Executive Summary

In 2018, the Changing Markets Foundation and Globalization Monitor published a report investigating the general, nutrition and health claims on infant milk products for babies under 12 months old sold by the market leader, Nestlé. The report, *Busting the myth of science-based formula*, highlighted a number of ways in which Nestlé’s ‘commitment to science’ appears to be little more than a marketing strategy, including giving contradictory nutritional advice and carrying claims of questionable credibility, including products claiming to be modelled on breastmilk. In particular, the report exposed concrete inconsistencies in Nestlé’s product range, highlighting instances in which its products contradicted its own nutritional advice in relation to sucrose and vanilla flavourings.

In response, Nestlé committed to removing sucrose and vanilla compounds from all its products for babies under 12 months of age. They also committed to removing contradictory nutritional advice on sucrose and vanilla flavourings.

One year after these commitments, we have reviewed Nestlé products and nutritional claims and found that Nestlé has so far failed to fulfil two out of these three promises. While sucrose seems to have been removed from products, vanilla flavourings remain in the same products in China and Hong Kong together with the advice (on different products) that it is healthier for babies not to consume vanilla flavourings. We have also found examples where Nestlé continues to compare its products to human milk. This is in breach of the WHO Marketing Code and subsequent resolutions, and is problematic from the perspective of Nestlé’s scientific credibility, as there is a clear scientific consensus that formula can never be close to breastmilk.

The report also investigates premiumisation and pricing strategies by Nestlé, especially in the highly lucrative Asian market, where we have previously identified some of the most expensive infant formula products. The most expensive Nestlé formula on the Hong Kong market (Wyeth Organic ILLUMA) is 96.7% more expensive than the cheapest Nestlé formula (Wyeth S-26 Gold SMA). In addition to the huge variance in price within one
market, there is also a marked difference in pricing of Nestlé products between different markets. Feeding a 2–3-month-old baby for one month with the most expensive Nestlé formula in Hong Kong would cost a family approximately 3.6 times more than feeding a child with their most expensive formula in the UK. This premiumisation happens despite the advice of nutritional and health experts (such as the NHS and UNICEF) that more expensive products have no proven nutritional benefits.

This report therefore concludes that Nestlé is still up to its old tricks, and continues to use science as merely a marketing tool. It calls on Nestlé, as the market leader, to demonstrate true leadership in the breastmilk substitutes (BMS) industry and rectify the inconsistencies detected in this report at a global level and in a timely manner.

1. Introduction

Adequate nutrition during infancy is vital, both for promoting a child’s healthy growth and development and for improving child survival rates. The first two years of a child’s life are particularly critical; poor nutrition at this stage increases the risk of illness and death, contributes to illness later in life and limits future potential. In this context, the World Health Organization (WHO) and UNICEF strongly recommend optimal breastfeeding: breastfeeding exclusively until six months of age, and continuing to two years and beyond. That said, many mothers cannot, or choose not to, breastfeed their children. Two out of three babies around the world (92 million infants under six months of age) currently rely on formula, either on its own or in combination with breastmilk and other foods, for their nutritional needs. Manufacturers of infant milks therefore have a huge responsibility to ensure their products are safe, fed only to appropriate-aged infants, as nutritionally complete as possible and strictly informed by science.

The market for milk formula continues to grow; by the end of 2019, global sales of breastmilk substitutes are expected to rise to US$70.6 billion, up from US$44.8 billion in 2014. It is estimated that companies spend around US$4–6 billion on marketing and promoting milk formula each year— a figure comparable to the WHO’s annual budget. NGOs campaigned for years against breastmilk substitute (BMS) manufacturers’ unethical practices, particularly in low-income countries, resulting in the World Health Assembly (WHA) adopting the WHO International Code of Marketing of Breast-milk Substitutes (the Code) in 1981. However, in the 38 years since it was introduced and subsequent WHA resolutions passed, the majority of countries have only partially implemented the Code in national legislation, and BMS manufacturers’ breaches of it are common and well-documented.

Swiss-based conglomerate Nestlé commands one fifth of the global market for milk formula, and particularly dominates sales in emerging markets; in 2016, Nestlé sold more than US$10.5 billion worth of formula and other foods for babies. The company takes particular pride in its scientific credentials, and states that it aims to become ‘the world’s leading nutrition, health and wellness company’.

