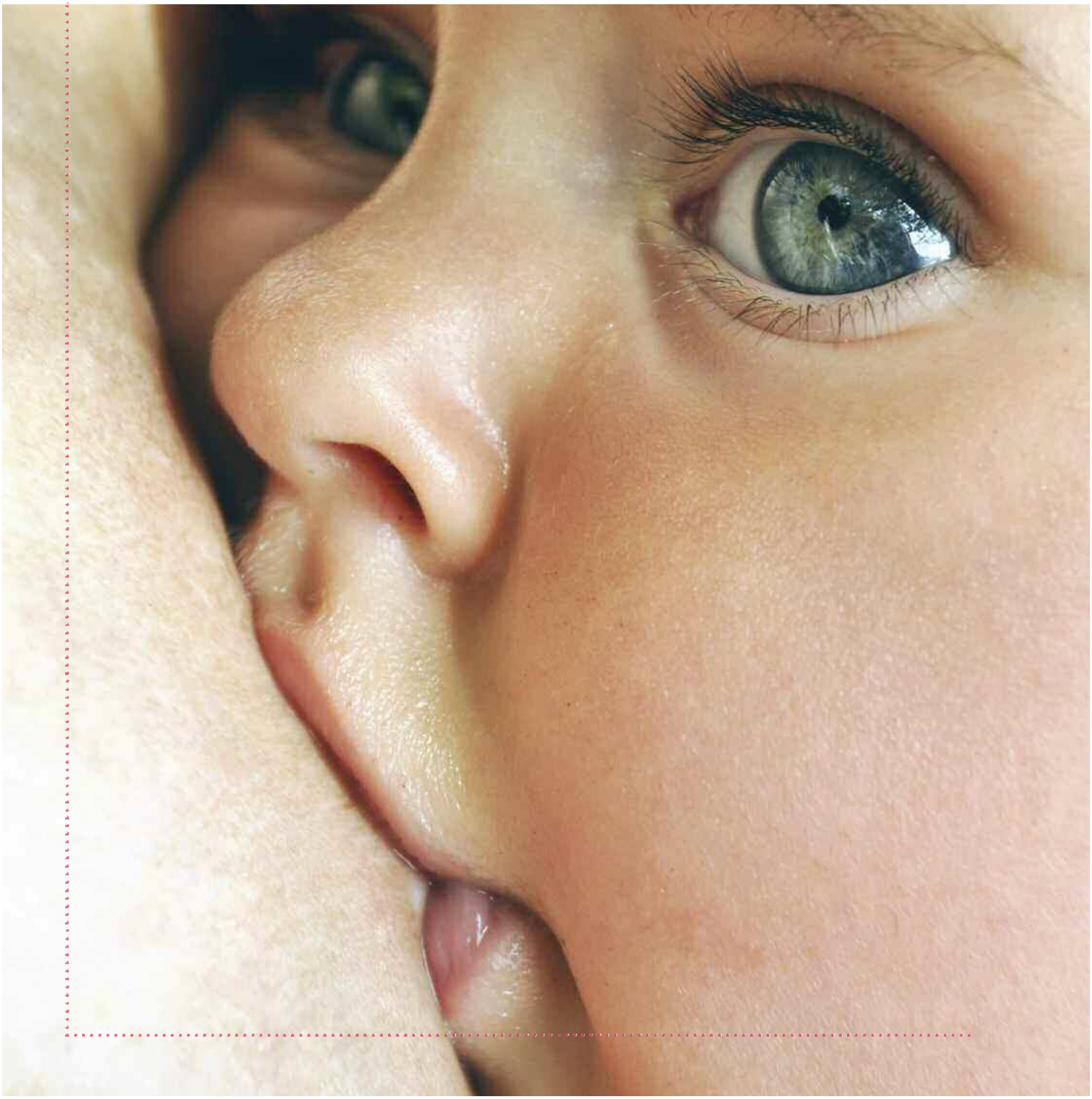
PHYSICIAN'S TOOLKIT

BREASTFEEDING

{QUICK REFERENCE GUIDE}



INTRODUCTION

The Physician's Breastfeeding Toolkit: Evidence-informed Practice for Newfoundland & Labrador 2014 (Revised 2016).

Revised with permission by Renfrew County and District Health Unit, January 2020.

This toolkit is designed to assist health care providers in providing optimal care and consistent information to breastfeeding families. The toolkit is based on current evidence and reflects best practice in the care of breastfeeding families. Topics include initiating and sustaining breastfeeding, management of common concerns, medication safety, establishing a breastfeeding-friendly practice environment and local support resources.

Acknowledgements

The development of this resource was initiated by the Baby-Friendly Council of Newfoundland & Labrador in an effort to promote evidence-informed practices for breastfeeding. The Baby-Friendly Council of Newfoundland and Labrador acknowledges the contribution of the two consultants for this project, Dr. Amanda Pendergast, BSc (Hons), MD, CCFP, FCFP and Janet Fox-Beer BN, RN, IBCLC. Their professional knowledge, clinical expertise and commitment to this project are exemplary.

Thank you also to members of the advisory committee for their guidance in the development and review of the resources for the toolkit.
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Designed and Produced by Fonda Bushell Inc.

Renfrew County and District Health Unit
"Optimal Health for All in Renfrew County and District"

www.rcdhu.com

Exclusive breastfeeding for the first six months and continue up to two years and beyond.

PHAC, 2012

HEALTH OUTCOMES ASSOCIATED WITH BREASTFEEDING

{ MOTHER }	{BABY}
↓ Breast and ovarian cancer	↓ Otitis media/LRTI
↓ Diabetes	↓ Obesity
↓ Osteoporosis	↓ Diabetes
↓ CVD	↓ Childhood cancer
↑ Rate of return to pre-pregnancy state	↓ Gastro
	↓ SIDS
	↓ NEC
	↓ Asthma, atopy
	↑ IQ

