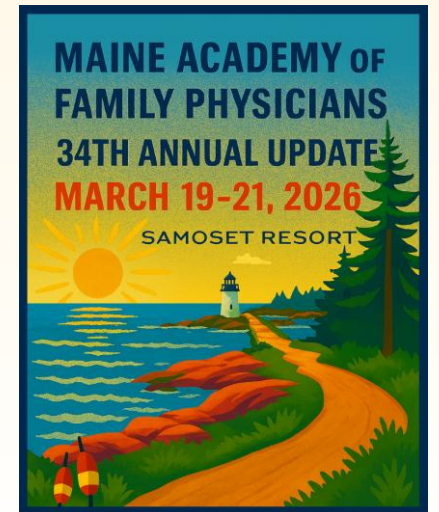


Breastfeeding Basics for Family Physicians

Kathleen Polonchek, MD
Paula Norcott, IBCLC

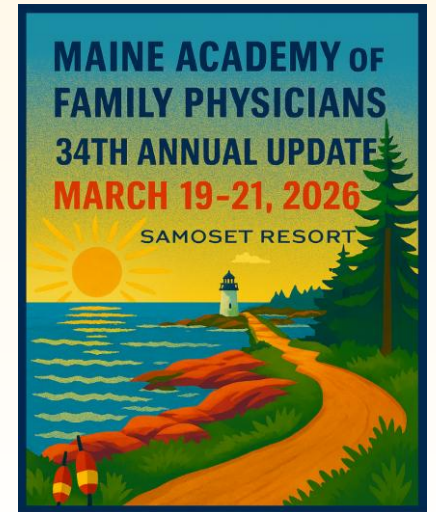
March 20, 2026



Objectives

At the conclusion of this session, participants will be able to:

1. Evaluate infant weight gain and feeding effectiveness using clinical indicators beyond growth curves alone.
2. Differentiate common breastfeeding concerns manageable in family medicine from those requiring referral to an IBCLC.
3. Apply current evidence-based mastitis protocols and utilize evidence based resources for medication safety in lactation.



Disclaimer:

We may use pronouns like “she/her” and language like “breastfeeding”, “mother” or “mom” out of habit or convention but our intention is to be inclusive of all people who have given birth and are feeding infants with their mammary glands.



Respond at
pe.app/kathleenpolonch

Do you take care of breastfeeding dyads in your clinical practice?

0 0

Yes 0%

No 0%

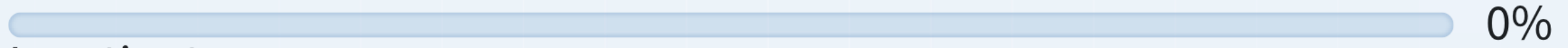
Edit

Show Choices Show Responses Lock Show Correctness



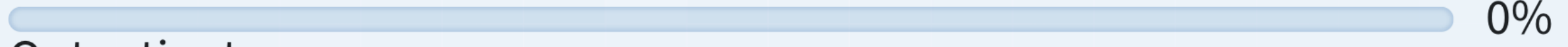
If so, do you care for them in the inpatient or outpatient setting?

0 0



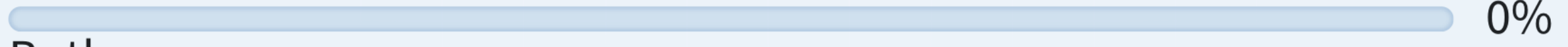
Inpatient

0%



Outpatient

0%



Both

0%



Did your residency training adequately prepare you to address clinical challenges in breastfeeding in your everyday practice?

0 0

A 0% Yes

B 0% No

Allison and baby Caroline

Your clinic schedule today has a 4 day old newborn follow up.

Female born at 37+1 weeks via unscheduled c-section to a G2P0->1 mother for category 2 tracing, remote from delivery. Pregnancy complicated by chronic hypertension on labetalol.

Newborn course complicated by: initial low blood sugars treated with breastfeeding, oral glucose and eventual formula supplementation.

Received vit K, hep B, erythromycin ointment and nirsevimab prior to discharge.

