks of partial bottle-feeding and the risks of formula-feeding.
  - The use of breastmilk substitutes should not be idealized in pictures or text.
  - Proper use and indications for infant formula should be detailed where needed.
  - Pamphlets from Formula companies should not be distributed.

St. Michael's  
Inspired Care. Inspiring Science.

### The Code: health care professionals

- Should protect and promote breastfeeding and be familiar with its benefits and superiority.
- Product information received should only be scientific and factual, and should not "imply or create a belief that bottle-feeding is equivalent or superior to breastfeeding".
- No financial or material inducements should be accepted to promote products under the scope of the Code.
- Any funding received from formula and other companies should be disclosed.
- No free gifts or samples of formula to patients!

St. Michael's  
Inspired Care. Inspiring Science.



The Code does not prohibit the existence of infant formula or the choice to bottle-feed.

Promotion is prohibited, not the sale of the product.

The Code tries to level the playing field so that the superiority of breastmilk which has no Madison Avenue agency or million dollar marketing budget promoting it - is not lost in the landslide of formula marketing hype...

- IBFAN -

St. Michael's  
Inspired Care. Inspiring Science.



### Take home messages

- Breastmilk saves infant lives and greatly benefits mothers.
- Your support makes a huge impact on breastfeeding success.
- Facilitating skin to skin and breastfeeding during birth and the early postpartum period can increase breastfeeding success.
- Breastfeeding problems may arise, but solutions can be found.
- Help is available.

St. Michael's  
Inspired Care. Inspiring Science.



THANK YOU!



Photos from Korea

St. Michael's  
Inspired Care. Inspiring Science.