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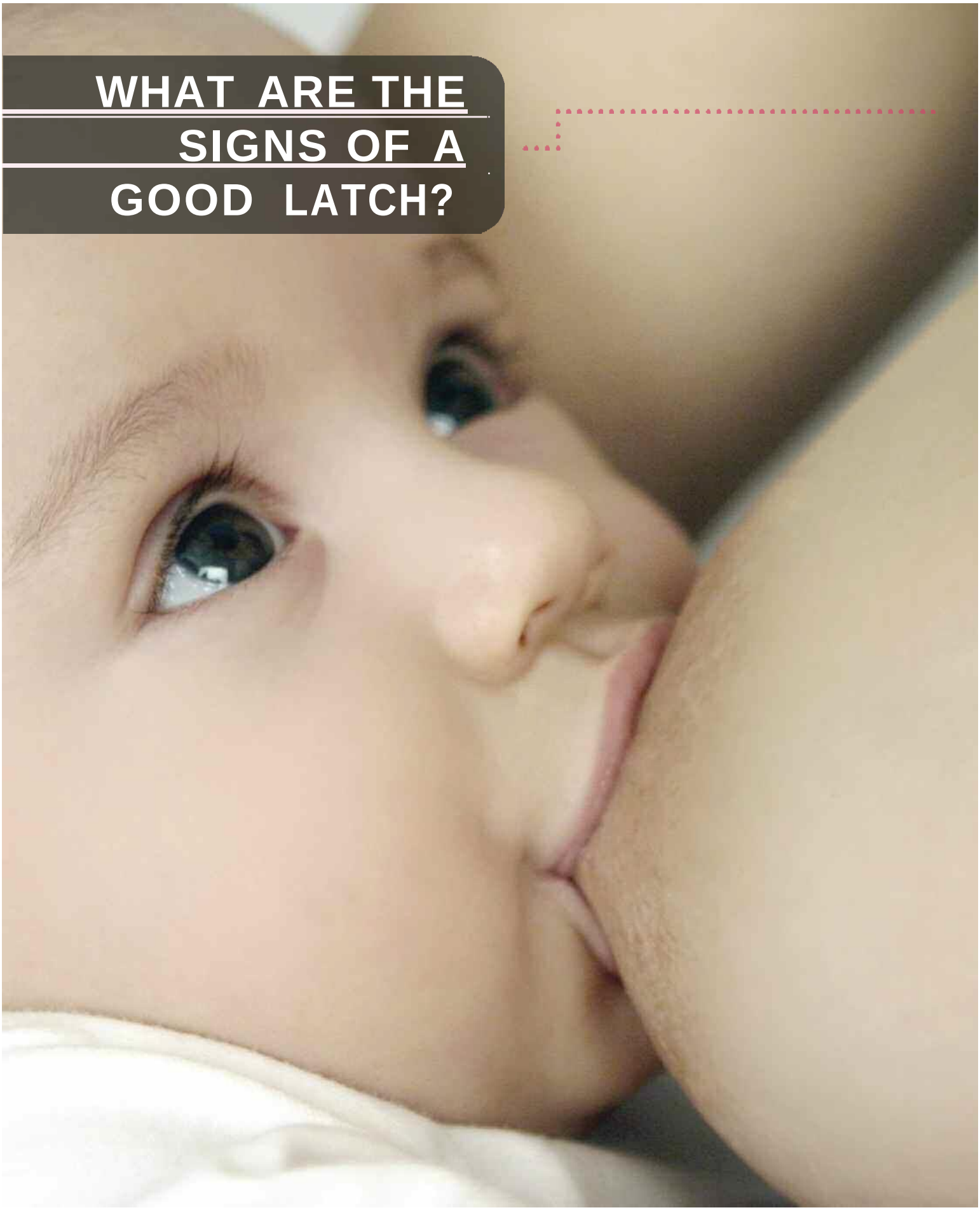
WHAT ARE THE SIGNS OF A GOOD LATCH?