Allison and baby Caroline

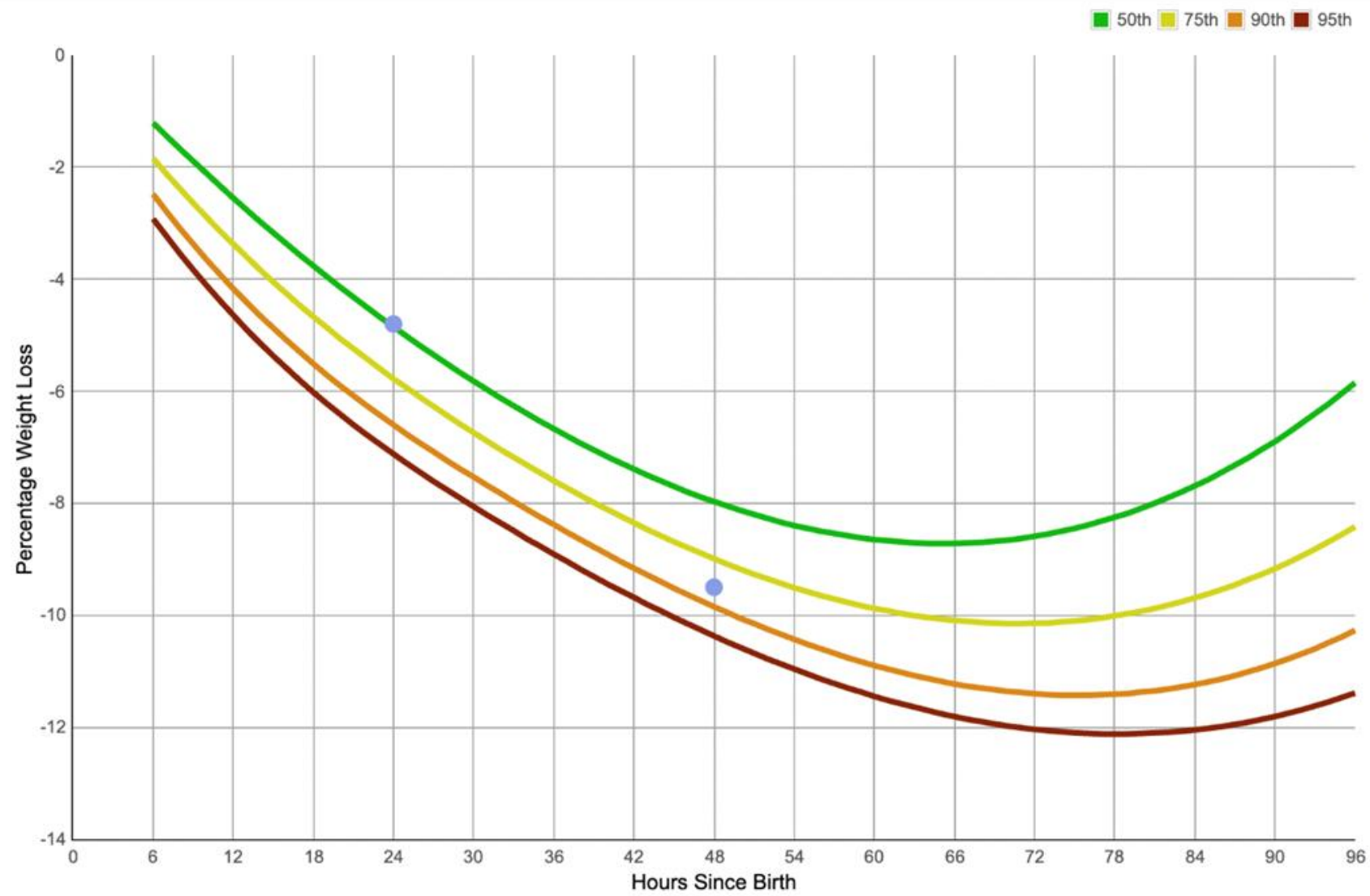
Discharge Summary:




Birthweight: 2800g

Discharge weight: 2535g (9.5% - less than 90%ile on NEWT)

Infant discharged on DOL #3. Lactation support provided. Infant sleepy at breast, mom supplementing with 10cc formula after every feed and pumping 2-3 times per day after feeding, still getting drops of colostrum. Plan for discharge home with close follow up within 24h.

TcB @ 24 HOL: 3.5mg/dL (8.2 below phototherapy threshold) - recommend clinical assessment at newborn follow up



newt   

Birth Details ▼

Weight
2800 g


Date
Feb 14

Time
23:00

Cesarean Breast Fed [Edit Details](#)

Measurements ▼

Hour	Weight	Change	Add New	
Birth	2800 g	—	Edit	
24	2665 g	-4.8%	Edit	x
48	2535 g	-9.5%	Edit	x

 **PennState Health**
Children's Hospital

Medical Perspective:

In your office this morning:

Weight: 2500 g

Pulse: 140

RR: 40

What do you want to know? and how do you proceed from here?

Medical Perspective:

percentage weight loss: 10.7%

well appearing, alert

mild jaundice to chest

no uric acid crystals in diaper

Waking to feed every 2-3 hours, infant latches for 10-15 on both sides, not sure if she is hearing swallows or sucks. Feeding with 10 mls formula after every feed. 2 wet diapers yesterday and one stool, but this morning has already had 2 wet diapers and two yellow stools. Mom pumped this morning and got 20 mls. She doesn't want to be giving formula but wasn't sure what to do and they told her in the hospital she needed the formula to keep the baby's sugar up.

Medical Perspective

Next steps:

- needs a feeding plan... triple feeding vs another option?
- how do we know if the baby is feeding well?
- repeat bilirubin is up to your clinical judgement
- do you need to re-admit the baby?

