Milking it

How milk formula companies are putting profits before science
Introduction

The WHO estimates that optimal breastfeeding could save the lives of 820,000 children under the age of five every year. On an individual level, a person’s health later in life is crucially dependent on their nutrition during the first two years of their lives. Despite overwhelming evidence that breastfeeding provides many benefits (including optimal nutrition for infants), globally, only about 36% of babies under six months are exclusively breastfed.6

While some mothers choose not to breastfeed their children, many who want to breastfeed lack support from qualified lactation experts and supporters, as well as from their employers and communities. Moreover, the improper marketing activities of breastmilk substitute (BMS) manufacturers, which the International Baby Food Action Network (IBFAN) has reported for decades, continue to undermine breastfeeding.7

The market for milk formulas is highly profitable – currently worth 47 billion USD per year – and projected to increase by around 50% by 2020.4,5 Milk formula is the fastest-growing packaged food product.

The composition of infant milks is regulated at different levels. A global trading standard, first set by Codex Alimentarius in the 1980s, sets minimum requirements for levels of macronutrients (carbohydrates, protein, etc.) and micronutrients (minerals, vitamins, etc.) in infant and follow-on formulas. The types and levels of nutrients in infant milks are broadly similar across legislatures of major markets, but required and/or permissible ingredients and labelling restrictions may vary.

Key findings

In this report, we have reviewed over 400 products on sale in a variety of countries across the world from the top four infant formula manufacturers: Nestlé, Danone, Mead Johnson Nutrition and Abbott. Our study focused on the most popular types of cows’ milk-based powdered milk formula for infants under 12 months old in 14 markets: the US, the UK, Germany, France, Poland, Bulgaria, Spain, The Netherlands; mainland China and Hong Kong; Indonesia, Australia, New Zealand and South Africa. We excluded products marketed for children over 12 months old and very specialised products that deal with precise medical conditions. Here are the main findings of our investigation.

1. The nutritional composition of formula is guided by legislation or Codex compositional standards, but controls on its nutritional quality are largely dependent on industry self-regulation

- The composition of infant milks is regulated at different levels. A global trading standard, first set by Codex Alimentarius in the 1980s, sets minimum requirements for levels of macronutrients (carbohydrates, protein, etc.) and micronutrients (minerals, vitamins, etc.) in infant and follow-on formulas. The types and levels of nutrients in infant milks are broadly similar across legislatures of major markets, but required and/or permissible ingredients and labelling restrictions may vary.

- There is very little oversight of the nutritional composition and compliance with regulatory standards of infant milks sold around the world. Although infant milks are perceived as a highly controlled product, authorities are heavily reliant on industry self-regulation. Powdered infant milks are not sterile products, and the presence of pathogenic microorganisms (e.g. Enterobacter sakazukii and Salmonella spp.) has been regularly reported. Compliance with the nutritional compositional requirements or broader quality issues, however, are reported less frequently. This seems a significant oversight by government food safety regulators - particularly for infants under six months old, who rely solely on the formula for all their nutritional needs in a key phase of their development.

2. No clear scientific rationale underpinning product ranges

- Despite legal requirements on the nutritional composition for infant formula, follow-on formula and milk marketed as specialty products, the top four manufacturers have a large range; our research identified over 400 products. These include similar products being sold under their own and subsidiary brands as part of product differentiation strategies.

- Manufacturers are marketing an increasing range of products for different age groups (1-12 months, 1-6 months, 1-3 months, etc.); products with additional nutrients, which are not required by law, in the race to get ‘closer than ever to breastmilk’ (omega fatty acids such as DHA and ARA, prebiotics and probiotics, nucleotides, etc.); products claiming to solve general conditions (preventing allergies, promoting softer stools and better sleep, etc.); and products with raw ingredients and flavours to cater for wider consumer preferences and concerns (claiming to be free of genetically modified organisms (GMOs) or palm oil, or using organically sourced ingredients, vanilla flavouring, etc.).

- Nevertheless, companies are placing products with different formulations on different markets, which suggests that there is little nutritional science and few health considerations behind their product range. For example, Nestlé is the only company that sells products in all of the 14 markets investigated, with a total of 165 products. However, it...
SUMMARY OF PRODUCTS AND PRICES FOUND IN DIFFERENT MARKETS

Monthly cost of feeding an infant (USD) with the cheapest and most expensive formula found on the market

Number of products from major companies

GRAND TOTAL 419
Product differentiation as a way to raise prices and increase profit margins

There is huge disparity in the cost of infant formula both within and between countries. The largest four companies are charging high prices for their so-called ‘premium products’ – especially in the growing Asian markets, where companies are charging high prices for their so-called ‘premium products’ – especially in the growing Asian markets, where manufacturers place new formula products on the market with a variety of different claims. Often, they claim that their products are informed by the ‘latest developments in nutritional science’. However, the wide variety of products on sale within and between countries and the efforts of companies to push expensive premium products, especially to high-growth Asian markets, call such claims into question.

Our research shows that manufacturers behave very differently in different markets, and that often their products are closer to those of their direct competitors within the same market than their own products elsewhere. There is evidence that such decisions are primarily informed by market research instead of scientific or health considerations. We have identified companies’ very sophisticated use of market research and social media to study consumer preferences in this area. Such research seems to be primarily focused on consumer affordability and willingness to pay, as there is no clear scientific justification for the very large price differences observed within brands on each market and also within brands across different countries.

For babies who are not breastfed, it is the responsibility of manufacturers and public food safety authorities to ensure breastmilk substitutes are as safe and nutritionally complete as possible, and that the development of such products is strictly based on science. Adequate nutrition in infant and young child feeding is critical for improving child survival, promoting healthy growth and development and preventing illness later in life. Instead of constant ‘product innovation’ for the sake of increasing their sales, this report calls for a comprehensive overhaul of infant milks being sold by BMS manufacturers so that only those based on unequivocal scientific advice and the highest quality of ingredients are sold.

The report also calls on authorities to ensure that the marketing and nutritional quality and completeness of products is regularly verified, and that any unjustified health claims are removed from products. Finally, governments should introduce and enforce national legislation that fully implements the WHO Code and WHA resolutions.

Conclusions and recommendations

This report exposes the lack of scientific underpinning behind the products BMS manufacturers put on different markets. Manufacturers are constantly placing new formula products on the market with a variety of different claims. Often, they claim that their products are informed by the ‘latest developments in nutritional science’. However, the wide variety of products on sale within and between countries and the efforts of companies to push expensive premium products, especially to high-growth Asian markets, call such claims into question.

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