Breastfeeding in the Mountain State: A Key for Better Beginnings and Better Health for West Virginians

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Poll

- How many participants have experience with breastfeeding from a personal perspective (nursed own children or family members)?
- How many have experience counseling nursing mothers?
- Do you work in a hospital or in the community?
- Breastfeeding is a public health issue yes or no?

A Life Saving Intervention

CPR

- More than 10 million people in the United States spend time, energy, and money to get trained and certified in CPR.
- A valuable skill set, of course.
- But as an intervention, applied alone, it's ineffective about two-thirds of the time.
- Most people, including most healthcare professionals, never use the training



Another Life Saving Intervention

- Imagine if just a tiny fraction of those 10 million people took less than an hour of their time to learn the breastfeeding basics I teach to new parents.
- Imagine if, in that same time, they also learned how to teach those simple, empowering, life-changing basics to others.

- They would learn an intervention that, applied alone, is likely to be highly effective.
- It's an intervention they'll have the chance to practice time and time again—how many pregnant women or new mothers do you think they'll see?—throughout their personal and professional lives.

Enabling optimal breastfeeding would prevent 2619 maternal deaths & 721 child deaths annually in the U.S.

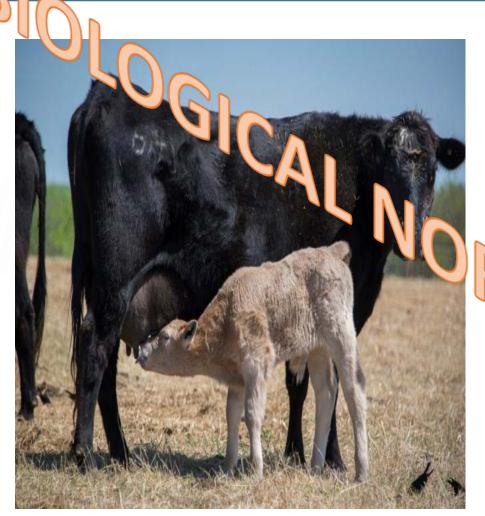
Who Shouldn't Breastfeed? Contraindications to Breastfeeding

- Galactosemia
- The infant whose mother:
 - Has HIV (in the US)
 - Is taking antiretroviral medications
 - Has untreated, active tuberculosis
 - Is infected with human T-cell lymphotropic virus type I or type II
 - Is using or is dependent upon an illicit drug
 - Is taking prescribed cancer chemotherapy agents, such as antimetabolites that interfere with DNA replication and cell division
 - Is undergoing **radiation therapies**; however, such nuclear medicine therapies require only a **temporary interruption** in breastfeeding

Breastfeeding is not "Best"

















 Human milk is the normative standard for infant feeding and nutrition

- Breastfeeding should be considered a <u>public health issue</u> and not a lifestyle choice
 - AAP Pediatrics 2012;129;e827-41



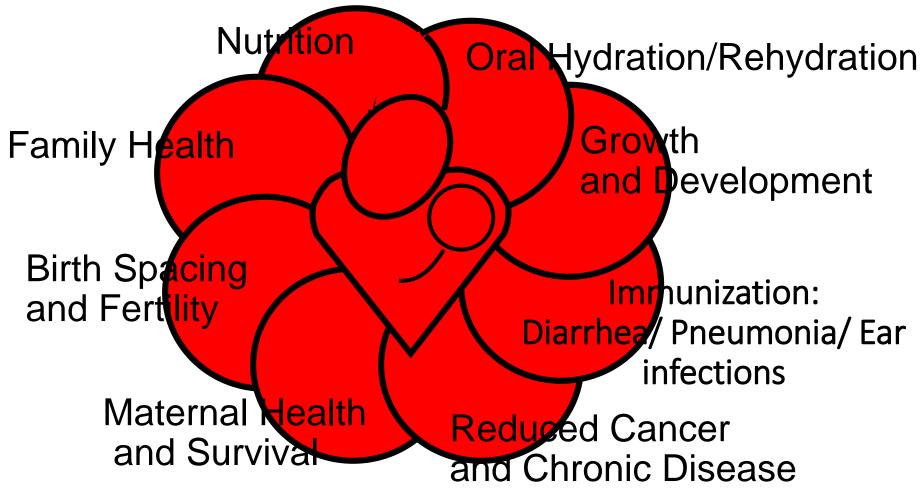








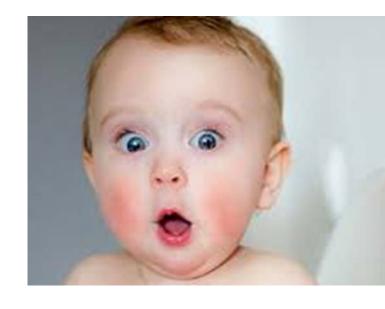
Breastfeeding, the Heartbeat of Maternal/Infant Health, supports:



With permission of the Carolina Global Breastfeeding Institute (CGBI) at UNC Chapel Hill, based on the logo of the Breastfeeding Division, IRH, at Georgetown U & Dr. Miriam Labbok

The Health Benefits of Breastfeeding are Substantial:

- Substantially higher rates of mortality among infants never breastfed compared to those exclusively breastfed in the first six months of life and receiving continued breastfeeding beyond.
- Otitis media occurs nearly twice as frequently among those not exclusively breastfed in the first six months
- Many of the benefits of breastfeeding are experienced well beyond the period that breastfeeding is stopped.
- Children who were breastfed have lower risk of obesity, higher intelligence quotients, reduced malocclusion and less asthma.



The Health Benefits of Breastfeeding are Substantial: MOM

- Breastfeeding mothers have lower rates of:
 - breast cancer
 - ovarian cancer
 - type 2 diabetes
 - heart disease & hypertension
 - osteoporosis
 - postpartum depression



These multiple benefits of breastfeeding demonstrate the contribution and relevance of breastfeeding as a global public health issue, for low- and high-income populations alike.

Exclusive Breastfeeding = Only Breastmilk

The effect of breast milk is dose-dependent, with exclusivity and longer duration there are increasing benefits.

Sankar MJ, Sinha B, Chowdhury R, et al. Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis. Acta Paediatr. 2015;104(467):3–13 4.

Hauck FR, Thompson JM, Tanabe KO, Moon RY, Vennemann MM. Breastfeeding and reduced risk of sudden infant death syndrome: a meta-analysis. Pediatrics. 2011;128(1):103–110 5.

Chowdhury R, Sinha B, Sankar MJ, et al. Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. Acta Paediatr. 2015;104(467):96–113

Exclusivity matters

Babies are six times more likely to be exclusively breastfeeding at 8 weeks if not supplemented with formula in the hospital.

Breastfeeding and New Jersey Maternity Hospitals: A Comparative Report, using data from the New Jersey Pregnancy Risk Assessment Monitoring System (NJ-PRAMS)"



Breastfeeding Can Improve Health and Development for Children and Mothers



Source:Unicef



The Cost of Suboptimal Breastfeeding

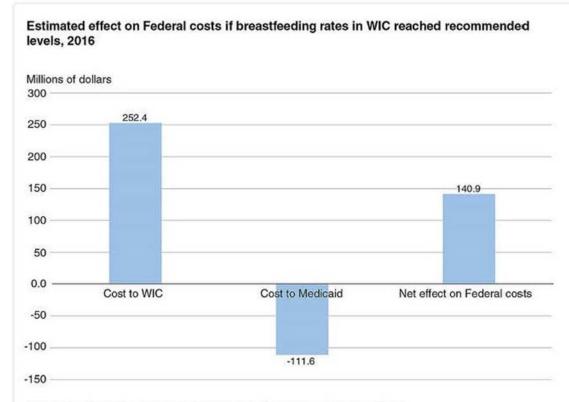
| COSTS OF SUB- OPTIMAL BREASTFEEDING RATES | Medical Costs of Sub-Optimal Rates | Non-Medical Costs of Sub-Optimal Rates | Death Costs of Sub- Optimal Rates |
|--|---------------------------------------|--|--------------------------------------|
| West Virginia | \$20,530,562 | \$7,808,795 | \$97,745,897 |
| U.S. National | \$2,405,023,438 | \$1,093,681,596 | \$10,798,725,299 |





Increased Breastfeeding in WIC Would Increase Federal Costs but Lower Health Related Costs for WIC Households

Posted by Victor Oliveira, Food Economics Division, Economic Research Service in Research and Science Mar 13, 2019





- Results from this study indicate that if breastfeeding rates in WIC in 2016 rose to recommended levels:
 - 8-percent increase in total **WIC** participants
 - Costs to WIC would have increased by \$252.4 million
 - BUT total health-related costs would have been reduced by \$9.1 billion

Note: WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Source: USDA, Economic Research Service.

Personalized Medicine



"Human breastmilk is therefore not only a perfectly adapted nutritional supply for the infant, but probably the most specific personalized medicine that he or she is likely to receive, given at a time when gene expression is being finetuned for life. This is an opportunity for health imprinting that should not be missed."