Medical Perspective

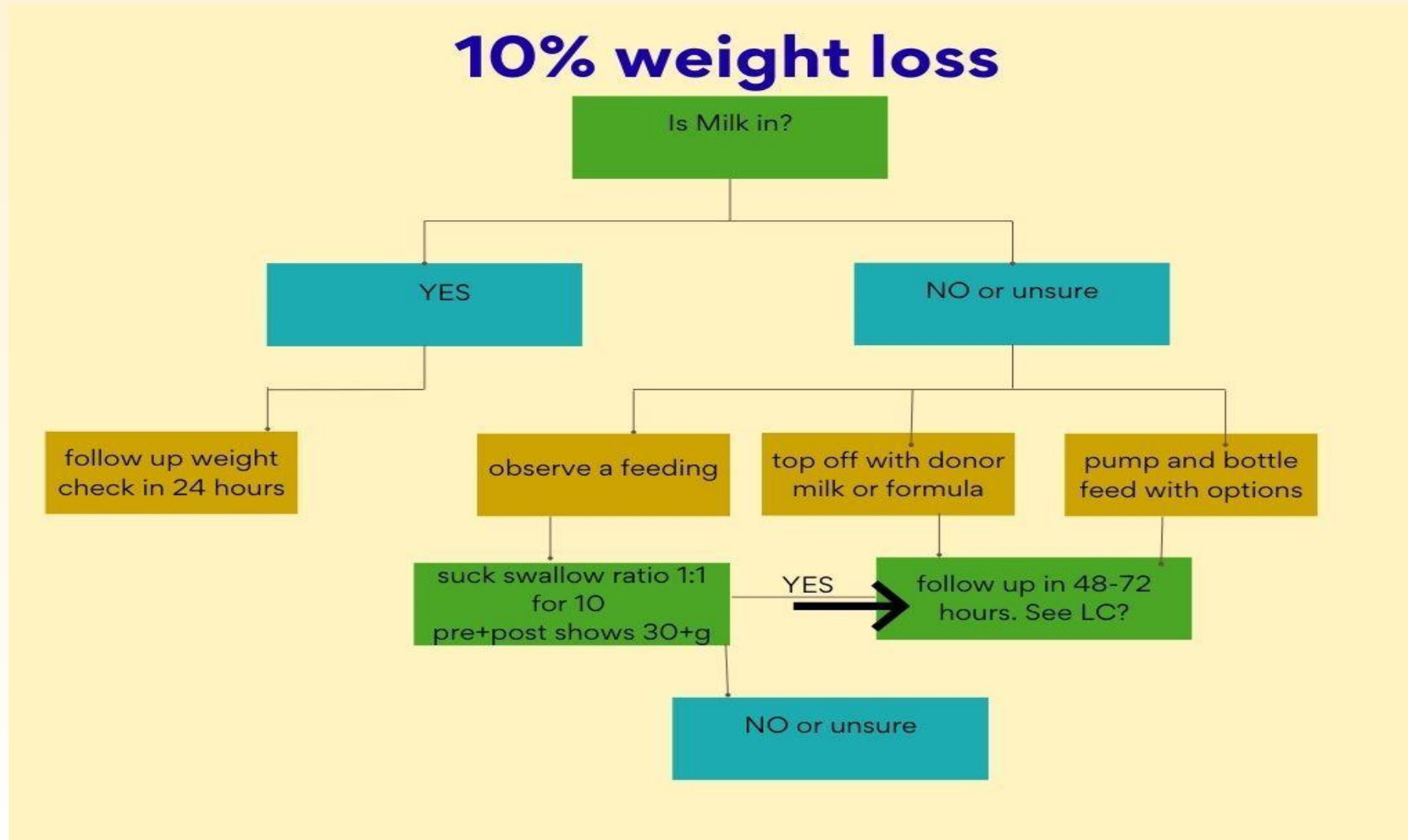
You observe a feeding and hear/notice a 1:1 suck swallow ratio, infant seems calm and satisfied after feeding, and see milk at the corners of the mouth.

You make a feeding plan and plan to see them back in the office the next day.

1. Continue to wake Caroline to feed every 3 hours, sooner if she is showing signs she is hungry.
2. If she still seems hungry after a feeding (rooting, fussing, etc) you can offer her formula or any breastmilk you have collected in your passive collector
3. If she has a bad feed (sleepy, fussy, doesn't want to latch) try pumping for the next feed and offering it to her in 1 oz increments.



IBCLC perspective



Medical Perspective:

24 hour follow up:

weight 2535g

5 pees and 5 poops in the last 24 hours

IBCLC perspective

Medical perspective:

2 week well child check:

weight 2850g (regained birth weight!)

still setting alarms to wake every 3 hours overnight to feed

Medical Perspective

1 mo WCC – in the 5th percentile for weight

Do we need to be concerned?

FIGURE 3. Comparison of World Health Organization (WHO) and CDC growth chart weight-for-age measurements for boys aged <24 months

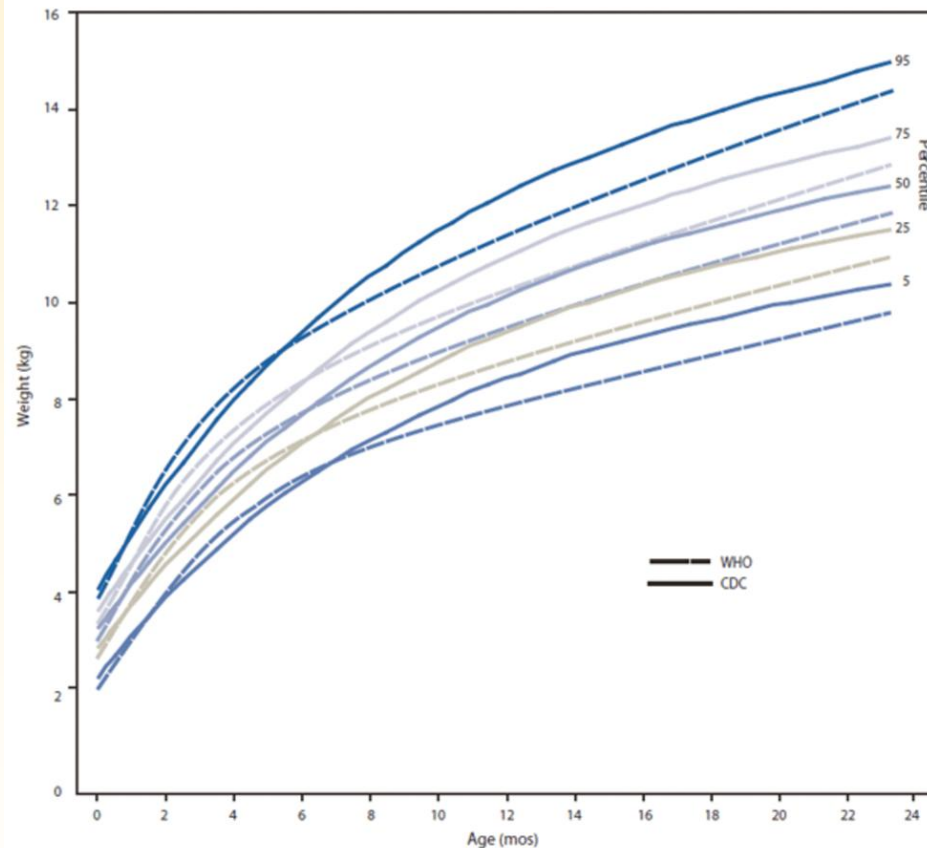


TABLE 1. Comparison of sample populations used to create the CDC and WHO growth curves for children aged <24 mos

