

THOUGHTS ON EXTENDED BREASTFEEDING AND ITS SUPPORT

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No Disclosures

Support the WHO Code
(International Code of Marketing
of Breast-Milk Substitutes

Work for the protection,
promotion, and support of
breastfeeding





1,200 x 630

Topics

- **Updated** breastfeeding/breastmilk **recommendations** and why including: how breastmilk is an ever-evolving and amazing elixir
- Importance of **birth** and **breastfeeding** education from pregnancy, throughout breastfeeding, and in an ongoing basis for all - leading to support for the breastfeeding dyad and family
- A brief look at breastfeeding **developmental behavior** including: The 4th Trimester, the awakening, toddler, 2 years and beyond
- Safe Bedsharing and Breastfeeding -**IMPORTANT**
- Breastfeeding and **Dental** Health

Infant Feeding Recommendations

American Academy of Pediatrics & World Health Organization

Exclusive Breast Milk for the 1st six months

Predominant Breast Milk 1st year

Introduction of Complementary Foods at 6 months

Breastfeeding for 2 years and beyond

HUMAN MILK COMPOSITION

- 88% Water
- 1000 Different Proteins
- 200 Complex Oligosaccharides
- Millions live cells (stem, white blood cells)
- Hundreds different enzymes, hormones, microRNAs
- Many components not yet identified or whose function is not yet understood
- It is the only food that is 99% Bioavailable

Breastmilk has EVERYTHING your baby needs

Breastmilk is the most complex mammalian milk.

Breastmilk is unique to each mother and it cannot be duplicated.

Breastmilk is a living substance that changes during a feed, between feeds and from day to day.

Breastmilk helps seal the newborn's gut and protects babies from pathogens.

Breastmilk is always the right temperature.

The smell and taste of **Breastmilk** changes depending on mom's diet, exposing babies to a variety of flavors.

Breastfeeding Preparation

» Lift shirt.

Formula Preparation

- » Wash hands and disinfect counters before preparing formula.
- » Powdered formula is not sterile, in order to reduce the risk of Cronobacter infection, a potentially deadly infection, parents should use water that is 158° to mix the powder, then reduce the formula's temperature prior to feeding.
- » Sanitize all nipples, bottles and caps prior to initial use, and then wash in hot, soapy water thereafter.
- » Never wash the feeding parts with other dishes.
- » Discard any leftover formula after a feeding.



Providing education for professionals, advocates and families: lactationuniversity.com

Formula Made in a factory

Minerals

Vitamins

Carbohydrates

Fats

Proteins

Water

Breastmilk Made by Mom

HAMLET Cells

Stem Cells

Antiparasitic Factors

Nucleotides

Probiotics

Oligosaccharides

Antiproteases

Antiviral Factors

Antibodies

Hormones

Growth Factors

Enzymes

Minerals

Vitamins

Carbohydrates

Fats

Proteins

Water

Myth –
formula is as good
or
better than Breastmilk

Breast milk evolves as the baby

Colostrum



DAYS <1-4

- Defined as the first stage of the breast milk.
- Yellowish/creamy color.
- High concentration of fat-soluble vitamins, minerals, proteins and immunoglobulins.

Transitional milk



DAYS 4-20

- High concentration of high levels of fat, lactose, and water-soluble vitamins.
- Its content of calories is higher compared with colostrum.

Mature milk



DAYS 20+

- Is the final stage of the Breast Milk.
- It is composed by 90% of water (necessary for the hydration of the baby) and 10% of carbohydrates, proteins, and fats, which are necessary for the growth and development of the infant.



Babies are hard wired to breastfeed from birth

Breast milk changes from morning to night





Morning milk – >
larger volume,
lower fat content,
contains cortisol



Night milk – lower volume, higher fat content, contains melatonin

Babies take a 1/3 of their milk supply and calories at night

Busy toddlers may take 50% of their calories at night

Myth -> a good baby sleeps thru the night

The 4th Trimester – Not Yet Born- Do 3 things

- Eat
- Pee and poop
- Sleep
- May Breastfeed 10,12,14x/day
- The New Womb is mother's chest
- The new umbilical cords are mother's breasts
- Babywearing essential and helps stabilize infant and form the close mother/baby dyad



Newborn baby
350g

1-year-old
1 kg

Infant & toddler
development

4th Trimester

From 40 weeks of gestation till 3 months

Most rapid growth, weight gain, length gain & brain development

Mother baby dyad

Baby's Age	Average Weight Gain
0-4 months	5.5-> 8.5 ounces/week
4-6 months	3.25->4.5 ounces/week
6-12 months	1.75->2.75 ounces/week
World Health Organization child growth standards	





Safe co-sleeping or breastsleeping



3-6 months

Improved vision,
increased awareness,
invisible umbilical cord

More efficient breast feeding



6 months - > 1st year (Busy Baby)