Cesar G Victora, Rajiv Bahl, Aluísio J D Barros, Giovanny V A França, Susan Horton, Julia Krasevec, Simon Murch, Mari Jeeva Sankar, Neff Walker, Nigel C Rollins, for The Lancet Breastfeeding Series Group. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect Lancet 2016; 387: 475–90

DID YOU EVER WONDER WHAT'S IN...?

Insulin-like growth factor- II

Nerve growth factor (NGF)

(combinations of amino acids)

Parathyroid hormone (PTH)

Cholecystokinin (CCK)

HMGF I (Human growth factor)

PEPTIDES

HMGF III.

Catalase

Lipase

Histaminase

Lysozyme

Phosphatase Xanthine oxidase

PAF-acetylhydrolase

B-endorphins

BREASTMILK

Triglycerides

acid)

brain development)

Linoleic acid

Free Fatty Acids

Oleic acid

Stearic

Phospholipids

Palmitic acid

Lauric acid

Plasmalogens

Sphingomyelin

Glucosylceramide

Lactosylceramide

Globoside (GB4)

Glycosphinaolipids

Galactosylceramide

Gangliosides

Sphingolipids

GM1

GM2

GMB

Sterols

Squalene

Lanosterol

Dimethylsterol

Methosterol

Desmosterol

Cholesterol

Sitosterol

B-lathosterol

Triacylglycerol

7-dehydrocholesterol

Vitamin D metabolites

7-ketocholesterol

Steroid hormones

Stigma-and campesterol

Lathosterol

Myristic acid

Palmitoleic acid

Saturated fatty acids

Phosphatidylcholine

Phosphatidylinositol

Phosphatidylethanolamine

Lysophosphatidylcholine

Heptadecenoic acid

CARBOHYDRATES (energy source)

Oligosaccharides (see below)

Lactose

CARBOXYLIC ACID

Alpha hydroxy acid Lactic acid PROTEINS (building muscles and bones) Whey protein Alpha-lactalbumin HAMLET (Human Alpha-lactalbumin Made Lethal to Tumour cells) Many antimicrobial factors (see below) Casein Serum albumin NON-PROTEIN NITROGENS Creatine Creatinine Urea Uric acid Peptides (see below) Amino Acids (the building blocks of proteins) Alanine Arginine Aspartate Clycine Cystine Glutamate Histidine Isoleucine Leucine Lycine Methionine Phenylalanine Proline Serine. Taurine Theronine Tryptophan Tyrosine Valine Camitine (amino acid compound necessary to make use of fatty acids as an energy source) Nucleotides (chemical compounds that are the structural units of RNA and DNA) 5'-Adenosine monophosphate (5"-AMP) 3':5'-Gydic adenosine monophosphate (3'.5'-cyclic AMP) 5'-Cytidine monophosphate (5'-CMP) Cytidine diphosphate choline (CDP choline) Guanosine diphosphate (UDP) Guanosine diphosphate - mannose 3'- Uridine monophosphate (3'-UMP) 5'-Uridine monophosphate (5'-UMP) Uridine diphosphate (UDP) Uridine diphosphate hexose (UDPH) Uridine diphosphate-N-acetylhexosamine (UDPAH) Uridine diphosphogluguronic acid (UDPGA) Several more novel nucleotides of the UDPtype

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Long-chain polyunsaturated fatty acids
  Docosahexaenoic acid (DHA)
  (important for brain development)
  Arachidonic acid (AHA) (important for
  Alpha-linolenic acid (ALA)
  Eicosapentaenoic acid (EPA)
  Conjugated linoleic acid (Rumenic
Monounsaturated fatty acids
Lysophosphatidylethanolamine
Globotriaosylceramide (GB3)
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VITAMINS Vitamin A Reta carotene Vitamin B6 Vitamin B8 (Inositol) Vitamin B12 Vitamin C Vitamin D Vitamin E a-Tocopherol Vitamin K Thiamine Riboflavin Niacin Folic acid Pantothenicacid Biotin MINERALS Calcium Sodium Potassium Iron Zinc Chloride Phosphorus Magnesium Copper Manganese Iodine Selenium Choline Sulpher Chromium Cobalt Fluorine Nickel Molybdenum (essential element in many enzymes) GROWTH FACTORS

(aid in the maturation of the intestinal

Granulocyte-colony stimulating factor

Macrophage-colony stimulating factor

Vascular endothelial growth factor

Tumor necrosis factor-a

Epithelial growth factor (EGF)

known as somatomedin ()

Interferon-v

Platelet derived growth factors (PDGF)

Hepatocyte growth factor -α (HGF-α)

Transforming growth factor-α (TGF-α)

Insulin-like growth factor-I (IGF-I) (also

interleukin-1β (IL-1β)

lining)

Cytokines

IL-4

11-6

II -10

(G-CSF)

HGF-B

B-defensin-1 Calcitonin Gastrin Bombesin (gastric releasing peptide, also known as neuromedin B) Neurotensin Somatostatin HORMONES (chemical messengers that carry signals from one cell, or group of cells, to another via the blood) Cortisol Trijodothyronine (T3) Thyroxine (T4) Thyroid stimulating hormone (TSH) (also known as thyrotropin) Thyroid releasing hormone (TRH) Prolactin Oxytocin Insulin Corticosterone Thrombopoietin Gonadotropin-releasing hormone (GnRH) Leptin (aids in regulation of food intake) Ghrelin (aids in regulation of food intake) Adiponectin Feedback inhibitor of lactation (FIL) Eicosanoids Prostaglandins (enzymatically derived from fatty acids) PG-F1 PG-EZ PG-F2 Leukotrienes **Thromboxanes** Prostacyclins ENZYMES (catalysts that support chemical reactions in the body) Amylase Arysulfatase

ANTIPROTEASES (thought to bind themselves to macromolecules such as enzymes and as a result prevent allergic and anaphylactic reactions) a-1-antitrypsin a-1-antichymotrypsin ANTIMICROBIAL FACTORS (are used by the immune system to identify and neutralize foreign objects, such as bacteria and viruses.) Parathyroid hormone-related peptide Leukocytes (white blood cells) Phagocytes Basophils Neutrophils Eoisinophils Macrophages Lymphocytes B lymphocytes (also known as B cells) T lymphocytes (also known as C cells) staA (Secretory immuno alobulin A) (the most important antiinfective factor) IgA2 IgG IaD IqM IgE Complement C1 Complement C2 Complement C3 Complement C4 Complement C5 Complement C6 Complement C7 Complement C8 Complement C9 Glycoproteins Mucins (attaches to bacteria and viruses to prevent them from clinging to mucousal tissues) Lactadherin Alpha-lactoglobulin Alpha-2 macroglobulin Lewisantigens Ribonudease Haemagglutinin inhibitors Bifidus Factor (increases growth of Lactobacillus bifidus - which is a good bacteria) Lactoferrin (binds to iron which prevents harmful bacteria from using the iron to Lactoperoxidase B12 binding protein (deprives microorganisms of vitamin B12) Fibronectin (makes phagocytes more aggressive, minimizes inflammation, and repairs damage caused by inflammation) Oligosaccharides (More Than 200 Different Kinds!)

FORMULA CARBOHYDRATES Lactose

Corn maltodextrin

Partially hydrolyzed reduced minerals whey protein concentrate (from cow's milk)

FATS Palm olein Sovbean oil Coconut oai High oleic safflower oil (or sunflower oil) M. alpina oil (Fungal DHA) C.cohnii oil (Algal ARA)

MINEPALS Potassium citrate Potassium phosphate Calcium chloride Tricaloum phosphate Sodium citrate Magnesium chloride Ferrous sulphate Zinc sulphate Sodium chloride Copper sulphate Potassium iodide Manganese sulphate

Sodium selenate

VITAMINS Sodium ascorbate Inositol Choline bitartrate Alpha-Tocopheryl acetate Niadnamide Calcium pantothenate Riboflavin Vitamin A acetate Pyridoxine hydrochloride Thiamine mononitrate Folicacid

Phylloquinone Rintin Vitamin D3 Vitamin R12 ENZYME

Trypsin

AMINO ACID

Taurine

L-Camitine (a combination of two different amino acids)

NUCLEOTIDES

Cytidine 5-monophosphate Disodium uridine 5-monophosphate Adenosine 5-monophosphate Disodium guanosine 5-monophosphate Soy Lecithin



Developed as a student project for the Breastfeeding Course for Health Care Providers, Douglas College, New Westminster, BC, Canada - @ 2007.



Breastmilk changes to meet baby's needs

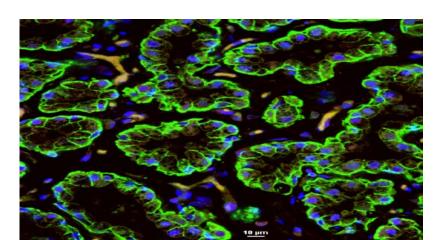


- 1. As baby grows
- 2. During growth spurts and illnesses
- 3. From day to night
- 4. During a feeding
- 5. Color
- 6. Flavor



The Science of Breastmilk STEM CELLS

- 2007, Professor Peter Hartmann with Dr. Mark Cregan and his team at The University of Western first discovered the presence of stem cells in breast milk (Cregan et al. 2007).
- Dr. Foteini Kakulas --these embryonic-like stem cells found in breast milk can be directed to become other body cell types such as bone, fat, liver, pancreatic and brain cells (Hassiotou et al. **2012**)



- Some of the cells that contain our genetic information are exchanged between the mother and her baby, remaining alive and active in each other's bodies for at least...decades.
- Occurs during pregnancy via the placenta, and continues to a large extent during breastfeeding
- These stem cells become active and functioning parts of the body of the baby and also help the immune system mature



Microbiome- Feed the bugs!