L

LIPS FLANGED OUT

Wide, gaping mouth to accommodate areola and nipple

A

ASYMMETRIC LATCH

More areola visible above the baby's top lip

T

TUMMY TO MUMMY

Baby's ears, shoulders and hips in alignment

C

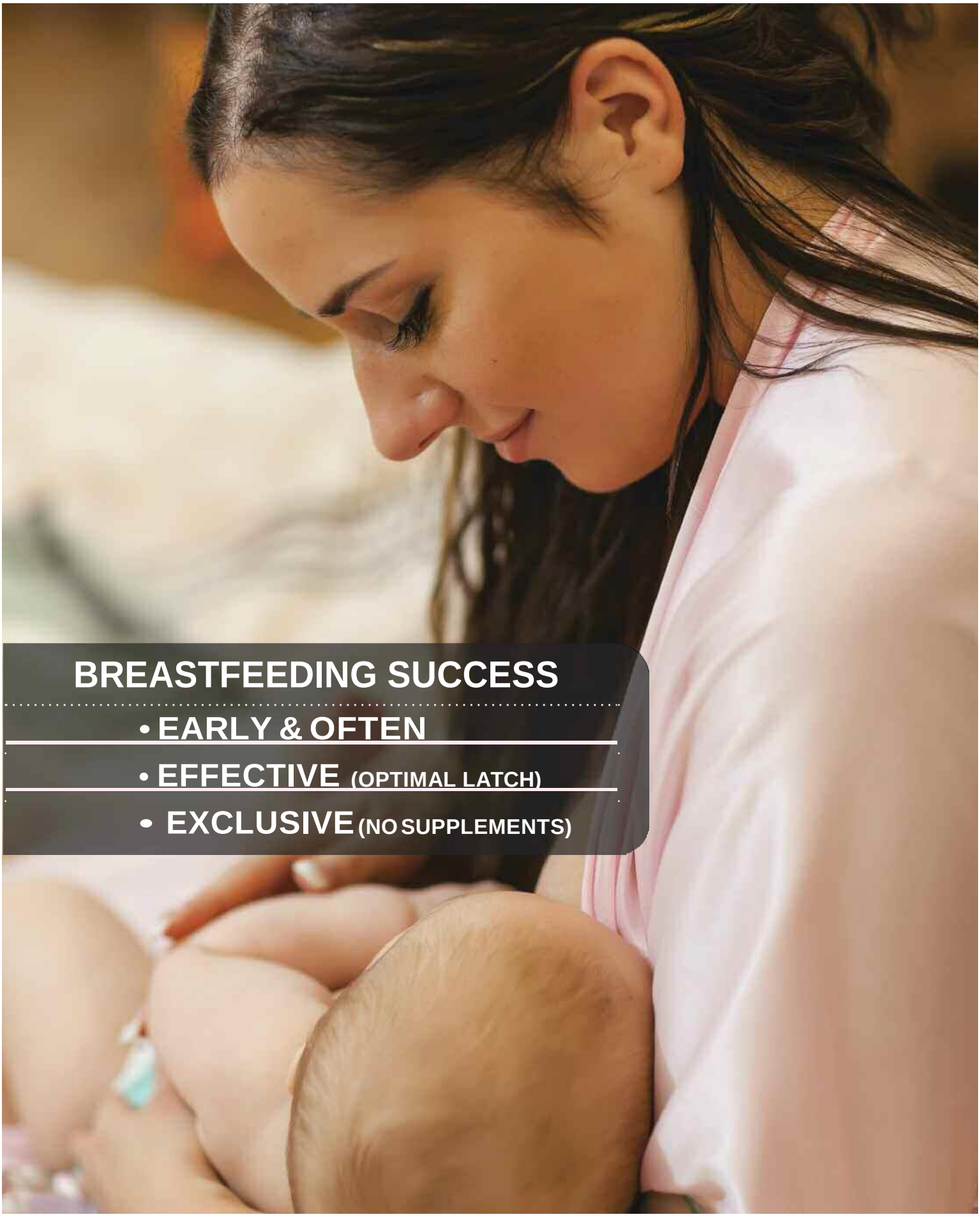
CHIN TOUCHING BREAST

Nose free in the sniffing position

H

HAVE A LISTEN & WATCH

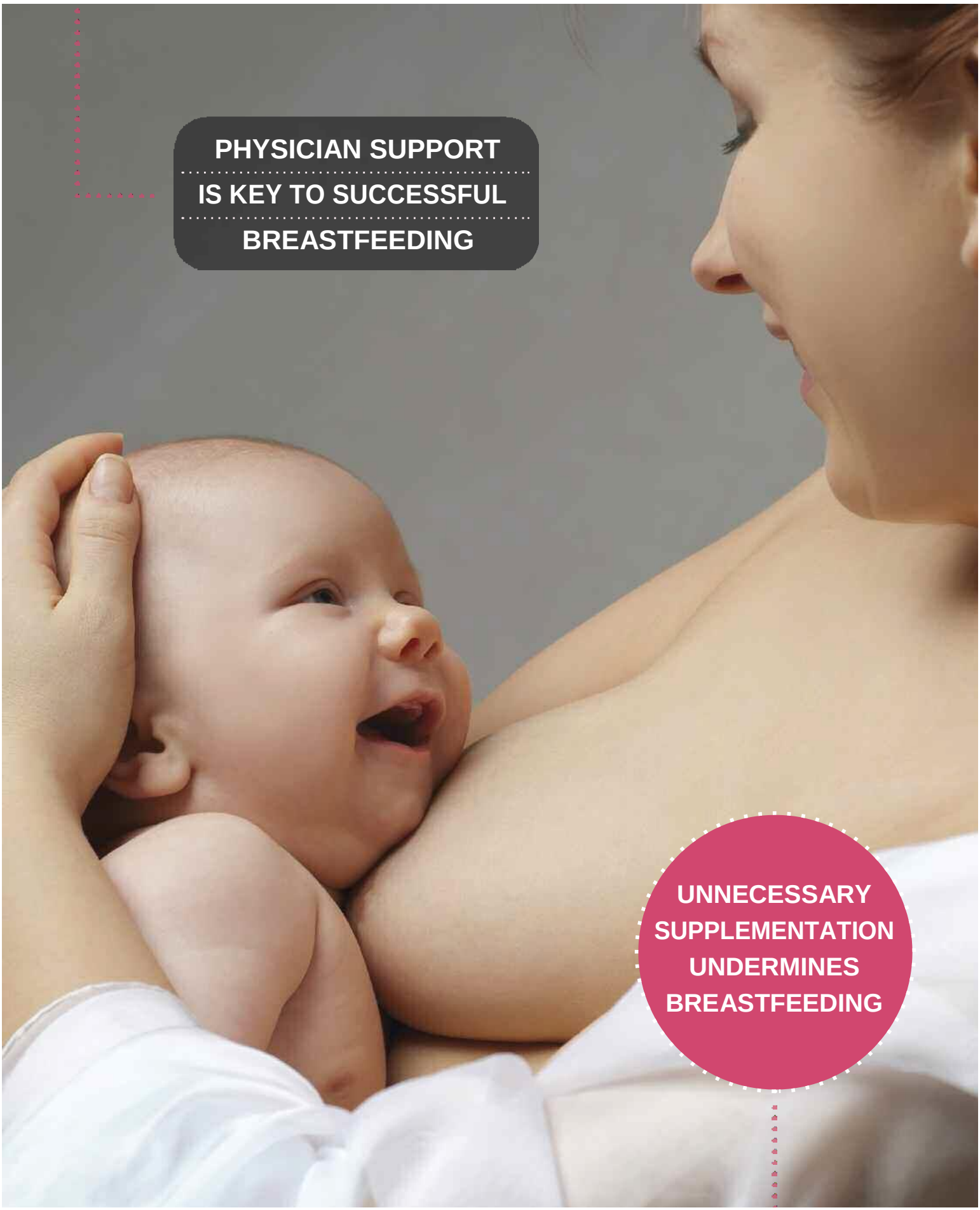
Active suckling and swallowing indicates milk transfer


BREASTFEEDING SUCCESS
• EARLY & OFTEN
• EFFECTIVE (OPTIMAL LATCH)
• EXCLUSIVE (NO SUPPLEMENTS)

INFLUENCE OF LATCH & MILK PRODUCTION ON BREASTFEEDING OUTCOMES

Note: If the latch is optimal, even a reduced milk production can lead to a healthy infant weight gain.

LATCH	Milk Production	Outcomes for Mother & Baby
Optimal	Optimal	• Excellent weight gain • Pain free feeding • Efficient feeding • Satisfied baby
Adequate	Optimal	• Good weight gain • Pain free feeding • Longer & more frequent feedings
Optimal	Adequate	• Good weight gain • Pain free feeding • Efficient feeding • Satisfied baby
Poor	Optimal	• Slower weight gain • Lower milk production • Longer feeds • Possible weight loss • Sore nipples
Poor	Adequate	• Slow weight gain • Longer feeds • Growth concerns • Fatigue (mom & baby) • Sore nipples


PHYSICIAN SUPPORT
IS KEY TO SUCCESSFUL
BREASTFEEDING
UNNECESSARY
SUPPLEMENTATION
UNDERMINES
BREASTFEEDING

SIGNS OF EFFECTIVE BREASTFEEDING

{ First 6 weeks }

- Exhibits readiness to feed at least 8 or more times in 24 hours
- Suckles and swallows effectively to transfer milk and stimulate production
- Has alert periods
- Settles after a feeding
- Yellow, seedy bowel movements and clear urine (see stool & urine output chart)
- Back to birth weight by day 14
- Appropriate weight gain (see page 16)*
- No pain with breastfeeding

*It may be acceptable for a healthy baby to have a slower weight gain pattern.

INFANT STOOL & URINE OUTPUT CHART

INFANT AGE	WET DIAPERS / DAY	STOOLS / DAY
Days 1 to 2 (colostrum)	1 - 2 clear or pale yellow	1+ meconium
Days 3 to 4 (milk coming in)	3+ clear or pale yellow	3+ green, brown or yellow
After 1st week (milk is in)	6+ clear or pale yellow	3+ soft, yellow, loose, seedy
After 4 weeks	6+ clear or pale yellow	Varies. 1 or more soft, large or may go several days without a BM**

**An occasional green stool is not unusual.

FACTORS THAT MAY IMPACT LACTATION

OBSERVATION AND EVALUATION OF BOTH MOTHER & BABY WHILE BREASTFEEDING IS ESSENTIAL.

{ INFANT }

NEWBORN HISTORY

- Preterm or late preterm
- SGA
- IUGR
- Multiple gestation
- Congenital anomalies
- Ankyloglossia
- Traumatic delivery

FIRST DAYS OF LIFE

- Signs of illness: jaundice, fever, lethargy, hypoglycemia
- Separation from mother
- Resuscitation

FEEDING HISTORY

- Ineffective latch
- Early introduction of artificial nipples/pacifiers
- Non-medical supplementation
- State around feedings (e.g., fussy, sleepy, unsettled)

A complete history and physical of mother and baby is necessary when assessing problems such as low milk production or slow weight gain

FACTORS THAT MAY IMPACT LACTATION

{ MOTHER }

SOCIAL HISTORY

- Primiparous
- Inadequate social supports
- Uninvolved partner
- Early return to work or school
- Uncertain feeding goals
- Adolescent or older mother
- Physical or sexual abuse
- Unrealistic postpartum expectations
- Hx of previous breastfeeding challenges