In February 2018, the Changing Markets Foundation and Hong Kong-based NGO Globalization Monitor published a report looking at Nestlé’s marketing strategies. The report, Busting the myth of science-based formula, highlighted a number of ways in which Nestlé’s ‘commitment to science’ appears to be little more than a marketing
strategy, including labelling its products ‘closest to breastmilk’ and giving contradictory nutritional advice. In particular, the report exposed concrete inconsistencies in Nestlé’s product range, and highlighted instances in which its products contradicted its own scientific advice in relation to sucrose and vanilla flavourings.

In the months following the launch of the report, Changing Markets and Globalization Monitor engaged with Nestlé, meeting in London in March 2018. In this meeting and subsequent communications, Nestlé committed to removing sucrose from all its products for babies aged 0–12 months by the end of 2018, and removing vanilla or vanilla flavourings – as well as advice regarding the absence of these ingredients - from its products for babies aged 6–12 months.

This paper draws on research conducted by Globalization Monitor in China and Hong Kong between January and March 2019, as well as on desk-based research, to analyse what changes Nestlé has made to its infant milk marketing practices in the 12 months since the launch of *Busting the myth*. The paper focuses on three key areas highlighted in our previous report:

- whether Nestlé has fulfilled its commitments in different countries on removing sucrose and vanilla flavourings;
- use of comparison to breastmilk/human milk as a marketing tool; and
- premiumisation and diversification of Nestlé products to boost profits.

*Busting the myth* found that Nestlé’s product development, composition and pricing were driven not by science but by marketing considerations, with the aim of boosting profit margins. It concluded that Nestlé claimed its products were evidence-based in order to attract unknowing caregivers, who want to provide the best possible nutrition for their child. This updated report finds that Nestlé has failed to address a number of issues identified in our previous report in the past year, and concludes that the company is still up to its old tricks and continues to use science primarily as a marketing tool.

2. Contradictory advice

*Busting the myth* unveiled a number of instances in which Nestlé contradicted its own advice across its different products in different countries. For example, one Nestlé product sold in South Africa contained sucrose, despite nutritional advice on the products it sold in Brazil and Hong Kong advising against giving sucrose to infants. Similarly, Nestlé infant milks sold in Hong Kong were marketed as healthier because they did not include *any added vanilla flavour or flavourings for baby’s good growth*, while Nestlé products sold in Hong Kong and mainland China contained vanillin compounds.

Following the publication of the report, Nestlé committed to making some changes to its products:

- Nestlé claimed its products for babies aged 0–6 months did not include sucrose, but committed to also removing sucrose from all its products for babies aged 6-12 months by the end of 2018. In its public response to the report, the company said sucrose was still present in ‘less than 10% of [its] products’, so it is likely that our investigation revealed only the tip of the iceberg.
- Nestlé claimed vanilla or vanilla flavourings are permitted in products for babies aged 6–12 months. However, in a subsequent meeting with Changing Markets and Globalization Monitor, Nestlé committed to removing vanilla or vanilla flavourings from its products for this age group. In addition, the company said it would remove nutritional advice relating to the absence of vanilla or vanilla flavourings from its products.
One year later, our review of Nestlé products confirms the company seems to have removed sucrose from its products for babies aged 6–12 months. On-the-ground monitoring by our NGO partners in South Africa appears to confirm this, and we commend Nestlé for taking action to eliminate this ingredient, which health professionals recommend babies do not consume at such a critical point in their nutritional development.

However, we are concerned to see that the two commitments Nestlé made last year in relation to vanilla and vanilla flavourings have yet to materialise. Research by Globalization Monitor in February 2019 confirmed vanilla flavouring is still being used in Nestlé products in Hong Kong and mainland China, while other Nestlé products on the same market contain neither vanilla flavourings nor sucrose—and the latter products’ nutritional advice promotes them as a healthy option precisely because they do not contain these ingredients.

