### **AU InforMed**

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Figure 1: https://www.heritagevalley.org/breastfeeding-awareness-month/1

### Key Inforbits

- Breastfeeding overview
- Breastmilk pathophysiology
- Myths and facts of breastfeeding
- Benefits of breastfeeding

- Barriers to breastfeeding
- Medication effects on lactation
- Medications in breastfeeding
- Breastfeeding resources

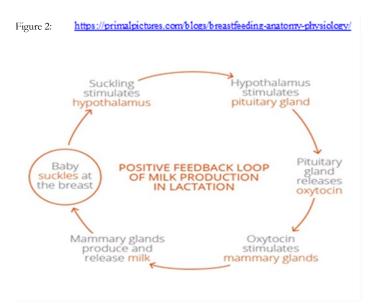
### **Breastfeeding Overview**

Breast milk production begins naturally around weeks 16–22 of pregnancy with the formation of colostrum. As pregnancy progresses, production gradually increases, with a significant rise in milk volume occurring after the baby is born. It provides basic nutrients to the baby for the first several months of life. The American Academy of Pediatrics recommends breastfeeding exclusively until 6 months of age and can continue up to 2 years of age with complementary foods. Data has shown that breastfeeding has numerous benefits for both the baby and mother. There are several myths pertaining to breastfeeding, and many concerns and questions about breastfeeding and medications the mother may be consuming while breastfeeding.<sup>2</sup>

On August 6, 2011, the U.S Breastfeeding Committee (USBC) officially declared that August is National Breastfeeding Month which took place at a community shower event. The community shower event was Hosted by Howard University Hospital and the DC Breastfeeding Coalition. This special event celebrates National Breastfeeding Month with resources, giveaways, and support for new and expecting parents. USBC was inspired by Innocenti Declaration of 1990 and was produced and adopted by participants at the WHO/UNICEF policymakers' meeting on "Breastfeeding in the 1990s". The goal is to improve the Nation's health by protecting, promoting and supporting breastfeeding as the norm for infant and young child feeding throughout the United States.<sup>3</sup>

#### Breastmilk Pathophysiology

Breastfeeding is primarily regulated by hormonal and neural mechanisms. The drop in estrogen and progesterone allows for the secreting of milk. The hormone prolactin stimulates milk production while oxytocin causes milk ejection. The neural mechanism and hormones are triggered by suckling, a primitive reflex that involves front to back movement of the baby's tongue against the nipple to trigger and release milk. It is important that



milk is continuously removed from the breast to maintain adequate supply. If there is poor latching, meaning the baby is unable to properly attach to the mother's breast, or infrequent feeding the process of milk production will be disrupted.

### Barriers to Breastfeeding

There are a few barriers to breastfeeding which include but are not limited to difficulty latching, maternal health conditions, neonatal complications and painful breastfeeding. Some infants may be born with tongue-tie or cleft palate that would make it challenging for them to latch to the mother's breast. If a mother has an infection or breast surgery, then a mother is expected to stop breastfeeding until she is feeling better or has healed, respectively. Another challenge in breastfeeding is if a child is born prematurely or has neonatal complications as priority would be to wait until the neonate is well enough to breastfeed. A common reason for women not to breastfeed is because it can be painful from crack(s) on the nipples. There are several

nipple creams to aid in relief such as Mother Love Cream, Bamboobies Boob-Ease Organic Nipple Balm, Lansinoh Lanolin Nipple Cream, and others.<sup>16</sup>

### Breastfeeding Myth or Fact<sup>5</sup>

There are many myths and misconceptions about breastfeeding, making it essential for healthcare providers to separate fact from fiction and provide mothers with accurate, evidence-based guidance. Figure 3 below outlines some of the most asked questions about breastfeeding.

VIVIH OR FA **ABOUT BREASTFEEDING** Breast size has no impact on Small breast means low the amount of milk that can be milk supply and large produced, it is dependent on breast means high milk the demand of the baby, supply. frequency of feeding and hormonal signals. Illnesses like the cold and flu do not require that the When a breastfeeding mother stops breastfeeding mother is sick with the because the body naturally cold or flu she should makes protective antibodies stop breast feeding. that get passed through the milk to protect the baby. There are many medications that are safe to take while You cannot breastfeed breastfeeding, though there if you take medications. may be some that require alternatives. Baby formula does not contain live immune cells, enzymes or evolving Baby formula is just as antibodies. Breast milk good as breast milk. adapts to the baby's needs and provides long term health benefits.

Figure 3: Myth of Fact about Breastfeeding

### Benefits of Breastfeeding<sup>6</sup>

Breast milk provides optimal nutrition for infants, supporting growth, immune function, and cognitive development, while also offering important health benefits for mothers, such as reduced risk of certain cancers and faster postpartum recovery. Figure 4 highlights key benefits for both mother and baby.