MEDICAL HISTORY

- Breast surgery
- PCOS
- Thyroid dysfunction
- Some medications
- Flat or inverted nipples
- Obesity
- Endocrine disorders

PREGNANCY HISTORY

- Infertility
- Hypertension
- Gestational diabetes
- Depression/anxiety
- Anemia

LABOUR & DELIVERY

- Gestation
- Induction of labor
- Prolonged labor
- Assisted delivery or C/S

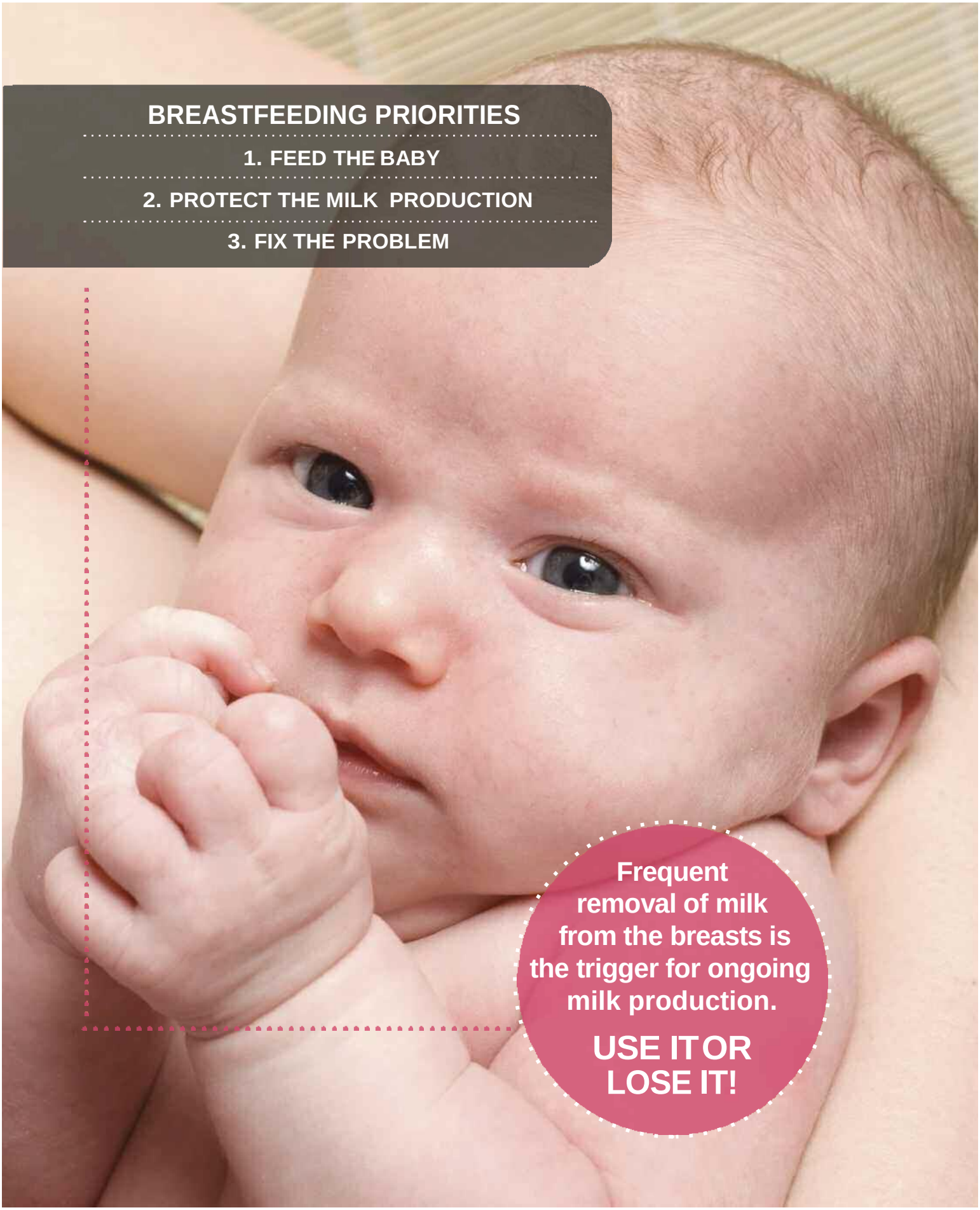
POSTPARTUM

- Infection
- Hemorrhage
- Retained placenta
- Delayed lactogenesis
- Breast or nipple pain
- Inadequate milk production
- Hormonal contraception before breastfeeding well established
- Anemia
- Thyroid dysfunction

Ankyloglossia

Premature baby

Inverted nipple



BREASTFEEDING PRIORITIES

1. FEED THE BABY
2. PROTECT THE MILK PRODUCTION
3. FIX THE PROBLEM

Frequent removal of milk from the breasts is the trigger for ongoing milk production.

USE IT OR LOSE IT!

QUESTIONS TO CONSIDER WHEN ASSESSING BREAST & NIPPLE PAIN

NOTE: IT IS IMPORTANT TO ASSESS IF THE BREAST / NIPPLE PAIN IS UNILATERAL OR BILATERAL.

QUESTION	POSSIBLE DIAGNOSIS
BREAST PAIN	
• Palpable, tender mass or lump?	Blocked duct or Mastitis
• Fever, malaise and erythema?	**YES:** Mastitis **NO:** Blocked duct
• Palpable, tender, red lump not responding to mastitis or blocked duct RX?	Breast abscess
• Persistent breast fullness and pain? • Shiny, taut skin and nipple effaced?	Engorgement (more common if < 1 week PP)
• Baby choking on feeds? • Strong letdown, hypersensitive nipples, very full breasts?	Overproduction
NIPPLE PAIN	
• Soreness or pain with no skin breakdown?	Sore nipples
• Nipple pain with skin breakdown? (nipple compressed, crease or blanching across the tip, ecchymosis, shallow or deep fissure)	Abrasion/cracked nipple
• Erythema and crusting?	Infected abrasion/cracked nipple
• Shooting or burning pain worse with feeding, itchy nipples?	Candida
• Nipple blanching, blue/red colour changes?	Vasospasm/Raynaud's
• Dry, flaking skin, pruritus and erythema?	Dermatitis/Eczema
• Painful, white lesion?	Bleb or sebaceous cyst

DIAGNOSIS & TREATMENT OF COMMON BREASTFEEDING CONCERNS

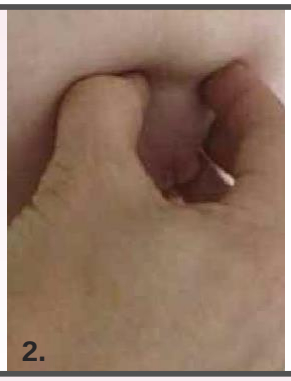
DIAGNOSIS	SYMPTOM	SIGN	TREATMENT

• Engorgement	• Breasts over full with milk, causing tightness and pain
	
	(Peaks days 3-5 postpartum, and anytime milk is not removed effectively)
		• Hard, tight, shiny breasts
		• Usually bilateral
		• Nipple effaced
		• Areola firm
		• Difficulty latching
		• Poor let-down
			• BEFORE feeding: facilitate milk let-down with:
			  • warm compresses to breast or warm shower
			  • gentle hand massage and expression
			  • reverse pressure softening (see below)
			• DURING feeding:
			  • optimize latch
			  • frequent feedings with breast compression (see below)
			• AFTER feeding:
			  • hand expression
			  • cool compresses to breast
			  • NSAIDs prn

REVERSE PRESSURE SOFTENING (RPS)

1. Apply gentle, but firm, positive pressure inwards towards the chest wall, on the areola at the base of the nipple for 40-60 seconds prior to latching the baby.

