

Fact Sheets for Families

Infant Feeding and Soy Formula

Soy formula is developed with soy protein and without lactose as a substitute for breastfeeding and cows' milk formula. Despite the fact that soy formula has limited and specific indications, it is used to feed an estimated 25% of infants in United States.

Background

Soy formula has been used in infant feeding for almost 100 years. It was first recommended for the treatment of summer diarrhea. In the 1970s, use of soy-based formulas became common especially for infants who could not tolerate milk protein or lactose. Lactose, also referred to as milk sugar, is the natural sugar in milk. When children and adults cannot digest lactose, they may experience diarrhea, vomiting, gas and cramps.

Human Milk for Human Infants

Human milk is the ideal source of nutrition for infants. As an exclusive food, it is the best food that meets the entire nutritional needs of infants from birth until 6 months of age. Breastfeeding protects infants from many acute and chronic diseases and has advantages for the mother, as well. There are very few medical reasons why a mother should not breastfeed. If infants receive formula during the day when they attend child care, it is also beneficial to give the infant their mother's expressed and stored breast milk. Iron-fortified infant formula is the best source of nutrition if human milk is not available.

The American Academy of Pediatrics' Policy on Soy Formula

The American Academy of Pediatrics (AAP) encourages and supports breastfeeding. The AAP has recently updated its review of soy protein-based formulas. Published in the May 2008 issue of Pediatrics, the updated review addresses the advantages and disadvantages

of phytoestrogens in soy formulas. Phytoestrogens, sometimes called "dietary estrogens", are natural compounds, similar to human hormones, and may cause hormonal imbalances.

Summary of Recommendations for Use in Infant Feeding

1. Although soy formulas are popular and may be used for full-term infants, there are few specific circumstances in which they are recommended to be used in place of cow milk-based formula.
2. For infants with documented cow milk protein allergy, extensively hydrolyzed protein formula or synthetic amino acids should be considered, because 10% to 14% of these infants will also have a soy protein allergy. Hydrolyzed protein is protein that has been broken down into its component amino acids.
3. Most previously well infants with acute gastroenteritis (infection or irritation of the digestive tract) can be managed after rehydration with continued use of human milk or cow milk-based formulas. Soy formulas may be indicated if the diarrhea causes temporary lactose intolerance.
4. Soy formula has no advantage over cow milk formula as a supplement for the breastfed infant, unless the infant has a medical condition that requires them to use soy-based formula.
5. Soy formulas were not developed for or recommended for premature infants.
6. The routine use of soy formula in the prevention or management of colic in infants--a condition marked by recurrent episodes of prolonged and uncontrollable crying and irritability in an otherwise healthy infant -- has not been shown to be effective in research studies.

Resources and References

Pediatrics 2008; 121; 1062-1068, Use of Soy Protein-Based Formulas in Infant Feeding.

Caring for Our Children: National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care. Second Edition, 2002.



California Childcare Health Program
UCSF School of Nursing
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