Breastfeeding or Formula Feeding: A Mother’s Choice

Deciding how to feed an infant is a decision that should be made by a mother and her family. The benefits of exclusively breastfeeding an infant for the first six months of life are well established (World Health Organization [WHO], 2017); however, it may not always be feasible or a preferred option. For mothers who cannot or choose not to breastfeed, formula feeding is a great option that can support a healthy and thriving infant. This fact sheet will address common questions about breastfeeding and formula feeding to help mothers make an informed decision on how to feed their infant, whether it is by breastfeeding, formula feeding, or a combination of the two.

Breastfeeding

Human breast milk is the gold standard of infant nutrition. It provides nearly all of the essential nutrients and bioactive substances necessary for optimal development and it constantly changes based on the infant’s nutritional needs. Breastfeeding also has many unique benefits for both the mother and baby, described in Table 1. These benefits encompass infant nutritional needs, mother-baby bonding, and maternal health.

Beginning Breastfeeding

Breastfeeding should be initiated within 24 hours of birth in order to stimulate the breasts and increase milk production. Initiating breastfeeding can be challenging for some mothers, and a variety of factors influence whether or not a mother will continue breastfeeding past the first few weeks. Prior lactation education, support from family and hospital staff, concern for the newborn's health, and cultural perceptions of breastfeeding are a few of the main factors that impact a mother's decision to breastfeed. The most influential factor on this choice is the support received from partners; however, physicians, lactation consultants, and other health professionals can also make a significant impact on a woman's desire to continue breastfeeding. In general, mothers and babies need continued support and encouragement in order to succeed in breastfeeding

Table 1. Benefits of Breastfeeding

Benefits for Baby	Benefits for Mother
Breast milk is composed of many nutrients including water, fats, carbohydrates, proteins, vitamins, and minerals.	Breastfeeding releases oxytocin, a hormone that helps mothers and babies bond. It also produces nurturing feelings in the mother.
Nutrient composition of breast milk will change to reflect infant age and needs.	Breastfeeding for a year or longer may reduce the risk of breast cancer and ovarian cancers in women.
Breast milk has been found to affect gastrointestinal health positively because it contains digestive enzymes.	Breastfeeding reduces the risk of type 2 diabetes and cardiovascular disease.
Special carbohydrates found in breast milk called oligosaccharides help develop healthy gut bacteria in infants.	Breastfeeding lowers the risk of postpartum depression due to the antidepressant effects of both prolactin and oxytocin, hormones produced during lactation.
The fats found in breast milk are important for brain development, immune function, and vision development	Breastfeeding mothers experience less postpartum bleeding and quicker healing of the uterus.
Antibodies passed through milk help develop infant immune systems and protect against infections during the first year of life.	Breastfeeding facilitates faster return to prepregnancy weight.
Breastfeeding reduces the risk of: • Diarrhea in first year of life • Allergies and asthma • Type 2 diabetes • Obesity • Necrotizing enterocolitis • Gastrointestinal infections • Ear infections	Delays return of menses cycle.

Breastfeeding Challenges

There are several obstacles that may arise when breastfeeding which may also prevent mothers from continuing breastfeeding. Breastfeeding requires that mothers and babies stay in close proximity, which may be difficult for working mothers, even with the aid of a pump. Lack of support in the workplace or social perceptions of public breastfeeding may also make the task more difficult.

Breastfeeding can be physically challenging as well. Many mothers experience sore nipples, plugged ducts, mastitis or other infections, and breast engorgement. These painful issues can cause women to stop breastfeeding. Most complications can be prevented by breastfeeding on demand, using proper breastfeeding techniques, wearing a

supportive bra, and completely emptying the breast of milk. More severe complications or infections that persist will require medical attention. It is important that a mother speak with her doctor or a lactation specialist if she experiences any uncomfortable symptoms.