2. Apply pressure with the fingertips moving around the circumference of the areola. This softens a 1 inch area of the areola, by pushing back interstitial fluids, reducing edema, and facilitating a deeper latch.



BREAST COMPRESSION is a simple technique that can enhance milk flow. The mother's hand applies gentle, but firm pressure to the breast as the baby is latched, but not actively sucking and swallowing. This pressure can be applied using a C-hold hand position on the breast, close to the chest wall and away from the baby's lips and latch. The pressure is released when the baby stops suckling, and resumes with the baby's return to nursing.

DIAGNOSIS & TREATMENT OF COMMON BREASTFEEDING CONCERNS

DIAGNOSIS	SYMPTOM	SIGN	TREATMENT
• Sore nipples	• Nipple pain during feeding	• Nipple erythema • Ecchymosis • Compressed nipple post latch	• Assess and correct latch and position • Apply 1st choice: expressed breastmilk or 2nd choice: lanolin • Consider APNO*

• Nipple abrasion
• Cracked nipple
	• Painful latch
	• Nipple pain
		• Nipple erythema
		• Broken skin integrity
		• Ecchymosis
		• Bleeding nipples
		• Compressed nipple post latch
		• May have purulent discharge and honey coloured exudate
			• Assess and correct latch
			• Rule out ankyloglossia or dysfunctional suck
			• Apply 1st: expressed breastmilk, 2nd: lanolin and/or coconut oil. With or without using a breast shell
			• Moist wound healing (water based hydrogel dressing)
			• Topical treatment options:
			  • APNO*
			  • 2% Mupirocin
			  • 2% Fucidic acid
			If no improvement in 48 hrs, consider po antibiotics
			(see mastitis on p. 14)

• Nipple bleb • Sebaceous cyst	• Nipple pain	• White or yellow lesion on nipple face (bleb) or shaft (sebaceous cyst)	• Apply warm, moist compresses • Coconut oil on a cotton ball against nipple (in bra) • Increase frequency of breastfeeding/expression • NSAIDs prn • Sterile lancing +/- topical antibiotic

*** APNO ALL PURPOSE NIPPLE OINTMENT**

- Mupirocin 2% Ointment (15g)
- Betamethasone 0.1% Ointment (15g)
- Ibuprofen Powder 2%*
- Miconaozole Powder 2%*

*final concentration

Note: Short term use of 2-3weeks only, then reassessment

- Apply sparingly to nipples postfeeding
- DO NOT wash off before breastfeeding

DIAGNOSIS & TREATMENT OF COMMON BREASTFEEDING CONCERNS

DIAGNOSIS	SYMPTOM	SIGN	TREATMENT
• Flat / Inverted nipples	• Difficulty latching • Nipple pain	• Non-protractile nipple • Nipple inversion • Erythema • Broken skin integrity	• Stimulate/shape nipple (using hand or pump) before latching-on • Alternate positions: e.g., football or cross cradle • Aim for a deep latch • Consult with Lactation Consultant (LC)
• Nipple vasospasm	• Deep, shooting breast pain (Usually follows a feeding and affects both nipples)	• Nipple blanches after feeding • May progress to blue/red colour changes (Raynaud's)	• Assess and correct latch • Treat underlying infection • Apply, warm, dry compresses post feeding • Massage pectoral and chest muscles • Avoid cold • NSAIDs prn • Nifedipine 10 mg po tid or Nifedipine XL 30 mg od • Magnesium 300 mg and calcium gluconate 200 mg po bid may be helpful

• Overproduction	• Mother
	  • breast fullness > 3 weeks postpartum
	  • hypersensitive nipples
	  • forceful let-down
	• Baby
	  • arching back with feeds
	  • choking/gagging
	  • frothy, explosive stools
			• Express initial milk into a cloth if let-down is forceful
			• Use laid-back position with baby prone on mom
			• Offer one breast per feeding
			• Offer same breast again if < 2 hours between feeds
			• After feeding, hand express for comfort

*APNO ALL PURPOSE NIPPLE OINTMENT

- Mupirocin 2% Ointment (15g)
- Betamethasone 0.1% Ointment (15g)
- Ibuprofen Powder 2%*
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*final concentration

- Apply sparingly to nipples post feeding
- DO NOT wash off before breastfeeding

DIAGNOSIS & TREATMENT OF COMMON BREASTFEEDING CONCERNS

DIAGNOSIS	SYMPTOM	SIGN	TREATMENT
• Candida (Mother) 	• Shooting breast pain • Burning, itchy sensation • Worse at end of day • Often after period of pain-free breastfeeding and can last minutes to hours	• Erythematous nipple and areola • Shiny areola • Dry / flaky areola	ALWAYS TREAT BABY TOO! • 1st line: APNO* applied to nipple and areola after each feeding • 2nd line: Fluconazole 400 mg day 1, then 100 mg po bid until asymptomatic x 7 days (If topical treatment has failed) • Frequent hand washing • Sanitization of ALL objects in contact with nipples or infant's mouth (breast pad, soother, toys) • Prophylactic coconut oil on nipples for mothers prone to yeast infection
• Candida (Baby) 	• Gassy and fussy at breast • Pulls on and off breast • Clicks while nursing	• Oral thrush • Candida diaper dermatitis	ALWAYS TREAT MOTHER TOO! • Nystatin suspension 100,000 units / ml 1 ml 4-6 times per day x 10-14 days +/- topical antifungal for diaper dermatitis • Avoid commercial baby wipes if diaper rash is present • Prophylactic Coconut oil used on diaper area for baby prone to yeast rash

DIAGNOSIS & TREATMENT OF COMMON BREASTFEEDING CONCERNS

DIAGNOSIS	SYMPTOM	SIGN	TREATMENT

• Blocked duct
 	
	• Unilateral, localized breast pain	• Localized tenderness
		• Palpable lump
		• Possible erythema
		• Afebrile
			• Apply warm compresses prior to feeding
			• Gentle breast massage before and during feeding
			• Frequent breastfeeding:
			  • start on affected side
			  • position chin towards blockage
			• Avoid missed feedings and breast constrictions (ie: underwire bras)
			• NSAIDs prn
			• Prevent recurrences:
			  • Lecithin 15 ml or 1200-2400 mg po tid - qid