Breastfeeding feeds gut bacteria

Mom's body ferries little microbes from her gut to her breast milk to pass to her baby.

Breast Milk Prebiotics—

Human Milk Oligosaccharides (HMOs) are the third largest component of our milk

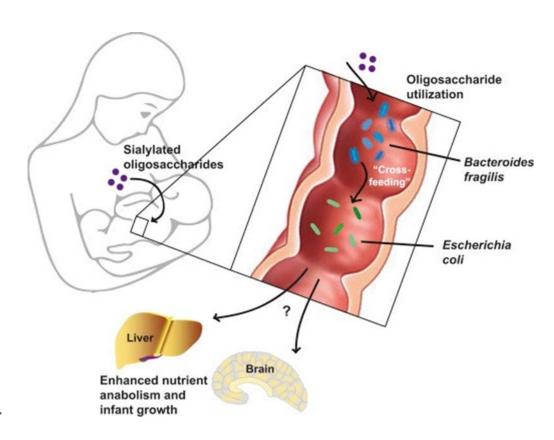
*these feed the good bacteria

anoso rosa ano gosa bastona

The composition of the microbiome at 1 month of age correlates with asthma and food allergies by age 7

May also contribute to Obesity

Formula fed infants have different gut bacteria but newer formulas have added prebiotics and probiotics which help – but long term outcomes are not known





Microbiome

Infants' Gut Microbiomes Can Shape Their Metabolic And Immune-related Health As Well As Their Lifelong Risk For Obesity, Asthma, Allergies, And Autoimmune Diseases.

- Vaginally-delivered babies arrive in a bacterially-laden splash, coated head to foot in their mother's bacteria. This difference has a profound impact on gut colonization.
- Babies born via C-sections are at <u>higher</u> <u>risk</u> for obesity, allergies and Type 1 Diabetes.

Factors influencing newborns gut microbiota

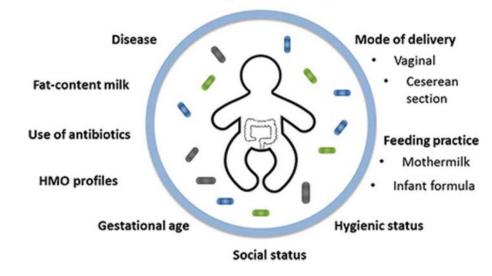


Figure 1. Factors influencing the composition and colonization of newborns gut microbiota.



"THE FIRST BUG WINS"
Good bacteria set the stage for lifelong metabolic and immune health



Spit Happens?



Breastmilk plays an important role in shaping a healthy oral microbiome

- The interaction of neonatal saliva and breast milk releases
 antibacterial compounds, including hydrogen peroxide.
 activates the 'lactoperoxidase system' which produces additional compounds that also have antibacterial activity
- Hydrogen peroxide can remain active at pH levels similar to that of a baby's stomach, it is thought that this antimicrobial activity seen in the mouth may also continue within the baby's stomach and intestines



The effect of breastmilk and saliva combinations on the in vitro growth of oral pathogenic and commensal microorganisms E. L. Sweeney, S. S. Al-Shehri, D. M. Cowley, H. G. Liley, N. Bansal, B. G. Charles, P. N. Shaw, J. A. Duley & C. L. Knox Scientific Reports volume 8, Article number: 15112 (2018)



Epigenetics



ep-i-ge-net-ics
/ˌepəjəˈnediks/
nounBIOLOGY
1.the study of changes in organisms caused by
modification of gene expression rather than alteration of
the genetic code itself.

 In addition to changes mediated through the flora, individual breastmilk components might directly affect epigenetic programming of the infant

 Breast milk has been shown to protect newborns against many diseases commonly experienced during the first year of life



4 main diseases and disorders that breast milk may epigenetically protect against:

1. Neonatal necrotizing enterocolitis (NEC)

 Breastfeeding may play a role in preventing NEC by programming slgA excretion through the influence on gut microbiota composition

2. Disorders of the Immune System – GI infections, Acute Otitis Media

- by influencing the gut microbiota, which influences pro-inflammatory genes
- Human milk contains oligosaccharides which promote healthier gut bacteria, which plays a leading role in epigenetically programming the infant's immune phenotype and infection susceptibility.



Diseases and disorders that breast milk may epigenetically protect against:

3. Cancer

- Benefits of breastfeeding are not only limited to the breastfed child. Mothers can have a deep and relevant impact on their own health just by nursing their babies.
- It is not very clear yet, but the evidence so far has shown an inverse correlation between breastfeeding duration and breast cancer risk, even in women who carry deleterious mutations in the BRCA1 gene.

4. Obesity and Related Disorders

- Gut microbiota has an important role in human metabolism
- Leptin is one of the several neuropeptides involve in the regulation of food intake and fat metabolism. When a baby is breastfed, there is less methylation or silencing of the leptin gene, meaning that more leptin is produced.

Epigenetics of Breastfeeding: 4 Diseases and Disorders That Breast Milk Could Protect Against August 2, 2018 Janeth Santiago Rios

•

How Very, Very Metabolic!



Results suggest that lactation goes beyond returning females back to a non-reproductive baseline and <u>improves their metabolic condition</u> long after reproduction has ended Scientific Reports. volume 7, Article number: 17118

(2017)







Obesity Prevention- The CHILD Study The way in which babies are fed is important.

- Babies who feed directly from the breast are less likely to be overfed. When they are full, they stop sucking, or switch to a "comfort" kind of sucking that doesn't produce milk.
- When babies are fed from bottles, parents and caregivers are more likely to push them to finish the bottle; feeding becomes a bit less about appetite and more about volume and schedule. (Clean Plate Club)
- Learning to eat only when you are hungry and stop when you are full is a really good skill when it comes to preventing obesity. That's why the American Academy of Pediatrics has encouraged parents to learn and use "responsive feeding," that is, responding to the cues of babies and children of both hunger and being full.

Azad et al, on behalf of the CHILD Study Investigators. October 2018, Pediatrics VOLUME 142 / ISSUE 4 Infant Feeding and Weight Gain: Separating Breast Milk From Breastfeeding and Formula From Food

Different expectations



Formula Feeding

- 4 ounces (120 ml) @1 month)
- 6 to 8 ounces (180–240 ml) at each of four or five feedings in twenty-four hours.
- 2 1/2 ounces (75 ml) of formula a day for every pound (453 grams) of body weight
 - Ever increasing volumes to ensure adequate nutrition

Breastfeeding

- A typical range of milk intakes is 19-30 oz per day (570-900 mL per day).
- Milk volume does not need to increase because composition changes to fit baby's unique needs

The State Of Breastfeeding In WV And The U.S.