Some mothers may also worry about producing enough milk. Only 5% of women have an insufficient milk supply; however, milk supply may dwindle if mothers are supplementing with formula or not breastfeeding on demand. Understanding the potential issues and how to overcome obstacles to breastfeeding is crucial in helping mothers continue to breastfeed.

Formula Feeding: Benefits and Drawbacks

Infant formulas are specifically designed to imitate human breast milk composition and they are the only safe alternative to breast milk for infants. Many families enjoy the convenience of formula since any caregiver can help feed the baby, as opposed to just the mother. This can help in situations where the mother is resting, is unable to feed the baby, or needs to return to work. It also provides an opportunity for other family members to bond with the baby during feedings. Many parents also feel that formula feeding helps their babies sleep through the night at an earlier age, meaning fewer nighttime feedings and more sleep for the mother.

A major drawback to formula feeding is the cost. Formulas cost an average of $1,500 per year. Mothers should also keep in mind that formulas cannot convey all the same health benefits as breast milk, as the non-nutritive substances such as antibodies and digestive enzymes cannot be replicated in formula. If a mother decides to use formula to feed her infant, healthcare providers should support her in her decision by helping her determine which formula provides the best option for her infant.

Choosing a Formula

Standard formulas are meant for babies who have no abnormal health or dietary problems. They are typically based on modified cows' milk or soy milk, which are then fortified with vitamins, minerals such as iron, and essential fatty acids. Formulas are typically produced in three forms: powder, concentrated liquid, and ready-todrink formulas. Powdered formula is cheapest but requires the most preparation, while ready-to-drink formulas are most expensive but require no preparation.

There are a variety of alternative infant formulas available on the market for babies with specific health conditions, as standard formula may not be suitable for all babies. Table 2 describes the types of formulas and their different uses. These formulas vary in nutritional composition, caloric value, taste, digestion, and cost. Talk with your pediatrician before switching your infant's formula.

Table 2. Types of Formula and Their Uses

Type of Formula	Composition and Use
Standard or cow's milkbased formula	• Basis for most formulas • Diluted so the protein ratio is similar to human breast milk composition • Modified to be safe for infants • Contains added vegetable oils, vitamins, minerals, and probiotics
Soy-based formula	• Good for infants with galactosemia, congenital lactose deficiency, colic, or milk allergies • High in protein • Contains added vegetable oils to provide nutrients such as vitamins and minerals • Not recommended for premature infants
Protein hydrolysates or hypoallergenic formula	• Have highly hydrolyzed, or broken-down, proteins for infants that have protein allergies or diseases of the gut, stomach, or liver
Amino acid formula	• For infants with severe cow milk allergies or intolerance to soy formulas • Protein is in the form of free amino acids, making it easy to digest • Very expensive and not widely available

What to Avoid

Regular cow or goat milks are not safe alternatives to breast milk or formula during the first year of life. Both goat milk and cow milk do not provide enough vitamin E, iron, or essential fatty acids for the baby and can overload the baby's body with potassium, sodium, chloride, and protein. The high protein levels in both milks can cause babies to urinate more which can lead to severe dehydration.

Likewise, alternative milks such as coconut, almond, or soy do not have the adequate nutrients an infant needs for healthy growth and development. Once a baby begins their first solid foods, it is safe to feed them foods that contain milk and alternative milks.

A Mother's Choice

Breastfeeding is the gold standard for infant nutrition and best for most mothers and babies, but there are times when bottle-feeding is the best choice for some mothers and babies. Many mothers may perceive that how they choose to feed their babies is a moral decision, with breastfeeding perceived as "good" and formula viewed as "bad" because of current stigmas and social norms. It is essential for mothers to feel supported when deciding on an infant feeding strategy that balances personal, financial, and family factors. Reducing stigmas associated with either choice is vital for helping mothers feel at peace with their decision. Most importantly, mothers should know that either breastfeeding and formula feeding can provide babies with all the essential nutrients they need for adequate growth and development.

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