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EDITORIAL

# Is there an "acceptable" percentage of using infant formula during hospital stays?☆

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The set of actions and policies for breastfeeding promotion, protection, and support made Brazil one of the world's references in this area.[1] It led to a significant increase in breastfeeding rates from 1980 to 2000.[2] The "Brazilian National Survey on Child Nutrition" (ENANI - 2019) was the national survey that collected the most recent data on breastfeeding among children under five years of age, carried out between February 2019 and March 2029. It revealed a prevalence of exclusive breastfeeding among children under six months of 45.8% and continued breastfeeding in the second year of life (20 to 23 months) of 35.5%.[3]

Despite the entire framework that protects breastfeeding and encourages its practice in Brazil, and the fact that 96.2% of mothers start breastfeeding their babies, and 62.4% breastfed them in the first hour of life,[3] one of the biggest challenges for improving breastfeeding indicators in Brazil and the world is the offering of foods other than breast milk in the first days of life, the so-called "prelacteal foods."[4,5] A study that evaluated 76 developing countries found that about one in three children worldwide (30.1%) unnecessarily receive prelacteal feeding.[5]

The nationwide survey named "Nascer no Brasil" aimed to assess prenatal care, childbirth, birth, and puerperium in Brazilian maternity hospitals, identifying the prevalence of prematurity, and the incidence of clinical complications related to labor and birth, both in mothers and newborns.[6] Data collection was conducted in Brazilian maternity hospitals with more than 500 deliveries per year between 2011 and 2012. The overall academic production resulting from this important study has contributed to understanding neonatal mortality patterns,[7] cesarean delivery,[8] and breastfeeding,[9] among other outcomes, promoting a qualified debate on maternal and child health in Brazil.

The study by Silva and collaborators (2022), entitled "Factors associated with infant formula supplementation in Brazilian hospitals: a cross-sectional study" and presented in this issue of *Jornal de Pediatria*, used data from "Nascer no Brasil" to show that around one in five newborns received infant formulas while still in maternity hospitals,[10] a period during which these babies should be receiving only breast milk.[4]

The study from Silva et al. reveals that children born by cesarean section in private hospitals and those whose mothers with higher educational levels belonged to the wealthiest families were the most vulnerable to exposure to infant formulas in the early days of life.[10] The results confirm the literature on the supply of foods other than breast milk during the first days of life in developing countries, which shows that mothers from higher socioeconomic levels, whose deliveries took place in a private institution[5] and who underwent cesarean delivery[11] were at greater risk of offering milk-based prelacteal foods.

The frequency of formula used in the first days of life of the study by Silva et al.[10] (21.2%) was similar to that observed in the 2006 Brazilian National Demographic Survey (PNDS, 20.5%)[12] and close to the frequency of "mixed" breastfeeding (breastfeeding concomitant with the use of

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infant formulas) of the ENANI - 2019 (19.8%),[3] indicating relative stability in the prevalence of this practice in Brazil over the last decades. The use of infant formulas in a study that evaluated data from 90 developing countries was inversely associated with continued breastfeeding in the first year of life and directly associated with higher levels of country wealth and family.[13]

All those pieces of evidence raise a reasonable concern. As family income increases, the mothers and their families tend to use infant formulas, considered "sophisticated and modern," to the detriment of breastfeeding, often described as "primitive and outdated".[1,14] The offer of infant formulas without medical justification during the hospital stay can aggravate this pernicious scenario. The question then remains: what is the reason for such a high prevalence of the use of infant formulas in Brazilian hospitals?

It is difficult to precisely establish what population percentages would be acceptable for using infant formulas due to justified medical prescription since maternity hospitals have different distributions of parturients according to the obstetric risk.[15] The United States, through the "Healthy People 2020 goals", set as a target the use of infant formula in the first two days of life at 14.2%,[16] but in a country like Brazil, where initiation of breastfeeding is virtually universal, a stricter target could be adopted.

The Baby-Friendly Hospital Initiative (BFHI), launched by WHO and UNICEF in 1992, includes ten steps to successful breastfeeding. The sixth step recommends not prescribing or using infant formulas, except in case of medical need.[16] However, Brazil had implemented the BFHI in only 326 hospitals until 2015. Of these, 113 underwent external evaluation by the Ministry of Health, and only 74% minimally complied with the sixth step.[16] This evidence shows that even with a clear guideline recommending the use of infant formulas only for justified medical reasons, the excess in the supply of this food persists.

The international code for breastmilk substitutes, known as the "International Code," aims to regulate the marketing of infant formulas and follow-on milk. However, despite the global scope of the Code, a recent systematic review has highlighted the abusive marketing of infant formula and infant foods in several countries around the world, revealing Code infractions between health professionals, health systems, public spaces, commercial establishments, media, and through direct contact between the industry and lactating women.[17]

The hospital environment is especially vulnerable to abusive marketing, as companies producing foods covered by the International Code can co-opt health professionals to prescribe their products. Among 153 studies that evaluated violations of the International Code, health professionals and associations of health professionals were identified as the second most frequent target of abusive marketing, right behind mothers, comprising 70.6% of all studies published until 2021 (n = 108).[18] In Brazil, the Multicentric Study for Monitoring the Brazilian Code (Multi-NBCAL),[19] conducted in seven Brazilian cities, found that 54.3% of pediatricians and nutritionists who participated in scientific conferences and events in the last two years received support or incentive from the infant formula industry,[20] evidencing potential conflicts of interest in the prescription of infant formulas.

Companies that manufacture infant formulas and infant foods have a market value exceeding 52 billion American Dollars and continually invest in marketing to influence mothers and their families to use their products to the detriment of breastfeeding. This marketing goes beyond the advertisements of the so-called traditional media (television, magazines, and newspapers), migrating to direct contact with mothers through digital marketing, which is not regulated by the current Code.[21]

In conclusion, there is no space to use infant formulas without medical need during the hospital stay. It is recommended to reinforce policies to encourage breastfeeding promotion since prenatal care, guaranteeing the mother the right to breastfeed her baby while still in the delivery room and providing a hospital environment free from the unnecessary use of infant formulas. The expansion of the Human Milk Banks network and the effective implementation of the BFHI are also essential, together with actions to promote and encourage the donation of human milk for HMB, which can reduce or even eliminate the unnecessary use of infant formulas in the hospital environment. This set of recommendations, associated with effective compliance with the International Code, will allow mothers to choose the best life headstart for their babies: exclusive breastfeeding.

## Conflicts of interest

The authors declare no conflicts of interest.

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