• Mastitis
 	
	• Unilateral breast pain
	• Swelling and redness
	• Flu like symptoms:
	  • fever
	  • myalgia
	  • malaise
		• Localized erythema, tenderness and induration
		• Breast enlargement or palpable lump
		• Decreased milk production
		• Usually unilateral
		• Fever greater than 38.5C
			• Frequent breastfeeding or expression (see blocked duct)
			• If symptoms persist >12-24 hrs or mother acutely ill:
			1st line:
			  • Cephalexin 500 mg po qid
			2nd line:
			  • Cloxacillin 500 mg po qid
			  • Amoxicillin clavulanate 500 mg po tid or 875 mg po bid
			  • Trimethoprim or Sulfamethoxasole DS po bid
			  • Clindamycin 300 mg po tid
			  • treat for 10 -14 days
			• NSAIDs
			• Supportive care:
			  • rest
			  • fluids
			  • nutrition

DIAGNOSIS & TREATMENT OF COMMON BREASTFEEDING CONCERNS

DIAGNOSIS	SYMPTOM	SIGN	TREATMENT
• Breast abscess	• History of recent mastitis • Unilateral breast pain • Swelling and redness	• Localized erythema, tenderness, induration • Breast enlargement or palpable lump • Fever and malaise (may have subsided if the mother has had antibiotics) • Poor response to antibiotics	Surgical emergency • Requires needle aspiration or incision and drainage • Breastfeed from non-affected side • Resume feeding on affected breast once treatment started • May breastfeed from affected side if abscess does not involve nipple • Incision may leak milk but promotes wound healing

EFFECTIVE DRAINAGE OF AN ABSCESS

Needle aspiration can be used. It is best to use ultrasound, if possible, to ensure complete drainage.

For more information visit www.uptodate.com or refer to Dieter Ulitzsch, MD, Margareta K. G. Nyman,MD, Richard A. Carlson, MD. Breast Abscess in Lactating Women: US-guided Treatment. Radiology 2004; 232:904–909

• Eczema/contact dermatitis	• Pruritis	• Oozing
		• Erythema
		• Dry flaky skin
			• Removal of irritant
			• Air dry breasts
			• Steroid cream:
			  • 1% Hydrocortisone
			  • 0.1% Betamethasone Valerate
			  • 0.1% Mometasone

MANAGEMENT OF POOR INFANT WEIGHT GAIN

Initial Assessment of:

MOTHER

- Medical hx (e.g., infertility, PCOS, obesity, endocrine dysfunction, anemia)
- Perinatal hx (e.g., PPH or high blood loss, PP depression, retained placenta, infection, GDM, HTN, stress)

BREASTS

- Development in puberty and during pregnancy
- Symmetry, shape, fullness
- Nipples: size, shape
- Prior Sx (eg. augmentation, reduction, biopsy)

BABY

- R/O underlying conditions (e.g., jaundice, fever, infection, heart murmur)
- Gestation, weight, length, HC
- Tone, alertness
- Oral cavity, suck, tongue/lip tie
- Meeting minimum urine/stool output

Observe the baby breastfeeding

WEIGHT CONCERNS:

> 8-10% loss of birth weight on day 5 of life OR not regaining birth weight by day 14 requires careful assessment and breastfeeding assistance by professional with breastfeeding expertise

A healthy term newborn may take up to 3wks to regain birth weight

Expected Weight Gain:*

- 150g+/wk @ 2-4weeks
- 130-420g/wk @ 1-2 months
- 90g-250g/wk @ 2-4 months
- 50g-180g/wk @ 4-6 months

Follow the WHO Set 2 growth charts

*Based on 5th-97th percentile for weight velocity, not overall weight for age. Slower gains may be normal, but require assessment.

Excess newborn weight loss is correlated with intrapartum maternal IV fluid, and may not indicate ineffective breastfeeding

MANAGEMENT OF POOR INFANT WEIGHT GAIN

POTENTIAL FACTORS	SUGGESTED MANAGEMENT
Sub-optimal Latch	• Correct latch • Assess suck and milk transfer • Ensure pain free breastfeeding vs nipple sucking • Ensure position is comfortable • Bring baby to breast rather than breast to baby **Monitor weight Q 2-4 days.** L LIPS FLANGED OUT A ASYMMETRIC LATCH T TUMMY TO MUMMY C CHIN TOUCHING BREAST H HAVE A LISTEN & WATCH
Sub-optimal Milk Transfer	• Observe for sustained suck-swallow pattern, visible/audible swallowing • Encourage skin-to-skin contact • Suggest breast compressions (p.10) • Hand express/pump post feedings • **+Large nipples** may require breast compressions throughout feeds and pumping until baby grows and can accommodate the size of the nipple **Sucking does not always indicate baby is feeding well.**
Restricted Feeding	• Educate mother on signs of readiness or cues for feeding • Discuss importance of frequent, unrestricted feeding (8 or more times in 24 hrs) • Advise to finish feedings on first breast and then offer the second • Avoid pacifiers as a means of delaying feedings • Consider psychosocial concerns as identified in history **Skin-to-skin care improves breastfeeding outcomes.**

MANAGEMENT OF POOR INFANT WEIGHT GAIN

POTENTIAL FACTORS	SUGGESTED MANAGEMENT
Sub-optimal Milk Production	• Assess maternal health • Optimize position and latch • Increase time spent skin to skin • Increase breastfeeding frequency (8 or more times in 24 hrs) • Suggest breast compressions (see p. 10) • Hand express/pump post feedings • Supplement **if medically indicated** using a lactation aid (pg 22): Expressed breastmilk (EBM) or if unavailable, artificial baby milk (ABM) • Consider galactogogues (see pg.26 Medication) • Consult with Lactation Consultant
Preterm / SGA	• Supplement **if medically indicated** using EBM or ABM with lactation aid (pg 22) • Suggest hand express/pump post feedings • Increase breastfeeding frequency (8 or more times in 24 hrs)
Psychosocial Concerns	• Consider other risk factors as identified in history (e.g., depression, uncertain feeding goals, stress, early return to work/school, dieting, self-confidence) • Reassess latch and technique • Provide education and support • Refer to community mother-to-mother support • Refer to Lactation Consultant

MEDICAL INDICATIONS FOR SUPPLEMENTATION

If breastfeeding must be interrupted or stopped for a medical reason, always consider the risks posed by using a breastmilk substitute (e.g., formula).

Infants who should not receive human milk:

- Some inborn errors of metabolism (e.g., galactosemia, maple syrup urine disease)
- Maternal HIV*

Infant conditions that may require supplementation for short periods of time, with continued breastfeeding:

- Birth weight < 1500 grams
- Gestation < 32 weeks
- Unresolved hypoglycemia
- Not regaining birth weight by 2-3 weeks
- Inadequate weight gain
(see page 16)

Maternal conditions that may require supplementation for short periods of time, with continued breastfeeding:

- Severe illness (e.g., sepsis)
- Specific maternal medications (see medications p. 23)
- HSV-1 (until active lesions near the nipple and areola resolve)

Maternal conditions that require close monitoring and may require supplementation:

- Delayed lactogenesis (e.g., retained placenta, PPH, diabetes mellitus, labour or birth interventions)
- Breast abscess (may breastfeed on affected breast once treatment started)
- Breast surgery
- Hepatitis B
- Hepatitis C
- Substance use

* In Canada, HIV positive mothers are advised to feed with a breastmilk substitute. In some countries, management may be different when the use of a breastmilk substitute is not Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS).