Sit up, roll over, crawl, separation anxiety

Increasing snacking at the breast and touching, nipple twisting, teething

Longer nursing to facilitate sleep or feeling poorly

Baby has learned how to make the breast work for them

Baby becomes possessive of the breast

Milk continues to change

Protein content, immune components rise

Prepares the baby for weight bearing – sit up and crawl

New behavior that might cause embarrassment – more touching of the breast, lifting clothing, nipple twisting, helping themselves to the breast, singing at the breast or expression of delight
demonstrating that they see the breast as belonging to them

Myth – fussy baby implies you have spoiled this baby

Breastfeeding continues to be a valuable source of nutrition and disease protection for as long as breastfeeding continues.

Myth – breastmilk has no value after 6 months

In the second year (12-23 months),
448 mL of breastmilk provides:

29% of energy requirements

43% of protein requirements

36% of calcium requirements

75% of vitamin A requirements

76% of folate requirements

94% of vitamin B12 requirements

60% of vitamin C requirements



Breast changes

1st week postpartum breast is full and heavy

1 month – breast becomes softer

3-6 months – softer and smaller

Myth – smaller size implies less milk

Mother returns to work/school

Myth –must stop breastfeeding when mother returns to work

Paid leave policy in New Jersey

Work place protections for pumping

Baby is waiting for mother to return

Co-sleeping and breastfeeding is important here

Maintain milk production and breastfeeding while working

Prioritize regular milk removal is necessary to maintain the milk supply

Engorgement or painful breast sends a message to decrease milk production

Longer than 6 hours can have a negative impact on milk production



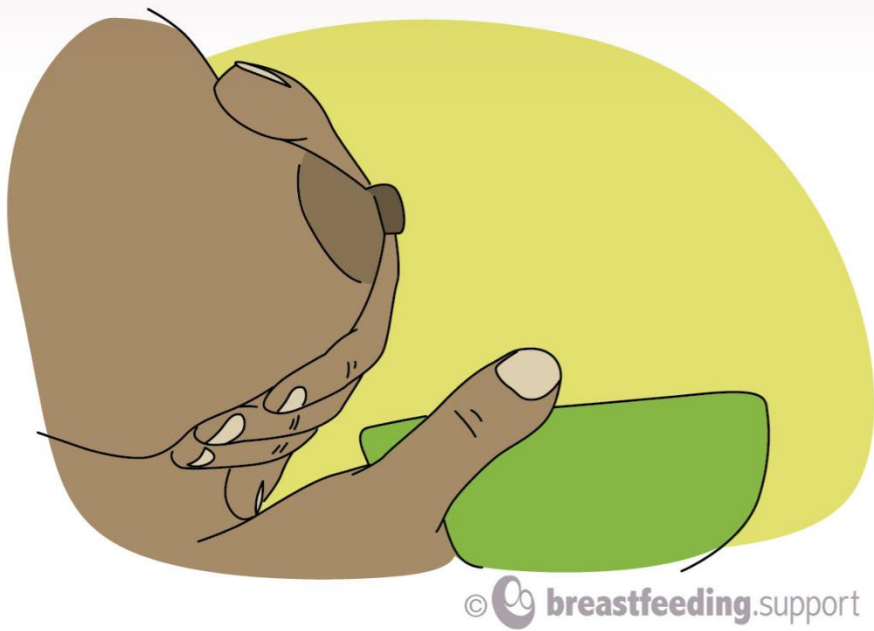
Breast Pumps

Warning : Tremendous marketing on social media promoting
Wearable Pumps

More education is needed during pregnancy on breast pumps, ones to avoid,
how to order from insurance

*If no insurance and they are on **Wic** a pump can be provided

Important to do pump maintenance changing valves etc



^ Step 1: The fingers and thumb are placed around the breast behind the nipple



Hand expression

Advantages – no electricity or power
Just your hand and a container

Some studies suggest higher fat content

Myth – no matter how I try – it doesn't work

Myth - it is taboo to touch your breast

Self care

Adequate fluid

Nutritious foods

Regular meals

Assistance at home

2 years to restore nutritional stores

BREASTFEEDING AND DENTAL HEALTH

- Some study(s) have made a connection between lactose and dental caries
→ that breastfeeding at night will harm teeth
- The major original source of assault was bottle being given to go to sleep or while sleeping.
Breastfeeding action differs from sucking on bottle
- The studies were not well done or comprehensive and a lack of education/ongoing education has some dentists saying to stop nighttime feeding
- Did not look at complementary or weaning foods/liquids given i.e.
(snack food, juice, crackers, sweets, soft foods)
- Did not look at hygiene practices being taught to baby/toddler
- Did not look at parents oral health































