



## Season 2, Episode #5

# Breastfeeding

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### Learning Objectives

- Review guidelines and recommendations for breastfeeding
- Discuss breastfeeding benefits and contraindications
- Recognize common problems in breastfeeding and discuss practical solutions
- Discuss barriers to breastfeeding
- Review appropriate resources for breastfeeding mothers and providers
- Highlight current research on substances in breastmilk

Breastfeeding is an important topic for pediatricians, as it is the main source of nutrition for infants. There are a lot of myths surrounding breastfeeding, and pediatricians need education on breastfeeding to discuss the benefits and techniques with mothers.

- 1) Breastfeeding duration
  - a) American Academy of Pediatrics recommends exclusive breastfeeding for 6 months, with breastfeeding continuing until 12 months old or longer
    - i) The WHO supports this recommendation, but many countries worldwide breastfeed for longer
  - b) 80% of mothers in the U.S. initiate breastfeeding, but this number drastically decreases over time. Only 50% of mothers continue to exclusively breastfeed at 3 months, and this drops to 25% at 6 months of age.
- 2) Benefits of breastfeeding
  - a) Mothers
    - i) Decrease postpartum blood loss, reduce breast cancer and ovarian cancer risk, and helps with an earlier return to pre-pregnancy weight
    - ii) Breastfeeding decreases a mother's risk of type 2 diabetes, heart disease, and postpartum depression
  - b) Infants
    - i) Breastmilk has been shown to lower rates of growth failure and neurodevelopmental disabilities in premature babies
    - ii) Breastmilk decreases risk of bacteremia, diarrhea, respiratory tract infections, necrotizing enterocolitis, otitis media, urinary tract infections, diabetes, lymphoma, leukemia, and childhood obesity.
    - iii) Breastfeeding is associated with a 36% reduced risk of sudden infant death syndrome (SIDS)
  - c) Economic
    - i) If 90% of women exclusively breastfed for 6 months, it would save 13 billion dollars a year due to increasing overall infant health



- 3) Obstacles to breastfeeding
  - a) Lack of social support
  - b) Aggressive marketing by formula companies
  - c) Short maternity leave
  - d) Lack of safe space to pump or store milk
  - e) Financial constraints on the family to stay home versus go back to work
- 4) Common problems in breastfeeding
  - a) Physical
    - i) Sore nipples, engorged breasts, mastitis, failure to latch
      - (1) Most treatments include frequent feeding, rest, and applying heat
      - (2) Consider antibiotic therapy if worsens
- 5) Breastfeeding support options
  - a) CLC – certified lactation counselor
  - b) IBCLC – international board certified lactation consultant
- 6) Breastfeeding tips
  - a) Latch
    - i) A wide mouth grab is needed to have them latch further than the nipple
    - ii) Sandwich method – compress breast tissue like holding a sandwich to help fit the breast into the mouth
  - b) Holds
    - i) Cradle hold – hold infant across the chest
    - ii) Cross cradle hold – hold infant with opposite arm across the chest
    - iii) Football hold – hold infant along the side
    - iv) Side lying hold – mother and infant lay down side by side
  - c) Tips for Moms
    - i) Rest
    - ii) Hydrate
- 7) Concerns about infant intake
  - a) Mothers make 1-1.25 ounces per hour
  - b) Good output and weight gain are ways to show mothers that intake is appropriate
    - i) Pre and post weight feeds can help show mothers the baby is getting milk
    - ii) Urine diaper numbers the first week usually equal the day of life for the infant
    - iii) Babies should have 4 stools a day by day 4 of life
- 8) Breastmilk storage
  - a) 4 hours out at room temperature
  - b) 4 days in the refrigerator
  - c) 6-12 months in the freezer
- 9) Resources
  - a) Mothers
    - i) La Leche League – provides in person education and encouragement for mothers
    - ii) Kelly Mom – website with breastfeeding advice and tips
    - iii) Mother’s Guide to Breastfeeding – guide made by the American Academy of Pediatrics
    - iv) Womenshealth.gov – federal website for questions and tips
    - v) WIC – local offices may offer peer counselors to help with breastfeeding
  - b) Providers
    - i) Academy of Breastfeeding Medicine – protocols and guidelines for the care of mothers and infants
    - ii) AAP’s Breastfeeding Handbook for Physicians



- iii) AAP's Resident Breastfeeding curriculum
  - iv) LactMed – evaluates the safety of drugs and chemicals in breastmilk
  - v) Infant Risk – evidence based information on medications and their safety in pregnancy and breastfeeding
- 10) Special considerations
- a) Hyperbilirubinemia
    - i) Continue breastfeeding, just keep the baby under the phototherapy lights as much as possible
    - ii) This may persist for a few weeks due to breastmilk jaundice, but breastfeeding does not need to be discontinued
- 11) Contraindications to breastfeeding
- a) Infant conditions include galactosemia or other metabolic disorders
  - b) Maternal conditions
    - i) Human T cell lymphotropic virus
    - ii) Active untreated tuberculosis
    - iii) Active herpes simplex lesions on the breast
    - iv) Varicella developed 5 days before through 2 days after delivery
      - (1) Can use their expressed milk
    - v) HIV
      - (1) Developing countries may breastfeed if the benefits outweigh the risks
- 12) Conditions not contraindicated for breastfeeding
- a) Hepatitis B
  - b) Hepatitis C
- 13) Drugs and breastmilk
- a) Street drugs like Phencyclidine, cocaine, and cannabis can be detected in human milk
  - b) Cocaine is absolutely contraindicated as it may lead to seizures in infants
  - c) Tobacco smoking is not a contraindication, but mothers should be encouraged to quit and cessation aids should be offered
  - d) Marijuana has been found in breastmilk for 6 weeks after use
    - i) The American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, and the Academy of Breastfeeding Medicine recommend abstaining from marijuana use during pregnancy and while a mother is breastfeeding
  - e) Alcohol
    - i) Alcohol during pregnancy can cause fetal alcohol syndrome
    - ii) Mothers should not be told they must quit to breastfeed, but it is encouraged
      - (1) Recommend 2 hours between drinking and breastfeeding
- 14) COVID-19 and breastfeeding
- a) Early studies show that COVID-19 antibodies (IgA and IgG) are seen in breastmilk after vaccination and after infection



**Resources:**

- Breastfeeding and the Use of Human Milk. SECTION ON BREASTFEEDING. Pediatrics Mar 2012, 129 (3) e827-e841; DOI: 10.1542/peds.2011-3552
- Breastfeeding. Centers for Disease Control. U.S. Department of Health and Human Services. <https://www.cdc.gov/breastfeeding/index.htm>
- La Leche League International, <https://www.llli.org/breastfeeding-info/>
- Mitchell EA, Blair PS, L'Hoir MP. Should pacifiers be recommended to prevent sudden infant death syndrome? Pediatrics. 2006 May;117(5):1755-8. doi: 10.1542/peds.2005-1625. PMID: 16651334.
- Perl et al. SARS-CoV-2–Specific Antibodies in Breast Milk After COVID-19 Vaccination of Breastfeeding Women. JAMA. April 2021.
- Wymore et al, Persistence of  $\Delta$ -9-Tetrahydrocannabinol in Human Breast Milk. JAMA Pediatrics, March 2021; DOI: 10.1001/jamapediatrics.2020.6098
- Your Guide to Breastfeeding. Office on Women’s Health, US Department of Health and Human Services. <https://www.womenshealth.gov/files/your-guide-to-breastfeeding.pdf>