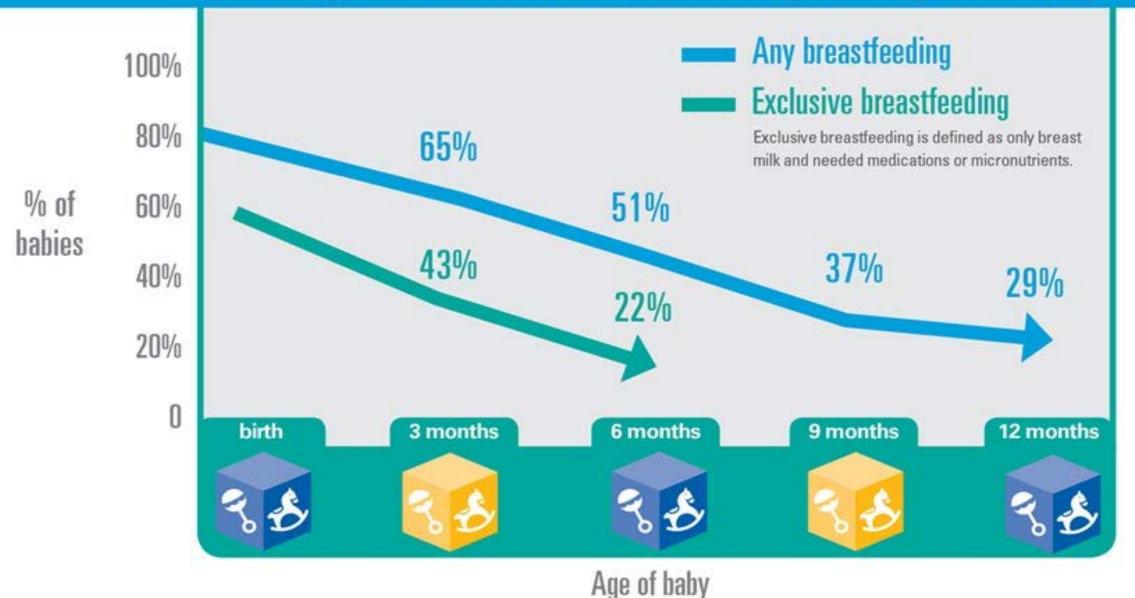


Mother's Intention to Breastfeed

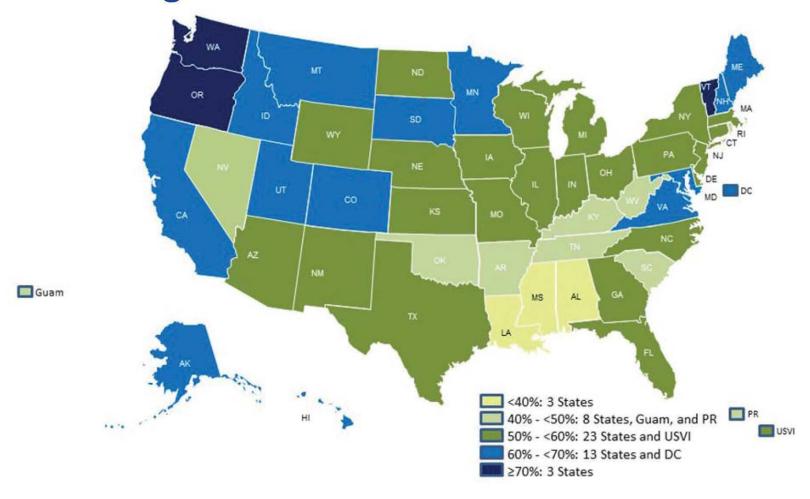
- 80% of women intend to breastfeed.
- 77% start breastfeeding.
- 16% exclusive breastfeeding at 6 mos.
- 60% of mothers do not breastfeed as long as they intend
 - > Problems with latch
 - > Pain
 - > Perceived insufficient milk supply
 - ➤ Poor weight gain, early supplementation
 - > Return to work



Percentage of babies breastfeeding during the first year



Geographic Disparities Percentage of Infants Breastfed at 6 Months



2018 CDC Report Card



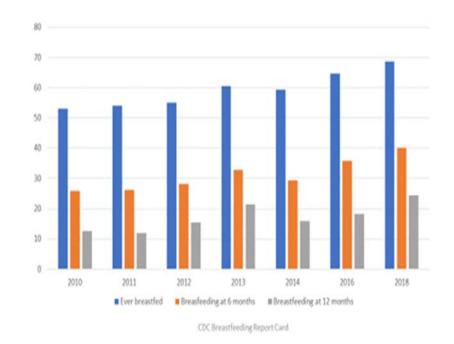
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| HEALTHY PEOPLE 2020 OBJECTIVES | TARGET | Current US Rates | Current WV Rates |
|--------------------------------|--------|------------------------|---------------------|
|--------------------------------|--------|------------------------|---------------------|

| MICH**-21.1 | Increase the proportion of infants who are breastfed: Ever | 81.9% | 83.2% | 68.6% |
|-------------|---|-------|-------|---------|
| MICH-21.2 | Increase the proportion of infants who are breastfed: At 6 months | 60.6% | 57.6% | 40.1% |
| MICH-21.3 | Increase the proportion of infants who are breastfed: At I year | 34.1% | 35.9% | 24.3% |
| MICH-21.4 | Increase the proportion of infants who are breastfed: Exclusively through 3 months | 46.2% | 46.9% | 36.3% |
| MICH-21.5 | Increase the proportion of infants who are breastfed: Exclusively through 6 months | 25.5% | 24.9% | 20.2% |
| MICH-22 | Increase the proportion of employers that have worksite lactation support programs. | 38.0% | 49.0% | unknown |
| MICH-23 | Reduce the proportion of breastfed newborns who receive formula supplementation within the first 2 days of life. | 14.2% | 17.2% | 14.9% |
| MICH-24 | Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies. | 8.1% | 26.1% | 8.1% |

WV Breastfeeding Rates 2010-2018



West Virginia

- 57% intend to breastfeed
- 37% are exclusively breastfeeding at discharge

Statewide initiatives

(WV Birthscore 2018)

- Ban the Bag (all 24 birthing facilities no longer give formula "gift bags")
 - 7th state to be designated as "Bag Free"
- Lactation Counselor Trainings
- 5 Baby Friendly Hospitals
 - Mon General- Morgantown
 - St Mary's Huntington
 - Ohio Valley Medical Center Wheeling
 - Berkeley Medical Center Martinsburg
 - United Hospital Center Clarksburg
 - 1 more actively on pathway for designation

WV Baby Friendly Hospitals









₩₩₩Medicine

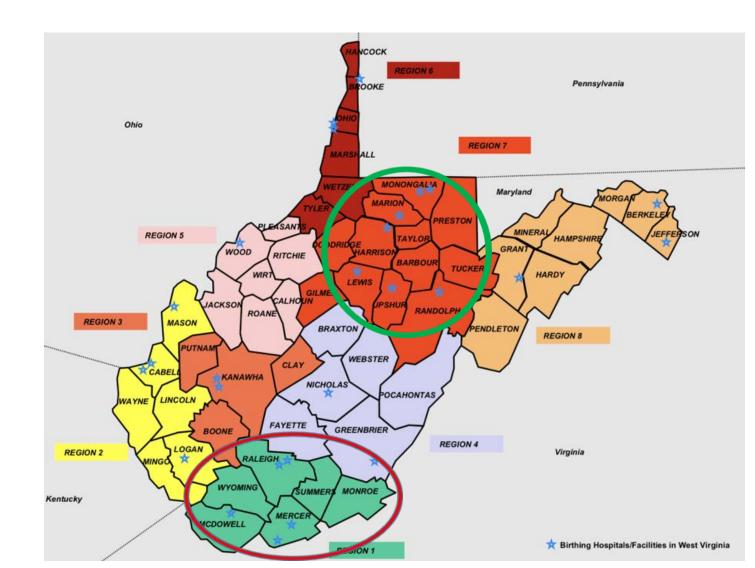




Working together for healthier mothers and babies

BREASTFEEDING INTENTION by RFTS Regions

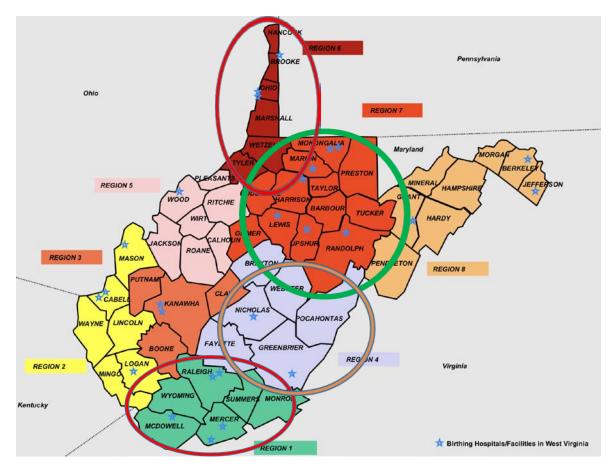
| RFTS Regions | Percent | Rank |
|-----------------|---------|------|
| Region 1 | 43.6 | 8 |
| Region 2 | 55.1 | 4 |
| Region 3 | 53.2 | 7 |
| Region 4 | 54.7 | 5 |
| Region 5 | 58.9 | 3 |
| Region 6 | 54.0 | 6 |
| Region 7 | 67.3 | 1 |
| Region 8 | 64.7 | 2 |





Low Exclusive Breastfeeding (At Hospital Discharge) BY RFTS REGIONS

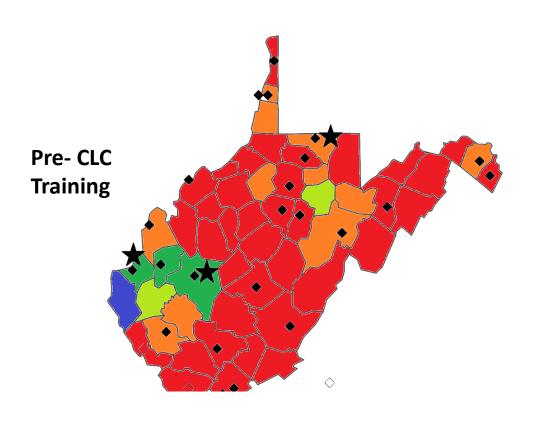
| Region Name | EXCLUSIVE BREASTFEEDING | | | |
|-------------------------|-------------------------|-------|-------|--|
| | NO | YES | Total | |
| 1 | 1276 | 395 | 1671 | |
| | 76.36 | 23.64 | | |
| 2 | 1297 | 924 | 2221 | |
| | 58.4 | 41.6 | | |
| 3 | 1514 | 755 | 2269 | |
| | 66.73 | 33.27 | | |
| 4 | 681 | 412 | 1093 | |
| | 62.31 | 37.69 | | |
| 5 | 922 | 500 | 1422 | |
| | 64.84 | 35.16 | | |
| 6 | 863 | 389 | 1252 | |
| | 68.93 | 31.07 | | |
| 7 | 2020 | 1603 | 3623 | |
| | 55.75 | 44.25 | | |
| 8 | 911 | 616 | 1527 | |
| | 59.66 | 40.34 | | |
| Unknown or out of state | 1695 | 1088 | 2783 | |
| | 60.91 | 39.09 | | |
| Total | 11179 | 6682 | 17861 | |
| Frequency Missing = 303 | | | | |