Characteristic	CDC growth reference (2000)*	WHO growth standard (2006)[†]
Data sources	National vital statistics (birth weights) Missouri and Wisconsin vital statistics (birth lengths) Pediatric Nutrition Surveillance System (lengths, 0.1 to <5 mos) NHANES I (1971--1974) (12--23 mos) NHANES II (1976--1980) (6--23 mos) NHANES III (1988--1994) (2--23 mos)	MGRS longitudinal component, with sites in the following locations: Pelotas, Brazil Accra, Ghana Delhi, India Oslo, Norway Muscat, Oman Davis, California
Type and frequency of data collection	Cross-sectional data on weight and length starting at age 2 mos, with mathematical models used to connect birth weights and lengths to survey data	Longitudinal data with measurements of weight and length at birth; 1, 2, 4, 6, and 8 wks; and 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 22, and 24 mos
Sample size	4,697 observations for 4,697 distinct children	18,973 observations for 882 distinct children
Exclusion criteria	Very low birth weight (<1,500 g [<3 lbs, 4 oz])	Low socioeconomic status Birth at altitude $>1,500$ m Birth at <37 wks or ≥ 42 wks Multiple birth Perinatal morbidities Child health conditions known to affect growth Maternal smoking during pregnancy or lactation Breastfeeding for <12 mos Introduction of complementary foods before age 4 mos or after age 6 mos Weight-for-length measurements >3 standard deviations above or below study median for sex
Breastfeeding among infants in sample	Approximately 50% ever breastfed Approximately 33% breastfeeding at 3 mos	100% ever breastfed 100% predominantly breastfeeding at 4 mos 100% still breastfeeding at 12 mos Complementary foods introduced at mean age of 5.4 mos

When to refer to an IBCLC?

- Concern for low supply
- Slow weight gain
- Painful latch or nipple damage
- Questions about pumping
- Questions about returning to work
- Introducing a bottle



Two months later, Allison calls with a red painful breast. Do you...



prescribe dicloxacillin 500mg q6h x 10 days 0%

prescribe cephalexin 500mg q8h x 10 days 0%

ask the patient to come in for an appointment 0%

tell the patient to call lactation, since this sounds like a breastfeeding problem 0%



Academy of Breastfeeding Medicine, Protocol 36 - The Mastitis Spectrum

2022 revision represents a shift from thinking of mastitis as a purely bacterial problem to a spectrum:

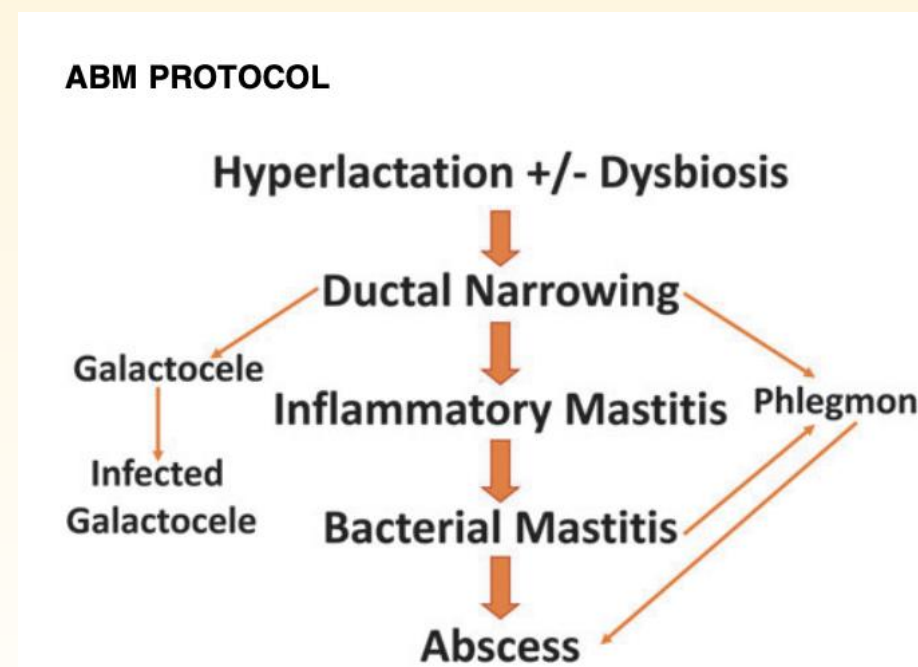


FIG. 1. Spectrum of inflammatory conditions in the lactating breast.

