

# THE SHORT-TERM AND LONG-TERM HEALTH EFFECTS OF BREASTMILK VERSUS FORMULA FOR INFANTS

## Purpose

The purpose of this review of literature was to explore the short-term and long-term health effects of breastmilk versus formula.

## Background

Proper nutrition in the early months and years of a child's life is critical to his or her development. Both breast milk and formula provide essential calories, vitamins, minerals, and other nutrients to infants for survival. There are known benefits that influence a parents decision:

Breastmilk

- Convenience
- Free
- Bonding experience

Formula

- Ability to be fortified
- Less emotionally stressful for the mother

## Relevance

Many articles are focused on the benefits of breastfeeding as opposed to formula, but the choice between the milk itself, from the breast, versus formula is less discussed. Research for this review was conducted to determine if a correlation between choosing breastmilk or formula for an infant's nutrition in early life, as well as short and long-term health effects, could be made. The goal in researching was to find the most specific, credible, and informative articles on the short-term and long-term effects of the two infant nutrition methods that could be used to make a hypothesis.

## Methods

- The Journal of the Academy of Nutrition and Dietetics and the Tennessee Technological University Library Database Eagle Search were searched to find the research literature in this review.
- Phrases such as “infant nutrition,” “formula effects,” “breastmilk effects,” and “formula vs. breastmilk” were used to search these data bases.
- The responses were numerous, but the search was narrowed down by using exclusion and inclusion criteria.

### Inclusion Factors

peer reviewed

contained an abstract

published within the last 10 years

provided information on both positive and negative health outcomes of formula or breastmilk

### Exclusion Factors

Not peer reviewed

Lacking abstract

Discussed effects of breastfeeding, rather than the milk itself

Not from reliable sources

- 6 articles were chosen.
- These articles that met the criteria were analyzed and placed in categories supporting inconclusive, formula, breastmilk as the better choice for infant nutrition.

## Discussion

Inconclusive	Formula	Breastmilk
3	1	3

## Results

Although 3/6 articles concluded inconclusive results, it can be concluded that breast milk is the most beneficial method of infant nutrition in regard to short- and long-term health. The articles used in this study confirm relationships between breast milk and lowered risk of disease such as asthma and SIDS, as well as bioactive factors that aid in physical development

## Limitations

Limited research that has been conducted on the long-term effects of infant nutrition due to the time restrictions associated with following a target population from birth to adulthood. It is also difficult to determine correlation between health effects and infant nutrition methods due to the possible outside factors that influence the participants. Inconclusive results indicate a need for further research.

## Implications

This research can be utilized by parents when making a nutritional choice for their child or researchers. Further research can be done to minimize limitations.