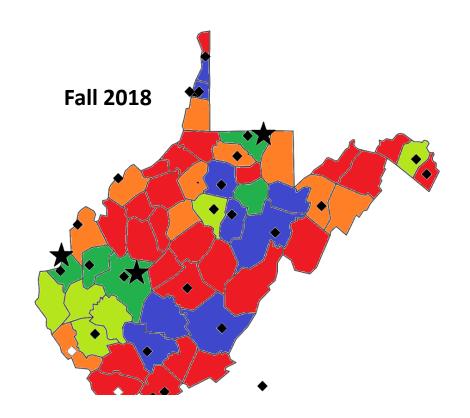


Average EXCLUSIVE BF at discharge for ALL Births in WV = 37.37%



Lactation Support Mapped





LEGEND

Why Do Mothers Stop Breastfeeding Early? 60% of mothers do not breastfeed as long as they intend

- Issues with lactation and latching
- Concerns about infant nutrition and weight
- Mother's concern about taking medications while breastfeeding
- Unsupportive work policies and lack of parental leave
- Cultural norms and/or lack of family support
- Unsupportive hospital practices and policies
- 1. Odom EC, Li R, Scanlon KS, Perrine CG, Grummer-Strawn L. Reasons for Earlier than Desired Cessation of Breastfeeding. *Pediatrics*. 2013;131(3):e726-732.
- 2. Sriraman NK, Kellams A. Breastfeeding: What are the Barriers? Why Women Struggle to Achieve Their Goals. J Womens Health (Larchmt). 2016;25(7):714-22.
- 3. Perrine CG, Galuska DA, Dohack JL, et al. Vital Signs: Improvements in Maternity Care Policies and Practices That Support Breastfeeding United States, 2007-2013—United States, 2007-2013. MMWR Morb Mortal Wkly Rep. 2015;64(39):1112-1117.







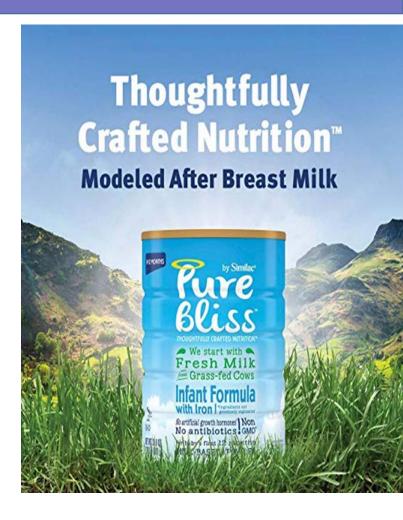
Aggressive Marketing by Infant Formula Companies











Women's Interpretations of Infant Formula Advertising



- Confusion about superiority of human milk
- Formula seen as a treatment or solution
- Expectation of failure with breastfeeding
- Greater influence when from healthcare sites

How Can You Support Mothers and Babies?

- Promote community resources
- Encourage third-party payer coverage for breastfeeding services and supplies
- Encourage child care providers to support breastfeeding and feeding expressed breast milk
- Support breastfeeding in the workplace

Protect Breastfeeding

- Improve Child's Right to Nurse legislation
- Awareness and Recognition of Baby Friendly
 - Businesses
 - Child Care
 - Colleges and MEDICAL SCHOOLS
 - Physician practices





AAFP Backs Breastfeeding, Lactation for Medical Trainees

Updated Policy to Serve as Model for AAP, Other Groups

June 26, 2019 02:35 pm Chris Crawford (mailto:aafpnews@aafp.org) – Despite being educated about the benefits of breastfeeding and taught to encourage and support their patients in their breastfeeding efforts, medical trainees may struggle in their own efforts to breastfeed.





Breastfeeding Coverage Guidelines Under the Patient Protection and Affordable Care Act:

Breastfeeding Services and Supplies Are Covered Without Cost Sharing

The following questions provide information on the provision under the Affordable Care Act for breastfeeding services and supplies, and how it will impact mothers and babies. The information provided is the most current available at the date of publication." For any questions regarding your specific health plan coverage, please contact your insurance provider.

QUESTION: What is the Patient Protection and Affordable Care Act (PPACA)?

ANSWER: The Patient Protection and Affordable Care Act is the health insurance reform legislation signed into law that requires health plans to cover preventive services at no cost. Preventive services that have strong scientific evidence of their health benefits, such as breastfeeding, must be covered and plans can no longer charge a patient a co-payment, co-insurance or deductible for these services.

Under Preventive Services for Women, provisions require health plans to cover breastfeeding services and supplies without cost-sharing (i.e. no co-payment). Many health plans implemented change with the first plan/policy year that begins on or after August 1, 2012.

QUESTION: When do breastfeeding services and supplies need to be covered?

ANSWER: If your insurance plan is affected by the Affordable Care Act, coverage is for health insurance plan years beginning on or after August 1, 2012. Your insurance provider is your source to confirm if your plan is affected. At this time, Medicaid and WIC are not part of the PPACA. QUESTION: What are details on the Affordable Care Act rules pertaining to Preventive Services for Women?

ANSWER: Under the Affordable Care Act, women's preventive health care services — such as mammograms, screenings for cervical cancer, and other services — are already covered with no cost sharing for new health plans. The Department of Health and Human Services (HHS) adopted additional Guidelines for Women's Preventive Services that will be covered without cost sharing in new health plans. Coverage now includes breastfeeding support, counseling and supplies, well-woman visits, contraception, and domestic violence screening. The guidelines were recommended by the Institute of Medicine (IOM)² and based on scientific evidence.

QUESTION: Is this coverage subject to deductibles and co-pays?

ANSWER: No. Breastfeeding services and supplies must be covered with no cost-sharing (no co-payments, co-insurance or deductibles) in plan years starting on or after August 1, 2012.

Break Time for Nursing Mothers

under the Fair Labor Standards Act (FLSA)



WAGE AND HOUR DIVISION UNITED STATES DEPARTMENT OF LABOR

The Fair Labor Standards Act (FLSA) requires employers to provide break time and space for a covered nonexempt nursing mother to express breast milk for her nursing child for one year after her child's birth.

- Employers must allow reasonable break time whenever a covered employee needs to express breast milk.
- . Employers must provide covered employees with space that is:
 - functional for expressing milk
 - shielded from view
 - free from intrusion
 - available as needed, AND
 - NOT a bathroom.

If an employer has fewer than 50 employees AND can demonstrate that compliance with this law would impose an undue hardship on the employer, that employer does not have to provide nursing breaks.

Note: The FLSA requirement of break time for nursing mothers to express breast milk does not preempt state laws that provide greater protections to employees (for example, providing compensated break time, providing break time for exempt employees, or providing break time beyond one year after the child's birth).

UNLAWFUL ACTS

Any employee who is "discharged or in any other manner discriminated against" because he or she has filed a complaint or cooperated in an investigation may file a retaliation complaint with the Wage and Hour Division or directly in court seeking appropriate remedies.

STANCTON THE

AAP Resources



My Collaboration Sites Early Career Pediatric Trainees International HealthyChildren org

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shopAAP

About the AAP

AAP.org > Advocacy & Policy > AAP Health Initiatives > Breastfeeding > Resources for Healt

Breastfeeding

Resources for Health Profess ona

Resources for Your Practice

- Breastfeeding: Baby's First Immunization Poster
 This poster promotes the importance of breastfeeding as the first immunizati
 receive all of their recommended vaccinations.
- BillTool
 BillTool is designed to help clinicians assess the risks for the development of newborns.
- Breastfeeding and Lactation: The Pediatrician's Guide to Coding Coding fact sheets to help you get paid for your breastfeeding and lactation:
- Clinical Protocols, Academy of Breastfeeding Medicine
 Breastfeeding protocols, for the care of breastfeeding mothers and infants.

https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Breastfeeding/Pages/Resources

7/21/2019

Resources for Health Professionals

- How To Have A Breastfeeding Friendly Practice
 As the breastfeeding rates in the US increases, there is now, more than ever, a need for health professionals who are able to care for and support breastfeeding families in their practice. This guideline provides you with suggestions on how to have a breastfeeding friendly practice.
- National Library of Medicine Drugs and Lactation Database (LactMed)
 A quick reference for anyone looking for information on medications for the lactating mother. It is helpful for physicians in making decisions pertaining to medication use.
- · Safe and Healthy Beginnings Toolkit

The AAP developed and tested this set of tools to help you to make sure that infants in your practice or hospital get off to the best start in life. The tools specifically relate to hyperbilirubinemia and jaundice prevention and treatment and breastfeeding support.