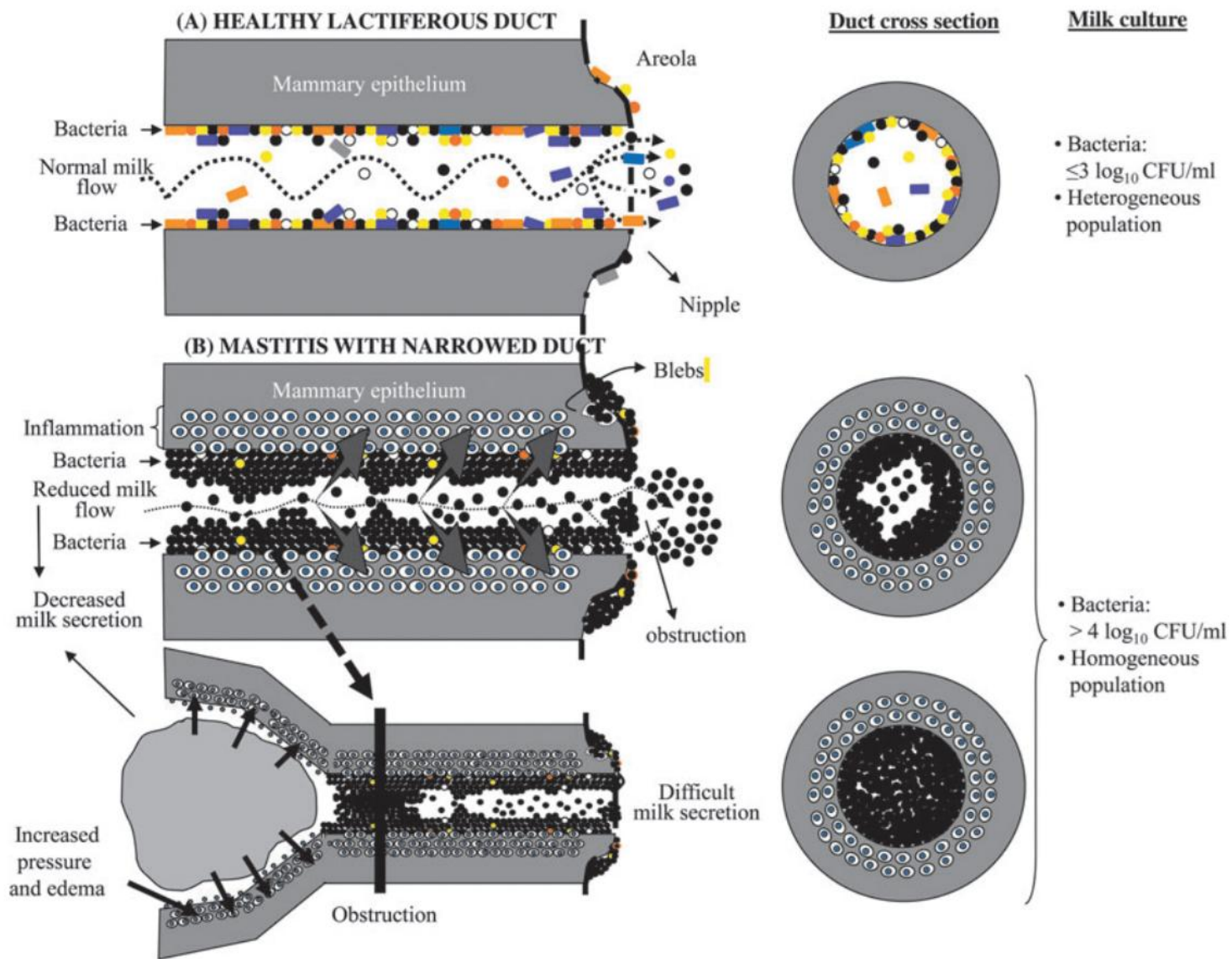


FIG. 2. Compared with a healthy lactiferous duct (A), ductal inflammation can result in narrowed lumens, stromal edema, dysbiosis, nipple bleb formation, and mastitis (B).

You see Allison for an office visit:

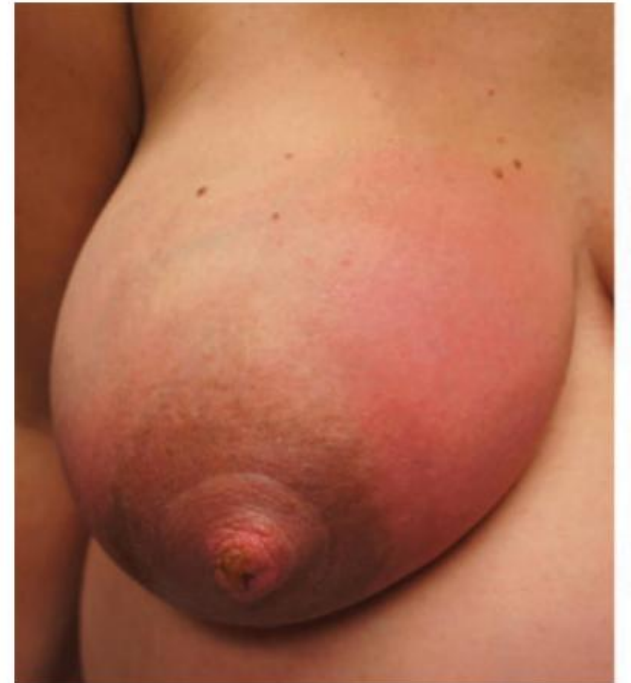
Baby Caroline slept through the night a few days ago, breasts felt engorged upon waking.

Thought she had a “clogged duct”.

Offered right breast first every feeding, tried hot showers after her sister recommended it.

Yesterday, noticed redness.

No fever but has felt generally unwell: achy, fatigued



What next?

Old advice:	New advice:
all mastitis is bacterial: antibiotics are needed	most is probably inflammatory: start with NSAIDs and ice
need to “empty” the breasts to clear out infection	feed on demand: extra feeding or pumping is probably upregulating lactation and contributing to the problem
massage to work out the clog	gentle, lymphatic massage
	Consider probiotics

Instructions to the patient:

1. Ibuprofen 600mg Q 6 hours
2. Ice the breast 15 minutes every hour while awake
3. Lymphatic massage 2-3 times a day ([video](#))
4. Avoid pumping for the next few days if you can, do not pump extra.
5. Wear a supportive bra to reduce swelling.
6. Can consider taking a lactation specific probiotic:
Limosilactobacillus fermentum or *Ligilactobacillus salivarius*
7. Call if you are feeling worse, not feeling better within 24-36 hours, or if you develop a fever.

What not to do:

avoid saline soaks, castor oil or other topical treatments

avoid sterilizing pump parts, household items, or the nipple

avoid unroofing “milk blebs” (these are actually inflammatory debris - treat with topical steroid)

only feed/offer the affected side first.



FIG. 20. Examples of different presentations of nipple blebs.

If bacterial mastitis, treat with:

dicloxacillin 500mg Q6H for 10-14 days

cephalexin 500mg Q6H for 10-14 days

Both are safe to use with continued breastfeeding.

If no improvement - consider obtaining sterile milk culture.

* phlegmon may require prolonged antibiotics

* abscesses require drain - consider placing a drain at the initial procedure vs. aspiration

3 month later, Allison messages you that she needs to have dental work done and the dentist wanted her to ask if it was ok to get lidocaine and amoxicillin while breastfeeding...



How do you find the answer?