1st CHOICE:
Expressed Breastmilk

2nd CHOICE:
Donor Human Milk

3rd CHOICE:
Protein Hydrolysate Formula (hypoallergenic)

4th CHOICE:
Regular Infant Formula

Consider the family's Breastfeeding goals and priorities. Use a realistic, non-judgemental approach.

TAILOR VOLUMES TO TUMMY SIZE

Age	Tummy Size	Supplement Volume
0 - 24 hrs	5 - 7 mls	2 - 10 mls per feed
24 - 48 hrs	12 mls	5 - 15 mls per feed
48 - 72 hrs	13 - 30 mls	15-30 mls per feed
72 - 96 hrs	30+ mls	30 - 60 mls per feed
By day 10	60 - 81 mls	Follow guidelines for slow gaining infant on next page

GUIDELINES FOR SUPPLEMENTATION

KEY POINTS:

- Tailor management to mother and baby
- Always observe and assess breastfeeding first
- Optimize breastfeeding technique and management
- Supplement using the volume and method least likely to interfere with breastfeeding
- Avoid artificial nipples and bottles, instead use cup, spoon or lactation aid (pg. 22)

Cup feeding

Hand expression of colostrum

Lactation aid

For the slow gaining infant:

- Start with supplemental feedings guided by the baby's appetite
- If infant is not exhibiting hunger cues, aim for a minimum supplementation of 50 ml/kg/24 hours divided into 8 feedings
- Increase supplement to meet baby's appetite and appropriate weight gain
- Mother should express breastmilk after feedings to increase production
- Reduce supplements as mother's milk production increases and baby's weight is appropriate

Note: These babies are still getting SOME breastmilk, so when supplementing give an amount that represents partial intake.

Use of Lactation Aid

Or Supplemental Nursing System (SNS)

Babies learn to breastfeed by breastfeeding. If supplementation is medically indicated, a lactation aid is the best option, since baby is on the breast and breastfeeding. Cup and spoon feeding are good alternatives when the baby is very sleepy or not yet able to latch to the breast.

Artificial nipples, such as bottles and soothers/pacifiers should be avoided while babies learn to breastfeed. Babies learn by doing, if they learn how to suck on a bottle, they may apply that technique to mom when attaching to the breast, which can cause pain and damaged nipples.

Lactation aids or SNS can be home made, using a 5fr feeding tube and a clean container, OR parents can purchase a commercially made SNS.

Once baby has latched and fed from mom, the tube can be inserted into the corner of the baby's mouth, past the gums. If correct positioning has been achieved and the latch has a good seal, the baby will draw milk from the container as he continues to feed at the breast. (Keep container at level of breast to allow baby to control the flow).
Caution: Ensure tube does not slip too far into babies mouth/throat. Tube only needs to extend past the baby's gums to function properly.

See video clip online and visit www.nbci.ca for more information.

https://www.breastfeedinginc.ca/inserting-a-lactation-aid

BREASTFEEDING MEDICATION SAFETY

COMPATIBLE CAUTION AVOID

ANALGESIA

- Acetominophen
- NSAIDs: Ibuprofen, Diclofenac, Celecoxib, Indomethacin,
- Triptans: Sumatriptan, Eletriptan
- Tramadol
- Methadone: if taken during pregnancy

- Narcotics: Codeine
  May cause infant drowsiness and CNS depression
  Safe for low dose short term use only
- NSAIDs: Naproxen
  Longer half-life, other NSAIDs may be preferred in preterm infants

- Triptans: Rizatriptan, Zolmitriptan, Naratriptan *

ANTI - I NFECTIVES

- Penicillins: Amoxicillin, Clavulanate, Fucidic acid
- Cephalosporins: Cefuroxime, Cephalexin, Cefaclor, Cefazolin
- Macrolides: Erythromycin, Azithromycin, Clarithrymycin
- Sulfonamides: TMP-SMX (full-term infants)
- Tetracyclines (short term use only)
- Antifungals: Fluconzaole (po), Clotrimazole, Miconazole, Terbinafine (topical)
- Antivirals: Acyclovir, Valacyclovir
- Anti-malarial: Chloroquine, Hydroxychloriquine

- Clindamycin (infant diarrhea)
- Metronidazole
- Quinolones: Ciprofloxacin, Levofloxacin, Moxifloxacin, Olfloxacin, Gatifloxacin (older studies show arthropathy in infants, newer studies show low risk)
- Nitrofurantoin

- Antivirals: Famciclovir *
- Sulfonamides: (avoid in preterm or jaundiced infants)

* No published data

LactMed: www.toxnet.nlm.nih.gov

COMPATIBLE CAUTION AVOID

CARDIOLOGY

- B-blockers: Propranolol, Metoprolol, Labetalol
- ACEI: Enalapril, Captopril, Quinapril
- Vasodilators: Apresoline
- Calcium channel blockers: Verapamil, Diltiazem
- Diuretics: Hydrochlorothiazide, Furosemide
- Anticoagulants: Warfarin, Heparin

- B-blockers: Nadolol, Acebutalol, Atenolol
- ACEI: Ramipril, Lisinopril,

- ACEI: Fosinopril *
- ARB *
- Statins *

CONTRACEPTION

Progestin-only contraceptives:
- Micronor® • Mirena®

Start only after breastfeeding well established (around 6 weeks PP)

Estrogen containing contraceptives:
- Can reduce milk supply

Progestin-only contraceptives:
- Depo-Provera® 150 mg IM
- Women can experience a reduced milk supply. Consider breastfeeding goals.

DERMATOLOGY

- Topical antifungals & steroids: Clotrimazole, Miconazole, Terbinafine, Hydrocortisone, Betamethasone
- Acne: Topical Tretinoin, Adapalene, Benzoyl Peroxide, Clindamycin
- Pimecrolimus, Tacrolimus
- Calcipotriene

* No published data

LactMed: www.toxnet.nlm.nih.gov

BREASTFEEDING MEDICATION SAFETY

COMPATIBLE CAUTION AVOID

DIAGNOSTIC TESTS/ SURGERY

- X-ray/CT/MRI/US
- Contrast: Gadopentetate, Iothalamate, Diatrizoate
- I 123 or technicium scans
- Propofol: safe to resume breastfeeding when mother recovered from GA

- Contrast: Iopamidol, Ioversol, Iodipamide, Iodixanol

- I 131: Delay elective diagnostic studies until breastfeeding completed
- Gallium citrate

DMARD

- Methotrexate

E. N. T.

- Intranasal steroids: Mometasone, Fluticasone
- Anti-histamines: Certirizine, Desloratadine, Loratadine,

- Pseudoephederine
  (A single dose decreases milk production acutely and repeated use seems to interfere with lactation)
- Diphenhydramine (small occasional dose only)

* No published data

LactMed: www.toxnet.nlm.nih.gov

COMPATIBLE CAUTION AVOID

ENDOCRINOLOGY

- Diabetic: Metformin, Glyburide, Acarbose, Insulin
- Levothyroxine

- Gliclazide
- TZD*
- Incretins*

GALACTOGOGUES

- Fenugreek: recommended dose 6 grams/day in divided doses

Available over the counter

Give information along with a referral to breastfeeding support

- Domperidone (caution in patients with hx of HTN, arythmia, cardiovascular disease): recommended dose 10-20mg 3-4times/day, dose tapering prior to cessation
- Blessed Thistle: recommended dose 1.5-3 grams as a tea, up to 3 times daily (allergy: ragweed family) **Give information/Rx along with a referral to breastfeeding support**