Sample Hospital Breastfeeding Policy for Newborns

Many hospitals have practices that are detrimental to be and free samples, pacifier use, and the separation of Section on Perinatal Pediatrics have written a sample procedures that hospitals should take to support brea

 Ten Steps to Support Parents' Choice to Breastfeed Information developed by the AAP Section on Breast and better support parents' choice to breastfeed their

Speaker's Kit

Breastfeeding Support and Promotion Speaker's Kit, An The Breastfeeding Support and Promotion Speaker's Kit wa Breastfeeding to be used as a tool for education on the topic easily presented by a wide range of professionals. We encoworkers, nurses, hospital, climic, or private practice staff, der promotion. Due to the size of this speaker's kit, users are as downloaded the file, to see the speaker's notes you must eit at the top of your screen. Once you are within PowerPoint, e Normal, in the bar at the top of your screen. The speaker's nay be directed to lactation@aap.org.

- Section 1 Introduction and Overview
- Section 2 The Benefits of Breastfeeding
- Section 3 The Process of Breastfeeding and Lacta
- Section 4 Management of Breastfeeding
- · Section 5 Breastfeeding Advocacy

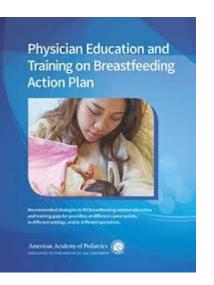
This kit was made available by a grant from the US Departm Reference Number 03T030012. The information in this publi as a standard of medical care. Variations, taking into account

Copyright © 2003, Rev 2012 American Academy of Pediatri reproduced, except for noncommercial purposes (such as fo in any form or by any means, electronic, mechanical, photoo from the publisher. Produced in the United States of America of any of the copyrighted information must obtain separate p Academy of Pediatrics.

The Breastfeeding Friendly Physician Office

- Have a breastfeeding policy
- Train staff
- Provide a supportive environment
 - No free formula samples
 - No commercial advertisements
- Encourage exclusive breastfeeding





West Virginia Perinatal Partnership

Clinical Guidance & Publications

· Contact Us

Breastfeeding Toolkit

Home About ACOG ACOG Departments & Activities Toolkits for Health Care Providers Breastfeeding Toolkit

Find an Ob-Gyn

Obesity Toolkit

UTI Toolkit

Breastfeeding Toolkit

Influenza Vaccination

Maternal Immunization Toolkit

Optimizing Immunization Programs in Obstetric-Gynecologic

Postpartum Toolkit

Practices

Tdap Vaccination Toolkit

Cessation Toolkit

HPV Vaccination Toolkit

Breastfeeding Toolkit

ACOG Breastfeeding Toolkit

Women's Health Care Physicians

ACOG Toolkits for

Evidence continues to mount regarding the benefits of breastfeeding for both women and their infants. The American College of Obstetricians and Gynecologists (ACOG) recommends exclusive breastfeeding for the first 6 months of life, with continued breastfeeding as complementary foods are introduced through the infant's first year of life, or longer as mutually desired by the woman and her infant, Unfortunately, breastfeeding rates in the United States are only 49% at six months and 27% at 12 months, well below the Healthy People 2020 target rates of 60.6% and 34.1%, respectively. As reproductive health experts and women's health advocates who work with a variety of obstetric and pediatric health care providers, obstetrician-gynecologists are uniquely positioned to enable women to achieve their infant feeding goals. The materials in this toolkit are designed to help ob-gyns and other women's health care providers do just that.

In this toolkit:



Committee Opinion 756, "Optimizing Support for Breastfeeding as Part of Obstetric

This Committee Opinion explains how obstetrician-gynecologists and other obstetric providers can support breastfeeding women and includes educational and policy recommendations



Physician Conversation Guide on Support for Breastfeeding

This guide will help to initiate discussions about breastfeeding with your patients early in pregnancy or prenatal care.



Breastfeeding Coding Quickly access a convenient list of ICD-10 codes for common breastfeeding conditions



Breastfeeding: Frequently Asked Questions

This patient FAQ explains the benefits of breastfeeding for women and babies, as well as common questions about breastfeeding and where women can get additional breastfeeding help. Click here to view the Spanish version.



Breastfeeding Infographic

Share this infographic on social media to educate your patients. Click here to view the Spanish version.

https://www.acog.org/About-ACOG/ACOG-Departments/Toolkits-for-Health-Care-Providers/Breastfeeding-Toolkit

Patient Education Pamphlet: Breastfeeding Your Baby (Members Only) ACOG members can preview a Patient Education Pamphlet that addresses common breastfeeding issues and offers helpful advice. It is also available in Spanish for all audiences.



See a comprehensive list of ACOG's breastfeeding resources for health care providers and patients.

Physician Conversation Guide on Support for Breastfeeding



Pertinent Medical and Surgical History: Ask about breast surgery (including reduction or augmentation and significant trauma or radiation to the chest wall), which could affect breastfeeding performance.

Medications: For chronic medications, ask what the patient knows about drug safety in lactation. Consult LactMed for long-term medications and provide her with printed resources, such as LactMed monographs or MotherToBaby fact sheets, for information on safety of medications she anticipates taking after giving birth.

Anticipatory Guidance: Begin conversations about lactation early in prenatal care using three-step counseling: 1 the patient an open-ended question and listen to her response, 2) Summarize her response in your own words, and 3) Eduaddressing her concerns.

Some questions and suggestions for education:

What have you heard about breastfeeding?

- · Health effects: Breastfeeding is different from formula feeding. Discuss benefits for the woman and the baby.
- · Pain: Many women experience discomfort with latching in the early days as the baby draws the nipple and areola into mouth. Pain lasting more than 20-30 seconds is a signal to adjust the baby's position, sometimes simply by shifting the baby's torso to face the woman's body. Hospital staff will help with positioning too.
- · When to feed: The baby has a fuel gauge—elbows flexed and fists near the mouth means "empty" and arms relaxed means "full." One arm flexed means "I might want dessert."
- · Making enough milk: To ma make more milk by having removes. Acknowledge th
- Nursing in public: Discuss I Consider timing outings ar request a private space for

What have you heard at

· Review recommendations the woman and the baby a

How does your family or

· Offer to consult with unsu · Concerns about sexuality: I

What are your plans for

 Discuss opportunities for e to more frequent nursing it requires most employers to Find out more at http://ww

Multiparous women: Ho

· Praise the patient for any p them. Offer a prenatal conthe patient formula fed, ex

"Questions & guidance adapted in part from Ap-

Breastfeeding Coding



for Obstetrician-Gynecologists 2016

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nipple associated with pregnancy

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d Codes for Breastfeeding eding Condition The American College of Obstetricians and Gynecologists of nipole associated with lactation f breast associated with lactation

Breastfeeding: Frequently Asked Questions

How does breastfeeding my baby benefit me?

Breastfeeding is good for you for the following reasons

- . Breastfeeding burns as many as 500 extra calories each day, which may make it easier to lose the weight you gained during pregnancy.
- . Women who breastfeed longer have lower rates of type 2 diabetes, high blood pressure, and heart
- . Women who breastfeed have lower rates of breast cancer and ovarian cancer;
- . Breastfeeding releases oxytocin, a hormone that causes the uterus to contract. This helps the uterus return to its normal size more quickly and may decrease the amount of bleeding you have after giving birth.

How does breastfeeding benefit my baby?

Breastfeeding benefits your baby in the following ways

- . Breast milk has the right amount of fat, sugar, water, protein, and minerals needed for a baby's growth and development. As your baby grows, your breast milk changes to adapt to the baby's changing
- . Breast milk is easier to digest than formula,
- . Breast milk contains antibodies that protect infants from ear infections, diarrhea, respiratory illnesses and allergies.
- . Breastfed infants have a lower risk of sudden infant death syndrome. Any amount of breastfeeding appears to help lower this risk.
- . If your baby is born preterm, breast milk can help reduce the risk of many of the short-term and long term health problems that preterm babies face, such as necrotizing enterocolitis or other infections

How long should I breastfeed my baby?

It is recommended that babies exclusively breastfeed for the first 6 months of life. Exclusive breastfeeding means to feed your baby only breast milk and no other foods or liquids unless advised by the baby's doctor. Breastfeeding should continue as new foods are introduced through the baby's first year. You an keep breastfeeding after the first year as long as you and your baby want to continue. You can use a breast pump to express milk at work to provide milk for your baby when you are separated. This also helps to keep up your supply while you are away from your baby.

When can I begin breastfeeding?

Most healthy newborns are ready to breadfeed within the first hour after birth. Hold your baby directly against your bare skin (called "skin-to-skin" contact) right after birth. Placing your baby against your skin right after birth triggers reflexes that help your baby to attach or "latch on" to your breast."

How do I know my baby is hungry?

When babies are hungry, they will nuzzle against your breast, suck on their hands, flex their fingers and arms, and clench their fixts. Crying usually is a late sign of hunger. When babies are full, they relax their arms, legs, and hands and close their eyes.