In communication with Globalization Monitor in March 2019, Nestlé stated they ‘will communicate timelines as soon as (they) have a technical solution’. This excuse does not hold up to scrutiny, as the company itself states, vanilla flavourings are used in a small number of its products,
and innumerable Nestlé products on the global market do not contain these ingredients. To suggest this ingredient plays an indispensable role in Nestlé products is, therefore, contradictory.

With regards to Nestlé’s failure to remove nutritional advice from the labels of its Nan Pro formula products, Nestlé stated (in the same communication to Globalization Monitor): ‘The change of label has not been completed yet because of the labels that were already in the value chain or printed. This process can take time before the products with the old labels are fully phased out of the system’. Again, this excuse does not hold up to scrutiny; since the publication of our report, Nestlé has, for example, updated the packaging of its S-26 ULTIMA PROMIL stage two formula in Hong Kong.

3. ‘Inspired by human milk’?

The WHO and UNICEF recommend breastfeeding exclusively until six months of age, and continuing to two years and beyond, as the gold standard for infant feeding. From a purely nutritional perspective, breastmilk’s composition has major benefits that formula products can never imitate. BMS manufacturers invest large amounts of money in attempting to mimic breastmilk’s nutritional profile; however, this research and development is likely to remain limited, as the composition of breastmilk continuously changes and is often suited to the specific needs of the child. In addition, breastmilk contains live substances, such as antibodies, hormones and other immune-system-related compounds, which protect babies from illness—and which manufacturers have not yet been able to replicate. Such limitations are one reason why attempts to humanise manufactured infant milks, through comparison with breastmilk, are not based on science and are banned under the Code.

Busting the myth highlighted a number of instances in which Nestlé advertised its products as being ‘closest to breastmilk’—even though the composition of these products varied. Four different products, each containing different ingredients or compositions, were marketed using phrases including ‘closest to breastmilk’, ‘following the example of breastmilk’ and ‘inspired by human milk’. However, in a statement following the launch of our report, Nestlé said it ‘does not use any statements on its infant formula products or in its other communications that idealise its products or imply that they are superior to or equivalent to breastmilk’.12

In February 2019, Globalization Monitor research explored the continued marketing of ILLUMA in Hong Kong. The product is sold under the trademark Human Affinity Formula, and its website states Nestlé is ‘dedicated to unveil [sic] the mystery of human milk…recreating as nature intended with revolutionary technologies’. On-the-ground research found the product being promoted in-store as ‘ever closer to lactating secretions’.

Nestlé has updated its S-26 ULTIMA PROMIL stage two formula—but has failed to remove vanillins from the product (Credit: Globalization Monitor)

Nestlé products sold in Hong Kong still carry nutritional claims relating to the absence of vanilla flavour or flavourings (Credit: Globalization Monitor)

ILLUMA is produced by Wyeth Nutrition Hong Kong, a Nestlé-owned subsidiary.

6

7
When Globalization Monitor presented Nestlé with these examples in March 2019, Nestlé responded:

Modern infant formulas are compositionally closer to human milk than unmodified cow’s milk, and it is clear for us that they cannot achieve the perfection of breastmilk. As such, we communicate that our products are ‘inspired by breastmilk’ or that they contain components comparable with components of breastmilk, where these are scientifically proven as such. This does not breach the WHO Code or WHA Resolutions.

In reality, this distinction does not seem to be in the spirit of the Code (or WHA resolutions), which prohibits ‘any image, text or other representation that is likely to undermine or discourage breastfeeding, that makes a comparison to breast milk, or that suggests that the product is nearly equivalent or superior to breast milk’. The Code also explicitly states there should be no advertising or other form of promotion to the general public. This would include any advertising through mass-media outlets such as television, magazine, billboards, websites or social media.

In November 2018, Globalization Monitor recorded an instance of in-store promotion of ILLUMA in Hong Kong, which is a clear violation of the Code. Additionally, it found the ILLUMA website promoting the product’s inclusion of two HMOs (human milk oligosaccharides), which are found in breastmilk. The same website emphasises that HMOs found in ‘lactating secretion’ support immunity and may decrease the risk of respiratory and gastrointestinal infections. Considering the proximity of these claims, and the product’s inclusion of synthetic HMOs, it would be natural for the consumer to (wrongly) assume these health benefits apply to the Nestlé formula. These examples show that Nestlé continues to market its products as being ever closer to breastmilk. This is in breach of the WHO Marketing Code and subsequent resolutions, and is problematic from the perspective of Nestlé’s scientific credibility, as there is a clear scientific consensus that formula can never be close to breastmilk.