Figure 4: Benefits of Breastfeeding for Mothers and Babies

# Benefits for Baby



- Nutrients and antibodies are in breastmilk which can provide protection from diseases
- Breastmilk has long term effects of protection against diabetes, obesity, and asthma
- Breastmilk is digested better than formula
- Lower risk of sudden infant death syndrome (SIDS)

## Benefits for Mother



- Can help reach prepregnancy weight faster
- Breastfeeding is more costeffective
- Reduce risk of high-blood pressure, certain cancers, and diabetes
- Skin-to-skin contact promotes bonding with baby and increases oxytocin levels

### Medications in Breastfeeding

Table 1: Medications to Promote or Inhibit Breast Milk Production		
<b>Promotes:</b> milk production in lactation typically by inhibiting dopamine and		
increasing prolactin		
Metoclopramide (Reglan)	5 to 15 mg three times a day two times a	
	week increases breast milk production.8	
Oxytocin (Pitocin)	1 spray intranasally prior to	
	breastfeeding/pumping increases milk	
	production by 3-5 times baseline.9	
Fenugreek (herbal supplement)	3 capsules three times a day can	
	stimulate milk production. <sup>10</sup>	
<u>Inhibits:</u> prolactin release, therefore decreasing milk production in lactation		
Bromocriptine (Parlodel, Cycloset)	1.25 to 2.5 mg once daily (limited use	
	due to adverse effects).11	
Cabergoline (Dostinex) – name	1 mg postpartum or 0.25 mg every 12	
brand discontinued in U.S.	hours for 2 days. <sup>12</sup>	
Others:	Estrogens,	
	Anticholinergics/Antihistamines,	
	Sympathomimetics	

### Dangerous Medications while Breastfeeding<sup>13</sup>

\*Women considering breastfeeding the mother should always discuss medication use with a healthcare provider prior to breastfeeding\*

- Antiretrovirals (HIV/AIDs treatment)
- Estrogen containing birth-controls
- Chemotherapy
- Ergot alkaloids (migraine treatment)
- Mood stabilizers (Lithium, Lamotrigine)
- Beta- blockers
- Anti-seizure drugs
- Retinoids
- Opioids

### OTC Medications Safe Vs. Unsafe in Breastfeeding<sup>14, 15</sup>

Table 2: Over-the-Counter Medication Use in Breastfeeding			
Usage	Safe	Not Recommended	
Allergy Relief	Cetirizine (Zyrtec) Loratadine (Claritin) Fexofenadine (Allegra)		
GERD/Nausea/Vomiting	Famotidine (Pepcid)	Nizatidine (Axid)	

	Omeprazole (Prilosec) Cimetidine (Tagamet)	
Decongestants, Expectorants, Antihistamines	Pseudoephedrine (Sudafed) - may decrease milk supply Chlorpheniramine (Chlor- Trimeton, Aller-Chlor) Guaifenesin (Mucinex) Dextromethorphan (Delsym, Tussin Cough) Diphenhydramine (Benadryl)	
Pain Relievers	Acetaminophen (Tylenol)	Aspirin - avoid Ibuprofen (Advil) - use with caution Naproxen (Aleve) - use with caution
Constipation	Docusate sodium (Colace) Polyethylene glycol (MiraLax)	Senna (Senokot, Ex-Lax) - use with caution Bisacodyl (Dulcolax) - use with caution
Antidiarrheal	Loperamide (Imodium)	Bismuth subsalicylate (Pepto-bismol)
Antifungals	Clotrimazole (Lotrimin AF) Miconazole (Monistat)	

Table 2 does not provide a comprehensive list of all medications that are safe or not recommended for breastfeeding women. It is important to consult a healthcare provider before taking any over-the-counter medication.



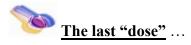
Figure 5: https://www.buzzrx.com/blog/medications-to-avoid-while-breastfeeding

### **Breastfeeding Resources for Patients**

- Alabama Department of Health Breastfeeding Page:
  - Alabama department of public health. Breastfeeding [Internet]. Montgomery (AL): Alabama department of public health, state perinatal program; [updated May 29, 2025; cited 2 Aug 2025]. Available from:
  - https://www.alabamapublichealth.gov/perinatal/breastfeeding.html
- Alabama WIC Breastfeeding Resource Guide: Alabama Department of Public health, WIC program. Alabama WIC breastfeeding resource guide 2024-25 [Internet]. Montgomery (AL): Alabama department of public health; [updated October 1, 2024; cited 2 Aug 2025]. Available from <a href="https://www.alabamapublichealth.gov/wic/assets/bf">https://www.alabamapublichealth.gov/wic/assets/bf</a> resourceguide 2 025.pdf
- Mother's milk bank of Alabama: mother's milk bank of Alabama [Internet]. Birmingham (AL): Mother's Milk Bank of Alabama; [cited 2 Aug 2025]. Available from <a href="https://www.mmbal.org/">https://www.mmbal.org/</a>
- The National Breastfeeding Helpline: 1-800-944-9662

### **Breastfeeding Resources for Healthcare Providers**

- LactMed:
  - Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National center for biotechnology information (US); 2006 Sep 18 [cited 2025 Aug 02]. Available from: <a href="https://www.ncbi.nlm.nih.gov/books/NBK501922/">https://www.ncbi.nlm.nih.gov/books/NBK501922/</a>
- e-Lactancia:
  - Paricio Talayero JM, Sánchez Palomares M, Landa Rivera L, Moyano Pellicer S, Casas Maeso N, Giannioti K, Mena Tudela D, Heart A. e-lactancia: ¿Es compatible con la lactancia? [Internet]. Valencia: asociación para la promoción e investigación centífica y cultural de la lactancia materna (APILAM); [updated 30 Jul 2025; cited 2 Aug 2025]. Available from: <a href="https://www.e-lactancia.org/">https://www.e-lactancia.org/</a>
- Medications and Mothers' Milk:
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Archived issues are available at: <a href="http://pharmacy.auburn.edu/di/auinformed.php">http://pharmacy.auburn.edu/di/auinformed.php</a>

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