The codes represented in this chart with an " require a 6th digit to men'ly trimoster. The audeline 6th-digit requirements for this code set are as follows: 1 Ifirst trimester 2 (second trimester), 3 (third trimes-The engles remesented in this elect with an * require an additional digi as indicated with the dash I-1 The guidelines for 7th-digit requirements for this code set are as follows: A (Initial Encounter), D (Subsequen Encounter), or S (Sequela)

If a feeding problem exists that requires the physician to spend an additional amount of time address ing the problem, the following codes are appropriate. This would include the obstetrician-gynecologist or other health care provider taking the woman's history, examining he breasts and nipples, observing a feeding, and making a diagnosis and treatment plan for the woman:

| 90201-90206 | Office or oth outpatient vi for the evalu tion and mar agament of a new patient |
|-------------|--|
| 99212 99215 | Office or oth outpatient vi for the evaluation and man ogement of a established |

ans and Gynecologists, 409 12th Street, SW, PD Box 96920, Washington, DC 20090-692

er for care and examination of lactating woman (excludes encoun-onditions related to O92.-)

AA6129





WIC Rx

and does not necessarily represent the views of CDC.

Healthy Pregnancy and Lifestyle Resources

| Name ————— | Date |
|--|--------------------------------------|
| Consider visiting | Breastfeeding support |
| | Prenatal nutrition |
| WIC for these | Child's healthy growth |
| services to help you and your family stay healthy: | Healthy food and nutrition education |
| | Food shopping and preparation tips |
| | Other |

Learn how WIC's community resources can help your patients



You might be surprised...

As a busy physician these days, it's important to be able to extend patient services without extending your office hours. Did you know that partnering with WIC can help you provide follow-up and care continuity for patients?

WIC, the Special Supplemental Nutrition Program for Women, Infants, and Children, is the nation's most successful public health nutrition program. It can also improve your patients' knowledge of-and access to-food sources and community resources for a healthy pregnancy lifestyle.

ACOG and WIC: an innovative partnership

Over the past three years, ACOG worked together with the National WIC Association (NWA) and 32 local WIC agencies on the Community Partnership for Healthy Mothers and Children (CPHMC)*. CPHMC aims to reduce and prevent chronic disease by improving access to healthy food environments and disease prevention and management services, like WIC. The project garnered many community successes. Learn more about CPHMC and its impact: www.acog.org/wic

Now, it's your turn to help sustain the successful momentumand apply the lessons learned to your community!

WHAT YOU CAN DO

Learn more about WIC.

 Gain a better understanding of this credible-and incredible-program!

WIC helps your patients:

- · Get prenatal care earlier
- Deliver healthier babies
- · Receive support for breastfeeding
- · Transform lifetime eating habits and implement healthy lifestyles

WIC also provides screening and referrals for healthcare and social services such as smoking cessation, substance abuse counseling, immunizations.

See for yourself-read more about WIC. www.signupwic.com

Refer your patients to WIC.

 Encourage your patients to achieve better health outcomes for themselves and their families in communities where they live, work and play. Refer your patients to WIC with these referral slips:

Healthy Pregnancy and Lifestyle Resources Breastfeeding suppor Child's healthy growth services to help you Healthy food and nutrition education Food shopping and preparation tipe

Connect with WIC.

Encourage your patients to learn more about WIC.

Patients can call 1-844-599-9714

or visit

www.signupwic.com

to learn more





*Made possible with funding from the National WIC Association and the Centers for Disease Control and Prevention (CDC) and does not necessarily represent the views of CDC.







(/breastfeeding-benefits)

(/breastfeeding-benefits)Breastfeeding Benefits (/breastfeeding-benefits)

U.S. DEPARTMENT OF AGRICULTURE

WIC **BREASTFEEDING SUPPORT**



(/breastfeeding-basics)Breastfeeding Basics (/breastfeeding-basics)

Learn how milk is made, when to nurse, how long babies nurse, and more.

7/21/2019



Breastfeeding Benefits | WIC Breastfeeding

(/talking-your-family-about-breastfeeding)

(/talking-your-family-about-breastfeeding)Talk to Your Family about Breastfeeding (/talking-your-familyabout-breastfeeding)

Talk about why you choose to breastfeed, and ask for your family's support.

Read More > (/talking-your-family-about-breastfeeding)



Policy Implications & Recommendations

Government support for BFHI hospitals is beneficial

- Set quality standards for maternity care and help hospitals achieve Baby-Friendly designation.
- Support hospitals' efforts to evaluate Baby-Friendly practices.
- Create requirements or incentives for hospitals to become BF or institute BF practices, including funding for the BF designation process.
- Create a model breastfeeding policy for hospitals to adopt.





Funded Project: "Breastfeeding Promotion in Women with a History of Opioid Abuse or Currently Receiving Medication-Assisted Treatment"

Develop educational programming through the WVBA for healthcare providers to help support this vulnerable population





Benefits of Breastmilk for the newborn that may be of specific significance to the NAS infant



- Reduction in SIDS
- Significant reduction in infections in childhood
- Improved maternal-child bonding
- Decreased risk of neglect
- Modified NAS symptoms/ decrease length of hospital stay

Breastfeeding and Substance Abuse making it better for moms & babies



Interventions known to decrease resource utilization include **rooming-in, low stimuli environments; gentle handling, swaddling, holding, on demand feeding, breastfeeding** (for mothers maintained on methadone or buprenorphine) and standardized weaning protocols" Pediatrics; May 18, 2016; 10.1542/peds.2015-2929

"The creation of consistent guidelines for breastfeeding in this population can lead to improved provider harmony, positive partnerships with mothers in recovery from opioid use disorders, and improved NAS outcomes." Revision of Breastfeeding Guidelines in the Setting of Maternal Opioid Use Disorder: One Institution's Experience. Journal of Human Lactation 2016, Vol. 32(2) 382–387

Breastfeeding Reduces the Need for Withdrawal Treatment in Opioid-Exposed Infants



"Breastfeeding is associated with a shorter hospital stay despite other confounding factors" Opioid dependency in pregnancy and length of stay for neonatal abstinence syndrome. Pritham UA, Paul JA, Hayes MJ. J Obstet Gynecol Neonatal Nurs. 2012 Mar; 41(2):180-190.

"Breastfed methadone-exposed newborns had a lower incidence of NAS and a shorter duration of pharmacological therapy as compared to non-breastfed methadone-exposed newborns" Welle-Strand GK, Skurtveit S, Jones HE, Waal H, Bakstad B, Bjarkø L, Ravndal E Drug Alcohol Depend. 2013 Jan 1; 127(1-3):200-6.

"There was an inverse relationship between breastfeeding and length of stay that remained significant after adjusting for birth year, hospital, neonatal intensive care admission, mode of delivery, birth weight, infant comorbidities, maternal age, race, and marital status"

The Association Between Breastfeeding and Length of Hospital Stay Among Infants Diagnosed with Neonatal Abstinence Syndrome: A Population-Based Study of In-Hospital Births. Short VL, Gannon M, Abatemarco DJ Breastfeed Med. 2016 Sep; 11():343-9.

Incorporating Breastfeeding into the Care of The Substance Exposed Infant

NO



Urine toxicology **POSITIVE** on admission or less than 4 weeks prior to delivery

YES

Are **BOTH** the following criteria met?

- 1. In a treatment program
- 2. Adequate prenatal care (5 or more visits, must include 2 visits within the last 2 months)

YES

ine of delivery but mothers who wish to establish a milk supply will be encouraged to pump with Lactation Support provided. Case Manager will notify team when reconsideration criteria are met.

*RECONSIDERATION CRITERIA

Mothers who wish to be reconsidered must document 3 consecutive negative urine toxicology screens at least 1 week apart.

NO

INELIGIBLE to provide breast milk to infant

Or more prior to delivery

YES

Are **BOTH** the following criteria met?

- 1. In a treatment program
- 2. Adequate prenatal care

(5 or more visits, must include 2 visits within last 2 months

YES

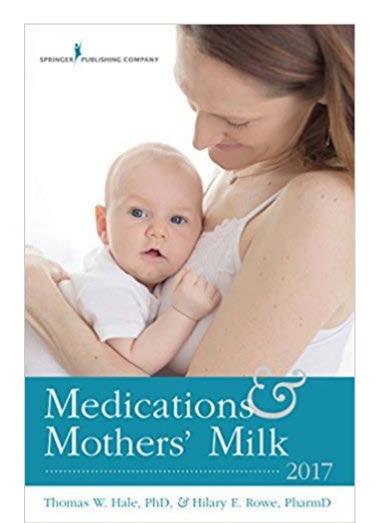
ELIGIBLE to provide breast milk to infant

Great References and Tools

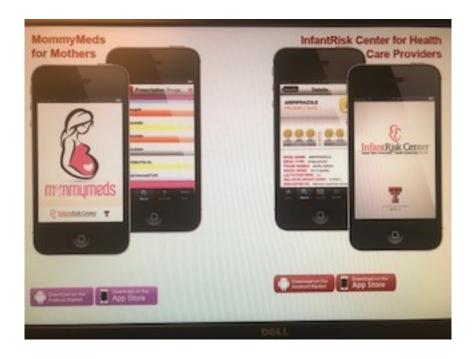


Medication and Breastfeeding Safety

Medications & Mothers Milk



• The Infant Risk Center



https://www.halesmeds.com

LactMed

may be exposed. It includes information on the levels

the possible adverse effects in the nursing infant.