4. Premiumisation

A previous report by Changing Markets, Globalization Monitor, the European Public Health Alliance and Su-mOfUs explored the issue of premiumisation, whereby the leading BMS manufacturers offer an ever-increasing number of products with additional ingredients, and/or for specific health issues (such as colic, reflux and allergies), with a wide range of prices. Prices were also found to show significant variation, both within the same country and between different countries. Nestlé was no exception to this practice, and some of the most expensive formulas were found in Hong Kong and China.

On a global level, the nutritional composition of formula is guided by standards first set by Codex Alimentarius in the 1980s, which lay out minimum requirements for levels of macronutrients and micronutrients in infant and follow-up formulas. UNICEF UK guidelines state all formulas are very similar and there is no evidence that ‘special’ milks live up to their claims (to help hungry babies and/or prevent colic, wind, reflux or allergies); they also advise parents against using follow-on formula or toddlers’ milks. The UK National Health Service (NHS) and First Steps Nutrition Trust publish similar advice.

Despite this, previous Changing Market research has identified over 400 products sold by the biggest four companies and their subsidiaries - 165 of which were sold by Nestlé or Nestlé-owned subsidiaries - that are divided into different age groups, ‘fortified’ with nutrients not required by law (such as DHA, ARA and probiotics), and include added flavourings and/or (increasingly) GMO-free or organic ingredients. This product differentiation has little scientific basis; indeed, more similarities were found between the formula products of different companies in one market than between the formula products of one company in different markets. This lack of consistency suggests product development is largely informed by market research and consumer preferences in different countries.

In March 2019, the UK’s Channel 4 aired an investigation into the marketing practices of the infant formula industry. On the topic of premiumisation, the programme interviewed an infant-feeding specialist, who said:
Based on science? Revisiting Nestlé’s infant milk products and claims

These different ingredients that the different companies add in – they’re trying to get us to buy them. They’re trying to get us to pick theirs over somebody else’s. But the long and the short of it is: If there was a benefit that was actually proven by independent researchers to actually be beneficial for babies, then they would all have to add it by law.

The lack of scientific basis for additional ingredients suggests the needless diversification of infant formula products is merely a marketing tool; one in which companies boost their profits by premiumising certain products. Premiumisation of infant milk is therefore a clever strategy that manufacturers use to sell more formula, in terms of not only volume of sales but also convincing parents to purchase more expensive products in the belief they are doing the best for their baby.

Globalization Monitor’s research found Nestlé to be selling five products in Hong Kong, under the NAN, ILLUMA and S-26 brands. The latter two are produced by Wyeth Nutrition Hong Kong, a Nestlé-owned subsidiary. The most expensive (Wyeth Organic ILLUMA) is 96.7% more expensive than the cheapest (Wyeth S-26 Gold SMA).

In addition to a huge variance in price across one market, there is a marked difference in pricing of Nestlé products between different markets. As of February 2019, the most expensive Nestlé product on the UK market, SMA Organic First Infant Milk, costs £13.99 for 800g. Feeding a 2–3-month-old baby for one month on this formula would cost approximately £63.13, or less than 3% of an average UK monthly wage. By comparison, the Wyeth Organic ILLUMA product in Hong Kong costs 589 HKD (£56.79) for 900g. Feeding a 2–3-month-old baby for one month on this formula would cost approximately 2,381 HKD (£229.55), or almost 16% of an average monthly wage in Hong Kong.

Our previous investigations found evidence suggesting that, in certain countries, Nestlé sets its infant-product prices higher than its competitors to maintain a perception of superior quality. Furthermore, Nestlé takes its own product range into account when setting prices, setting different prices for products within the same range with the aim of maximising the sales of different products. Our latest investigation confirms that Nestlé has still not addressed this and continues to value high profit margins over scientific credibility.