GASTROENTEROLOGY

- H2 blockers: Ranitidine
- PPIs: Pantoprazole, Lansoprazole, Esomeprazole, Omeprazole
- Laxatives: Docusate sodium, lactulose
- Antiemetics: Dimenhydrinate (small occasional dose)

- Domperidone

  Caution with HTN, arrhythmia, CAD or risks for same
- Bismuth subsalicylate
- H2 blockers: Cimetidine

- PPIs: Rabeprazole,
- Methotrexate

* No published data

LactMed: www.toxnet.nlm.nih.gov

BREASTFEEDING MEDICATION SAFETY

COMPATIBLE CAUTION AVOID

NEUROLOGY

- Anticonvulsants: Phenytoin
- Trip tans: Eletriptan

- Anticonvulsants: Valproic acid, Carbamazepine, Gabapentin. Monitor for thrombocytopenia, drowsiness, hepatotoxicity, weight gain, developmental milestones.
- Trip tans: Sumatriptan

- Triptans: Rizatriptan, Zolmitriptan, Naratriptan*

PSYCHIATRY

- SSRI: Paroxetine, Escitatopram, Sertraline (preferred)
- SNRI: Desvenlafaxine
- BZD short & medium acting: Lorazepam, Oxazepam
- ADHD: Methylphenidate (infants > 1 month)

- Mirtazapine
- BDZ long acting: Diazepam, Alprazolam, Clonazepam
- TCA: Amitriptyline, Desipramine, Imipramine
- Bupropion
- Lithium
- Trazadone
- Quetipine

MONITOR INFANT FOR:
- **Poor weight gain**
- **Sedation**
- **Irritability**

- Atomoxetine*

* No published data

LactMed: www.toxnet.nlm.nih.gov

COMPATIBLE CAUTION AVOID

RESPIROLOGY

- Short acting: Terbutaline, Salbutamol, Ipratropium
- Long acting: Salmeterol, Formoterol
- Steroid inhalers: Budesonide, Fluticasone, Ciclesonide, Beclomethasone
- OTCs: Dextromethorphan, Guaifenesin (infants > 2 months)

- Monoleukast *

SOCIAL

- Alcohol: < 2 drinks per day
- Caffeine: < 300 mg per day

- Smoking: LESS is BETTER! Not a reason to stop breastfeeding as infant will have second hand exposure

Most drugs can be safely used by breastfeeding mothers.

- It is rarely necessary to stop breastfeeding because of a medication
- If a drug is incompatible, an alternative can usually be prescribed
- Breastfeed before a scheduled dose to minimize transfer into breastmilk
- If the drug has a short half-life, encourage feeding after the first half-life has passed

* No published data

LactMed: www.toxnet.nlm.nih.gov

LACTATION CONSULTANTS & PUBLIC HEALTH NURSES

Make use of hands-on and in-home assessment, counselling and support by Lactation Consultants and Public Health Nurses

LACTATION CONSULTANTS & PUBLIC HEALTH NURSES {Renfrew County and District}

Public Health Nurses	COST	PHONE
Renfrew County and District Health Unit, Family Health intake line, Monday – Friday 8:30-4:30. Calls returned within one business day. Public Health Nurses available for phone or in-home breastfeeding support for all families living in Renfrew County and District. Certified Lactation Consultant (IBCLC) available.	Free	(613) 735-8651 ext 589
Private Lactation Consultants		
Lois O'Brien BScN, Lactation Consultant (IBCLC)	One-time fee $25 local (Petawawa/ Pembroke), $40 for outlying areas.	(613) 735-8049 Call between 8am-10pm only
Breastfeeding Clinics		
Pembroke Regional Hospital, labour & birth unit Patty Keon RN, Lactation Consultant (IBCLC) available Monday-Friday by appointment up to 7 days after birth.	Free	(613) 732-2811 ext 6438
Pembroke Breastfeeding Drop-in Monday's 9am-12pm, at the West Champlain Family Health Team (315 Pembroke St. E). Open to all, do not need to be a patient. No appointment needed.	Free	Ashley Hanly RN BScN (613) 735-8651 ext 578
Petawawa Breastfeeding Drop-in Tuesday's 9am-11am, at the Petawawa Centennial Family Health Centre (154 Civic Centre Rd). Open to all, do not need to be a patient. No appointment needed.	Free	Heidi Krebsz NP (613) 687-7641

OTHER BREASTFEEDING SUPPORT {Renfrew County and District}

NATUROPATHIC DOCTOR	COST	PHONE
Cheryl Allen	Fees covered by some extended health plans	(613)635-7206
PHYSIOTHERAPY		
Ottawa Valley Physiotherapy & Sports Medicine	Fees covered by some extended health plans	Petawawa Office: (613) 687-6600 Renfrew Office: (613) 432-9088
Physio in the Valley	Fees covered by some extended health plans	(613) 635-4777
TONGUE TIE REFERRALS		
Dr Linde Corrigan, Petawawa Centennial Family Health Centre 154 Civic Centre Rd, Petawawa, ON (Self-referral accepted, access through Petawawa Breastfeeding Drop-in)	OHIP	(613) 687-7641
Dr Gina Corrigan and Dr Kipp, North Renfrew Family Health Team 117 Banting Dr. Deep River, ON	OHIP	(613) 584-1037
Dr Fayad, Dentist, Chapman Hills Dental 50 Marketplace Ave, Unit 11, Ottawa, ON Frenectomy using laser treatment	Fees may be covered by some extended health plans	(613) 823-4001
Dr Crossman, Dentist, Hampton Park Dental Centre 1399 Carling Ave, Ottawa, ON Frenectomy using laser treatment	Fees may be covered by some extended health plans	(613) 792-4040

OTHER BREASTFEEDING SUPPORT {Renfrew County and District}

BREAST PUMP RENTAL/RETAILER (Hospital Grade)	LOCATION	PHONE
Community Resource Centre	Killaloe	(613) 757-3108
Mulvihill Drug Mart	Pembroke	(613) 735-0161
Shoppers Drug Mart	Arnprior	(613) 623-7971
ONLINE AND TELEPHONE SUPPORTS	**Website**	**PHONE**
Telehealth Ontario 24/7 Breastfeeding Support		1-866-797-0000
La Leche League Canada (LLL)	www.lllc.ca/	1-800-665-4324
Dr. Jack Newman, Breastfeeding Inc	www.breastfeedinginc.ca	
ONLINE MEDICATION & BREASTFEEDING REFERENCE		
LactMed, part of the National Library of Medicine's (NLM) Toxicology Data Network (TOXNET®), is a database of drugs and dietary supplements that may affect breastfeeding.	www.lactmed.ca	
E-Lactancia, a part of APILAM, database for medication and breastfeeding	www.elactancia.org	

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NOTES

Renfrew County and District Health Unit

"Optimal Health for All in Renfrew County and District"

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