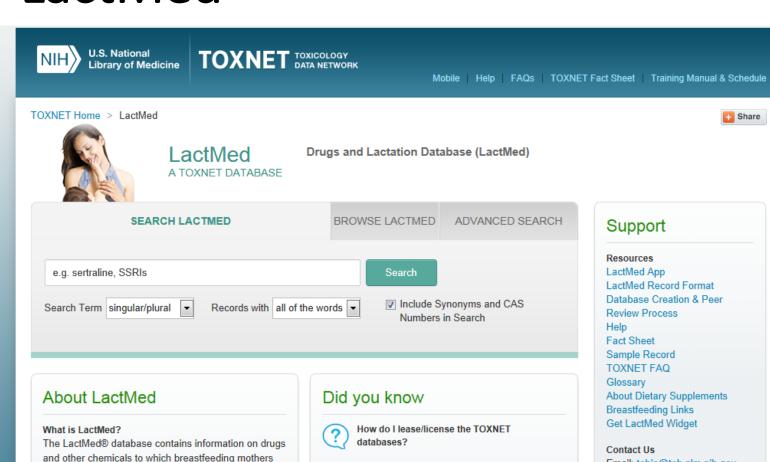
of such substances in breast milk and infant blood, and

Suggested therapeutic alternatives to those drugs are

provided, where appropriate. All data are derived from

the scientific literature and fully referenced. A peer review panel reviews the data to assure scientific

validity and currency.



HSDB, and TOXLINE.

More FAQs

National Library of Medicine.

The following TOXNET databases are available for

lease: ChemIDplus, DIRLINE, CCRIS, GENE-TOX,

For further information visit Leasing Data from the



TOXNET

Toxicology Data Network



TOXNET Mobile Access

SIS Home

▶ Env. Health & Toxicology ▶ TOXNET ▶ LactMed

LactMed App

Share

Email: tehip@teh.nlm.nih.gov

Telephone: (301) 496-1131

Fax: (301) 480-3537

Environmental

Need to know more about drugs/supplements and breastfeeding? LactMed can help. Find information about maternal and infant drug levels, possible effects on lactation and on breastfed infants, and alternative drugs to consider.



LactMed App for iPhone/iPod Touch

- . Free App at the Apple App Store
- . System requirements: iPhone OS 3.0 or higher



LactMed App for Android Devices

- Free App at the Android Market
- . System requirements: Android 2.1 or higher



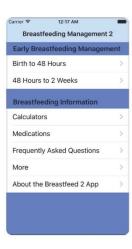
This app is only available on the App Store for iOS devices.

App Store Preview

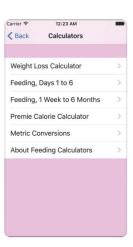


Kobert Jen \$1.99

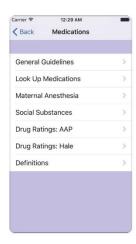
Breastfeeding Management App





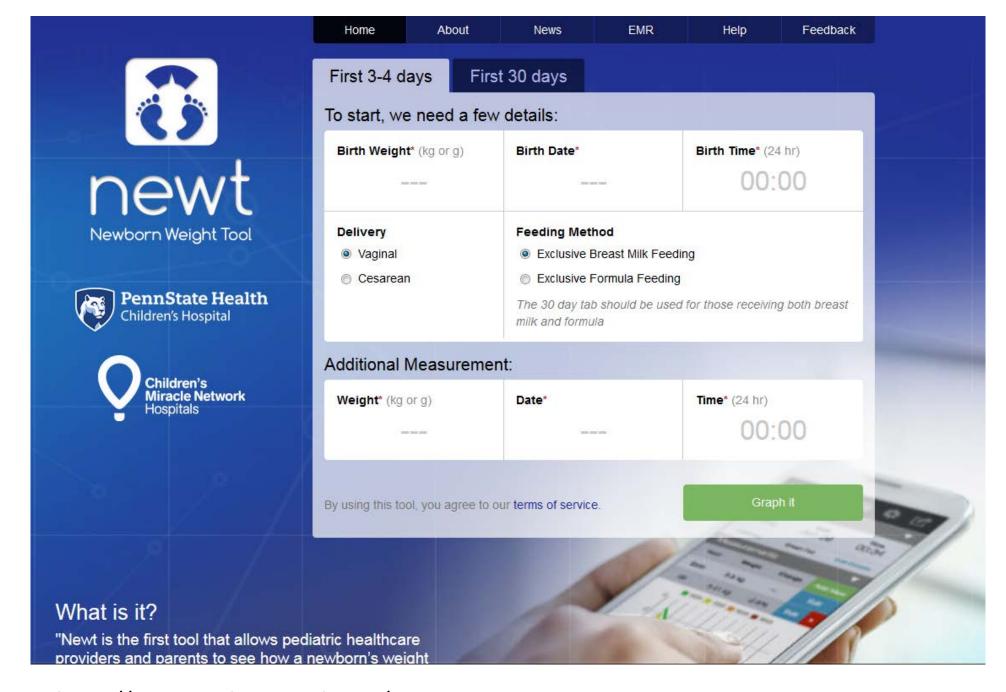




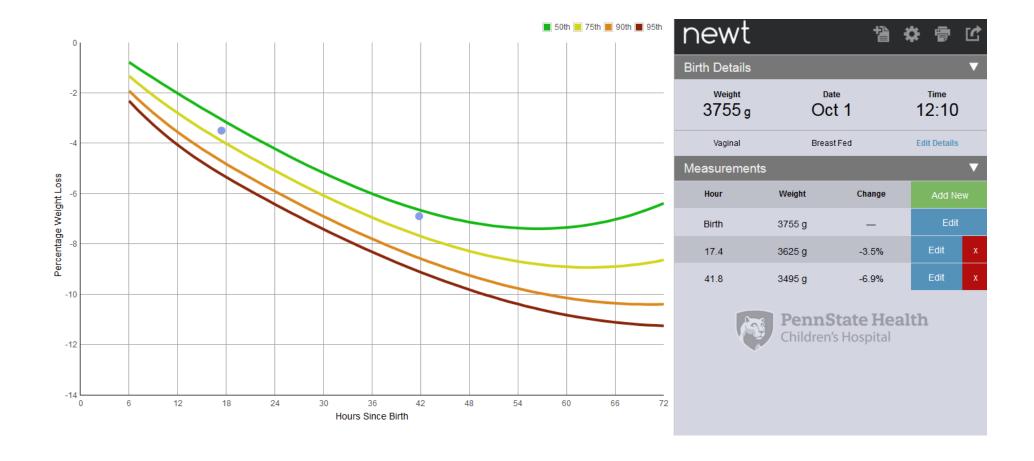


Description

An evidence-based application developed by the renowned Massachusetts Breastfeeding Coalition to help the clinician identify triage, and manage common breastfeeding problems in the first weeks of life. The Breastfeed App, formerly available for free, now includes 5 calculators, including two feeding calculators and a weight loss calculator. It also includes information on medications as well as a link to LactMed, the comprehensive online resource from the National Library of Medicine.



https://www.newbornweight.org/





Under New "ownership"



Working together for healthier mothers and babies





www.wvbreastfeeding.org

Facebook page@WVBFA

Our Mission:

To improve the health of West Virginians by working collaboratively to protect, promote, and educate our community about breastfeeding.

Our Vision:

We envision breastfeeding as the normal and preferred method of feeding babies and children.

Our Goals:

- Improve the health and well-being, primarily, of our state's infant and maternal population by increasing the initiation and duration rates of breastfeeding, resulting in residual and lasting health benefits.
- Promote and protect a public environment that is supportive and accepting of breastfeeding.
- Promote communication and collaboration among individuals, professionals and organizations working to support and educate the community about breastfeeding.



WVBA Steering Committee

- Director: Molly McMillion, RN, BSN, IBCLC, LCCE, CPST WV Perinatal Partnership & Greenbrier Valley Medical Center
- Christine Compton, MPH, CLS, Government Relations Director, American Heart Association Great Rivers Affiliate
- Charlita Atha, RN, IBCLC Stonewall Jackson Memorial
- Anne Banfield, MD, FACOG --OBGYN Davis Medical Center, Elkins
- Denise Ferris, RDN, LD, DrPH, Director, Office of Nutrition Services (WV WIC), WVDHHR
- Tammy Foley, RN, BSN, IBCLC, Lactation Consultant WVU Children's Hospital
- Denise Smith Director Perinatal Programs, Office of Maternal Child and Family Health, WVDHHR
- Emma Walters, MS, RDN, LD Nutrition Services Coordinator, Office of Nutrition Services (WV WIC)
- ❖ Jan Wilkes, LD, IBCLC -WV WIC



Register Now!!



Fall 2019 Lactation Counselor Training

- November 4-8, Canaan Valley Resort, Davis WV
- Check WVBA website <u>www.wvbreastfeeding.org</u> and follow us on Facebook @wvbfa for more details!
- Registration will close SOON! Only 50 slots available! The goal of the sponsors for this training is to increase the number of certified lactation support professionals in the state. Therefore, preference will be given to in-state individuals who work with nursing women and infants, particularly in underserved areas.
- This offering made possible with support from the WV Bureau for Public Health/Office of Maternal Child and Family Health, WV WIC and WV Division of Nutrition Physical Activity and Obesity









Thank you!!









Questions??