---

### Why does Nestlé formula cost parents much more in Hong Kong than the UK?

<table>
<thead>
<tr>
<th>Most Expensive</th>
<th>Least Expensive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td><strong>Cost</strong></td>
</tr>
<tr>
<td>£13.99 per 800g</td>
<td>£7.50 per 800g</td>
</tr>
<tr>
<td>£56.82 per 900g</td>
<td>£28.84 per 900g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Cost to Feed 2-3-Month-Old Baby</th>
</tr>
</thead>
<tbody>
<tr>
<td>£63 per 800g</td>
</tr>
<tr>
<td>£230 per 900g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Average Monthly Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>3%</td>
</tr>
<tr>
<td>16%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least Expensive</th>
<th>Most Expensive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost</strong></td>
<td><strong>Cost</strong></td>
</tr>
<tr>
<td>£7.50 per 800g</td>
<td>£13.99 per 800g</td>
</tr>
<tr>
<td>£28.84 per 900g</td>
<td>£56.82 per 900g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Cost to Feed 2-3-Month-Old Baby</th>
</tr>
</thead>
<tbody>
<tr>
<td>£35.50 per 800g</td>
</tr>
<tr>
<td>£116 per 900g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of Average Monthly Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5%</td>
</tr>
<tr>
<td>8%</td>
</tr>
</tbody>
</table>
5. Conclusions and recommendations

Busting the myth highlighted a number of examples suggesting that Nestlé’s self-proclaimed commitment to science was little more than a marketing strategy. Despite subsequent engagement with Nestlé, in which the company committed to making some changes to its product range, the main question posed by the report – whether the company will follow scientific nutritional advice across its whole product range - remains unanswered.

This report has revisited products for which Nestlé does not seem to follow scientific advice, and evaluated these against the company’s commitments, to ascertain what progress Nestlé has made in the past year. While we commend Nestlé for fulfilling its commitment to remove sucrose from its products targeted at babies aged 0–12 months, its other two commitments remain unfulfilled; Nestlé is still selling products containing vanillin in Hong Kong and China, while in the same market it continues to include nutritional advice on the benefits of not using vanilla, sucrose and other additives on its vanillin-free products. Despite having had over a year to implement its commitments, Nestlé has failed to do so, which calls the credibility of the company and its promises into question.

In addition, Nestlé continues to compare its products to breastmilk, which the Code prohibits. This is also problematic from the perspective of scientific credibility, as there is clear scientific consensus that formula can never be close to breastmilk. For example, Professor George Kent of the University of Hawaii has previously stated that describing a product as ‘closer to breastmilk…is not the same as saying it is close to breastmilk. New York is closer than New Jersey to Paris, but that does not mean New York is close to Paris.’

Finally, premiumisation of infant formula products leads caregivers to purchase increasingly expensive products with little or no proven nutritional benefit. Despite UNICEF UK, the NHS and First Steps Nutrition advising that simple is best when it comes to infant formula, the price differential between different Nestlé products on the same market, and between different markets, is huge.

This report therefore concludes that Nestlé is still up to its old tricks, and continues to use science as merely a marketing tool. It calls on Nestlé, as the market leader, to demonstrate true leadership in the BMS industry in the following ways:

- Conduct an independent review of its product range at a global level. The aim of this exercise must be to ensure that only infant milks with composition based on the best - and independently verified - science are sold, and that these products are priced appropriately and fairly across all markets.
- Ensure its company policy aligns fully with the Code, and implement this across all countries regardless of national legislation, removing the arbitrary distinction between ‘low-risk’ and ‘high-risk’ countries.

Adequate nutrition for infants and young children is critical for healthy development, and companies like Nestlé have a huge responsibility to provide products that are safe, nutritionally complete and informed by the best available science. As a company that claims to be committed to science, Nestlé should rectify the inconsistencies detected in the report, at a global level and in a timely manner.
References


This report was published in April 2019 by the Changing Markets Foundation and SumOfUs. Globalization Monitor contributed to the research in this paper.

The purpose of the report is to shed light on industry-specific issues related to the marketing and composition of infant milks worldwide. The information in this document has been obtained from sources believed reliable and in good faith. The authors accept no liability whatsoever for any direct or consequential loss arising from the use of this document or its contents.

Designed by Pietro Bruni - helloo.org

Printed on recycled paper