0 0

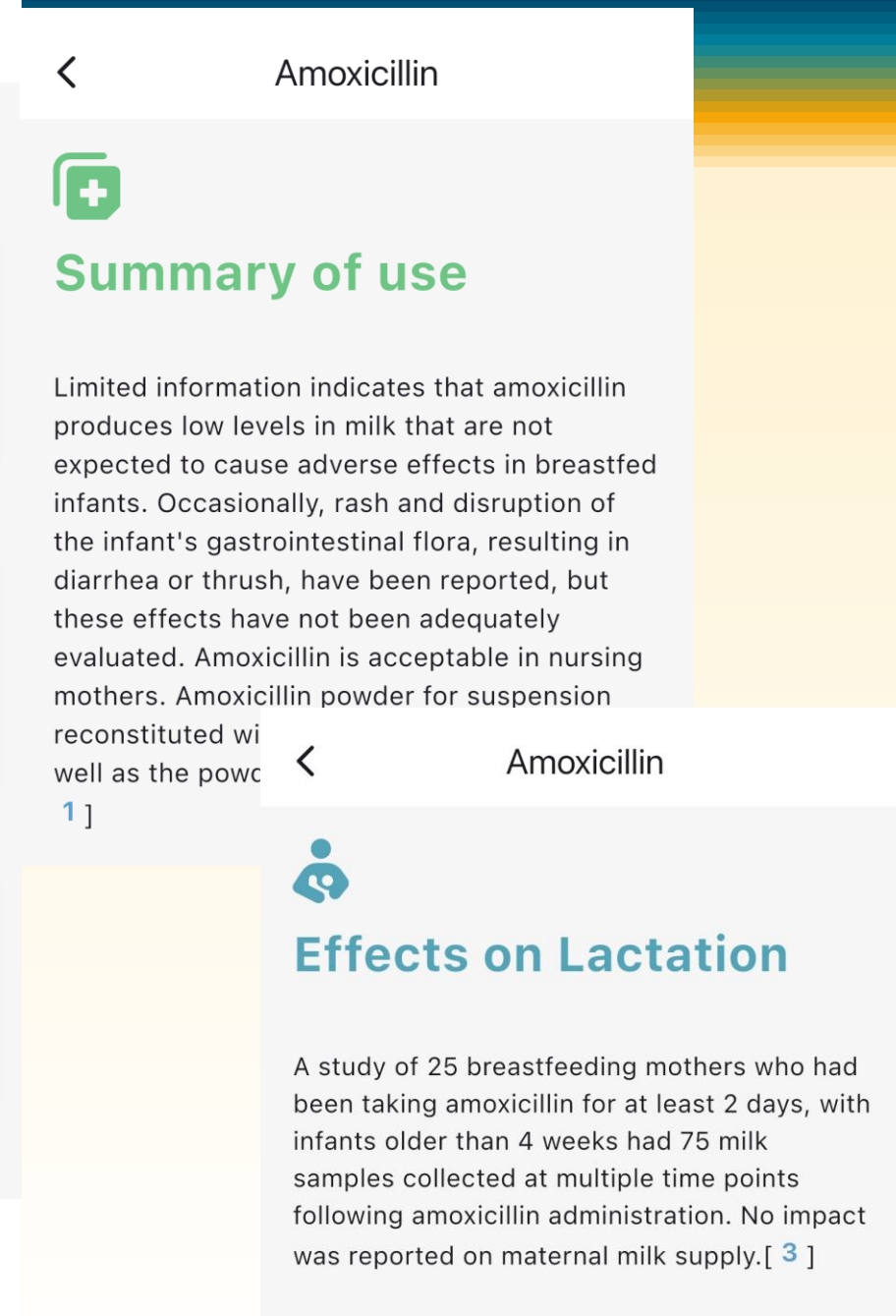
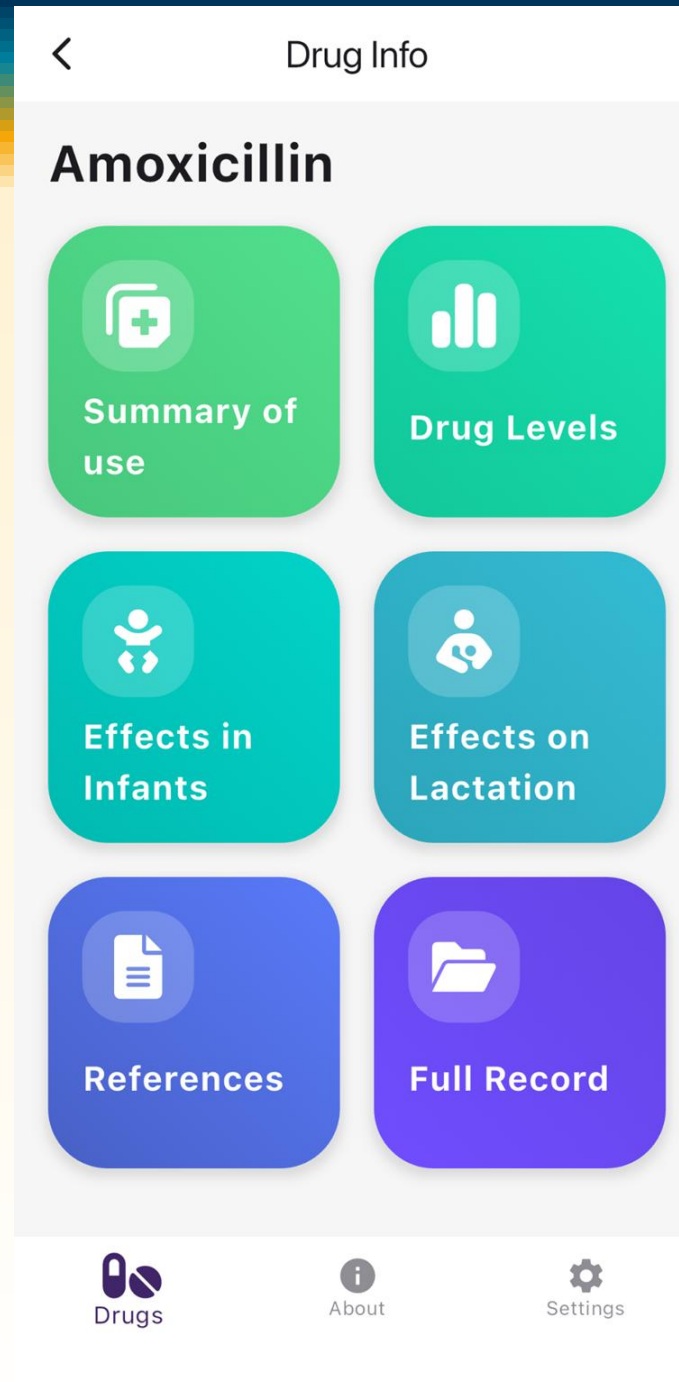
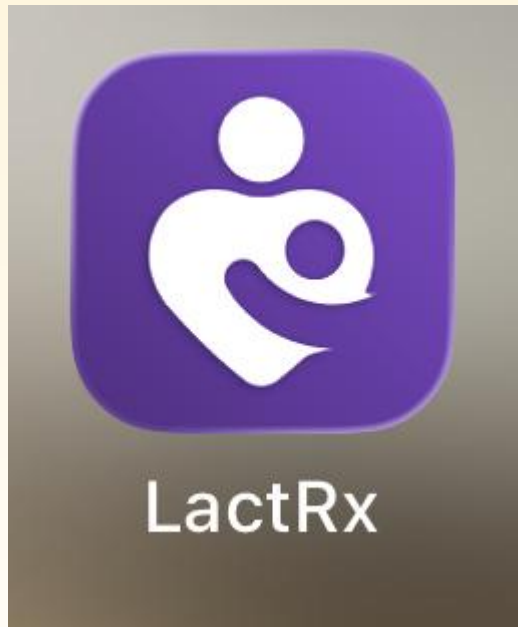


Awaiting first audience response..



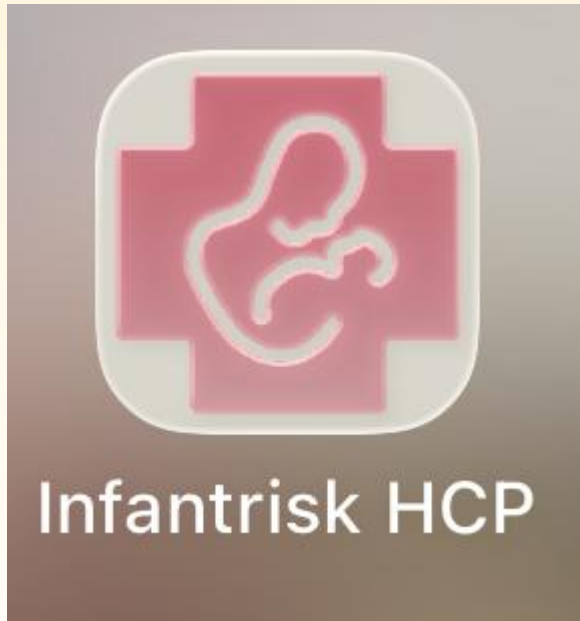
Resources

Lactmed/LactRx app



Resources

\$14.99/year



Search AMOXICILLIN ⓘ

Currently displaying **Lactation Risk Category** preview. [Tap to change.](#)

AMOXICILLIN

Trade Names: Alphamox, Amoxil, Betamox, Cilamox, Larotid, Moxacin

Overall Rating: ⓘ L1 - Limited Data-Compatible

✓+	✓+	✓+	BIRTH	✓++	✓++	✓++
1st	2nd	3rd		0-6	6-12	12+
Trimester				Months		

Pregnancy Overview
There are no controlled, clinical trials examining the effect of amoxicillin on the risk of congenital malformations. However, extensive epidemiological studies and other post-marketing surveillance h...[View More](#)

Lactation Overview
Experience with the use of this drug by a large number of breastfeeding mothers has not demonstrated any adverse effects in the infant. Amoxicillin is commonly used in neonates and infants and is safe...[View More](#)

Drug Overview

Drug Category: [Antibiotic, Penicillin](#)

Usual Dose: 500 mg TID or 875 mg BID.

Relative Infant Dose ⓘ: 0.95%

Side Effects: Diarrhea, rashes, and changes in GI flora. Pancytopenia, rarely pseudomembranous colitis

Monitor Infant For: Vomiting, diarrhea, change gastrointestinal flora, and rash.

Home Search Categories Bookmarks Settings

Search AMOXICILLIN ⓘ

Therapeutic Action ⓘ

(BETA)

- Antibacterials For Systemic Use >
- Beta-lactam Antibacterials, Penicillins >
- Penicillins With Extended Spectrum >

Breastfeeding Safety

Lactation Risk
✓++ L1 - Limited Data-Compatible

Overview
Experience with the use of this drug by a large number of breastfeeding mothers has not demonstrated any adverse effects in the infant. Amoxicillin is commonly used in neonates and infants and is safe to use during breastfeeding. No adverse effects have been reported in breastfed infants.

Pregnancy Safety

Pregnancy Risk
✓+ P2 - Benefits are likely to exceed risk

Overview
There are no controlled, clinical trials examining the effect of amoxicillin on the risk of congenital malformations. However, extensive epidemiological studies and other post-marketing surveillance have indicated that this drug does not independently increase the risk of adverse fetal outcomes. If clearly indicated, the benefits of this drug are very likely to outweigh risks.

Home Search Categories Bookmarks Settings

3:49

Search AMOXICILLIN

Currently displaying **Lactation Risk Category** preview. [Tap to change.](#)

AMOXICILLIN

Trade Names: Alphamox, Amoxil, Betamox, Cilamox, Larotid, Moxacin

Overall Rating: L1 - Limited Data-Compatible

✓+	✓+	✓+	BIRTH	✓++	✓++	✓++
1st	2nd	3rd		0-6	6-12	12+
Trimester				Months		

Pregnancy Overview
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Monitor Infant For: Vomiting, diarrhea, change in gastrointestinal flora, and rash.

Home Search Categories Bookmarks Settings

3:50

Search AMOXICILLIN ⓘ

Therapeutic Action ⓘ

(BETA)

- Antibacterials For Systemic Use >
- Beta-lactam Antibacterials, Penicillins >
- Penicillins With Extended Spectrum >

Breastfeeding Safety

Lactation Risk
✓++ L1 - Limited Data-Compatible

Overview
Experience with the use of this drug by a large number of breastfeeding mothers has not demonstrated any adverse effects in the infant. Amoxicillin is commonly used in neonates and infants and is safe to use during breastfeeding. No adverse effects have been reported in breastfed infants.

Pregnancy Safety

Pregnancy Risk
✓+ P2 - Benefits are likely to exceed risk

Overview
There are no controlled, clinical trials examining the effect of amoxicillin on the risk of congenital malformations. However, extensive epidemiological studies and other post-marketing surveillance have indicated that this drug does not independently increase the risk of adverse fetal outcomes. If clearly indicated, the benefits of this drug are very likely to outweigh the risks.

Home Search Categories Bookmarks Settings



[MommyMeds](#) **Details**

AMOXICILLIN
Benefits are likely to exceed risk

Pregnancy Info Overview Lactation Info

1ST	2ND	3RD	BIRTH	0-6	6-12	12+
Trimester				Months		

Drug Type: Penicillin antibiotic
Trade Names: Alphamox, Amoxil, Betamox, Cilamox, Larotid, Moxacin
Lactation Risk: L1 - Limited Data-Compatible
Pregnancy Risk: Benefits are likely to exceed risk
Side Effects: Diarrhea, rashes, and changes in GI flora. Pancytopenia, rarely pseudomembranous colitis.

3:59

[MommyMeds](#) **Details**

AMOXICILLIN
Benefits are likely to exceed risk

Pregnancy Info Overview Lactation Info

Experience with the use of this drug by a large number of breastfeeding mothers has not demonstrated any adverse effects in the infant.

Monitor Infant For
Vomiting, diarrhea, changes in gastrointestinal flora, and rash.

Alternative Medications
Ampicillin, cephalixin.

Interested in learning more?



ACADEMY OF
**Breastfeeding
Medicine[®]**



IABLE

**Institute for the Advancement
of Breastfeeding &
Lactation Education**

Questions?



Resources

<https://newbornweight.org/>

<https://bilitool.org/>

Mitchell, K. B., Johnson, H. M., Rodríguez, J. M., Eglash, A., Scherzinger, C., Zakarija-Grkovic, I., Cash, K. W., Berens, P., & Miller, B.; Academy of Breastfeeding Medicine. (2022). *Academy of Breastfeeding Medicine Clinical Protocol #36: The Mastitis Spectrum, Revised 2022* (Vol. 17, No. 5, pp. 360–376). *Breastfeeding Medicine*. <https://doi.org/10.1089/bfm.2022.29207.kbm>

Vanguri, S., Rogers-McQuade, H., & Sriraman, N. K., & Academy of Breastfeeding Medicine. (2021). *ABM Clinical Protocol #14: Breastfeeding-Friendly Physician's Office — Optimizing Care for Infants and Children* (Vol. 16, No. 3). *Breastfeeding Medicine*. https://www.bfmed.org/assets/Clinical_Protocol_14.pdf

Kemper, A. R., Newman, T. B., Slaughter, J. L., Maisels, M. J., Watchko, J. F., Downs, S. M., Grout, R. W., Bundy, D. G., Stark, A. R., Bogen, D. L., Holmes, A. V., Feldman-Winter, L. B., Bhutani, V. K., Brown, S. R., Panayotti, G. M. M., Okechukwu, K., Rappo, P. D., & Russell, T. L. (2022). *Clinical practice guideline revision: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation* **Pediatrics**, 150(3), e2022058859. <https://doi.org/10.1542/peds.2022-058859>

American Academy of Pediatrics. (2022, May 31). *Growth faltering in newborns and infants*. American Academy of Pediatrics. <https://www.aap.org/en/patient-care/newborn-and-infant-nutrition/growth-faltering-in-newborns-and-infants/>

Uzumcu, Z., Sutter, M. B., & Cronholm, P. F. (2020). *Breastfeeding education in family medicine residencies: A 2019 CERA Program Directors survey*. **Family Medicine**, 52(7), 497–504. <https://doi.org/10.22454/FamMed.2020.579473>

1. Rodriguez Lien E, Shattuck K. Breastfeeding Education and Support Services Provided to Family Medicine and Obstetrics-Gynecology Residents. *Breastfeed Med*. 2017;12(9):548-553. <https://doi.org/10.1089/bfm.2017.0014>

Bartick, M., Hernández-Aguilar, M. T., Wight, N., Mitchell, K. B., Simon, L., Hanley, L., Meltzer-Brody, S., & Lawrence, R. M.; Academy of Breastfeeding Medicine. (2021). *ABM Clinical Protocol #35: Supporting breastfeeding during maternal or child hospitalization* (Vol. 16, No. 9). *Breastfeeding Medicine*. <https://www.bfmed.org/assets/ABM%20protocol%2035%20Nov%202021.pdf> (Original work published 2021)

Grummer-Strawn, L. M., Reinold, C., & Krebs, N. F.; Centers for Disease Control and Prevention. (2010). *Use of World Health Organization and CDC growth charts for children aged 0–59 months in the United States* **MMWR Recommendations and Reports**, 59(RR-9), 1–15. <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5909a1.htm>