We welcome the publication of the interim report from Competition and Markets Authority's infant and follow-on formula market study. The NIHR-funded Healthy Weight Policy Research Unit (formerly the Obesity Policy Research Unit, 2017-2023) has carried out research into the marketing and promotion of formula milk products in the UK, as part of a programme of work agreed with the Department of Health and Social Care. This work was led by the Behavioural Science worksteam of the Policy Research Unit, which includes researchers in UCL's Department of Behavioural Science and Health. This published research provides additional insights into the current commercial milk formula market, which can inform recommendations for government action.

The CMA review raises concerns about the 'widespread non-compliance with provisions of regulations which require infant formula and follow-on formula to be clearly distinct from each other'. We provide further evidence of this in our published paper[1]; specifically, in our analysis of formula milk products in the UK market we found that 72% of follow-on formula (FOF) products were highly similar to adjacent infant formula (IF) products (adjacent = products from the same brand and product line). In addition, 29% of products labelled as Foods for Special Medical Purposes (FSMP) were highly similar to adjacent IF products, which are important to distinguish from standard IF because these should only be used under medical supervision. To assess similarity, we used the guidance notes provided by the Department of Health and Social Care (DHSC), which were developed to provide sufficient detail to facilitate an assessment of compliance with the legislation.

Our analysis indicated that the current legislation lacks sufficient detail to assess compliance with respect many aspects of labelling; we also found that DHSC guidance was frequently disregarded. For example:

- 67% of IF and 78% of FOF packs included images considered non-permitted
- 44% of FOF included nutrition claims considered non-permitted
- 17% of IF and 17% of FOF included health claims considered non-permitted
- 6% of IF and 22% FOF included text considered non- permitted
- 100% of IF displayed mandatory information about the superiority of breast milk in small, hard-to-locate text (not 'prominently', as DHSC advise)

In our policy brief we set out a clear list of recommendations for amending the legislation to increase effectiveness[2]. For example:

- Specify the features of FOF and specialist formula which must be different to enable a clear distinction to be made from IF
- Clarify and give examples of text which idealises the use of formula and therefore should not be used
- Specify position and size requirements for mandatory information regarding the superiority of breast milk

In addition to assessing whether labels complied with legislation and DHSC guidance, we explored how mothers use formula labels to inform their milk feeding choices, as well as and their understanding of differences between products[3]. Mothers reported being drawn to brands they recognised from years of exposure to formula brand advertising. Products were assumed to vary according to brand and stage, which created, for some mothers, anxiety about choosing 'the best one'. On-pack messaging, including imagery, was understood by mothers as indicating that certain products were superior to others. While mothers rarely mentioned tangible on-pack

health and nutrition claims, they were attracted to the overall appearance of packs and messaging relating to science, research and nature. On-pack references to breast milk and a logo perceived to represent a breastfeeding mother were taken as indicators of closer similarity to breast milk, despite legislation aimed at preventing this. Interview findings indicated that legislation in GB needs to be updated to restrict brand advertising and the use of on-pack text and images that mothers perceive as indicating products have a closer similarity to breast milk.

Overall, our findings point to a need for (i) current legislation in England and the devolved nations to be updated and (ii) stronger enforcement of legislation.

Below, the Behavioural Science workstream of the Health Weight Policy Research Unit provides feedback in response to questions 1-4 and 11, set out in the CMA interim report.

1. **What is the value derived from follow-on formula for a) parents and babies and b) manufacturers and retailers given that the NHS states that 'research shows that switching to follow-on formula at 6 months has no benefits for your baby. Your baby can continue to have first infant formula as their main drink until they are 1 year old.' CMA analysis has found that follow-on formula is generally priced the same as (or sometimes slightly cheaper than) infant formula.**

a) We do not believe that either parents or babies derive any value from FOF, compared with IF. Furthermore, our research shows that the existence of FOF causes unnecessary anxiety for some mothers who are told by healthcare professionals that babies need only IF, but are led to believe by brands that babies need FOF. Mothers are then worried about whether or not to switch from IF to FOF[3]. This problem extends to Growing-up Formula (GUF), which are much more expensive than cow's milk (which is recommended by the NHS). In our qualitative research, one mother in a low-income household told us:
"with my other two I put them onto cows' milk at one. But I know now [Brand X] has stage three and it's got more vitamins in it. So, depending on how money is I might, we might carry on with stage three but it is so expensive [laughs] not going to lie."

b) Our research with caregivers who use formula to feed their babies indicates that there is considerable value for manufacturers and retailers:
   (i) FOF allows for cross promotion and indirect marketing of IF, due to the highly similar packaging of IF and FOF products[1]. In interviews, mothers expressed confidence in formula brands they were familiar with, and seeing brands advertised, irrespective of the type of formula shown (IF, FOF or GUF); this created brand familiarity and loyalty for parents[3].
   As these quotes from two mothers illustrate, they were drawn to brands, rather than something specific about one IF compared to another IF:
   "I mean to be honest it sounds really stupid saying it out loud but it's the brand we recognise so we went for that one to begin with"
   "I was drawn to Cow & Gate and Aptamil because they were well known brands"
   (ii) Our research indicated that the existence of FOF creates, for parents, the illusion that babies should move through formula 'stages', thus also promoting the use of GUF. Mothers described to us the belief that babies needed to move through formula stages from IF to FOF then GUF, despite NHS recommendations to use IF then cows' milk from 1 year of age onwards[3].
   For example, one mother told us:

> "I don't know what the difference is with the toddler milks to be honest. But for me, because I'm an anxious person, if it said don't use it, use this after six months and use this after a year, I would go by what it said, rather than using my own judgement type thing."

2. Do you agree with our provisional analysis of market outcomes, as set out in section 4 of this interim report? Please explain why you do or do not agree, providing evidence to support your response where possible.

We have undertaken research that relates to point 4.82. The legislation allows for the addition of other ingredients that are suitable (defined in the report as "in terms of expected benefits and safety considerations"). However, if there is sufficient evidence to suggest an ingredient is beneficial then the legislation ensures it is added to all IF and FOF. Manufacturers currently highlight the addition of novel ingredients, such as 2'FL, with the suggestion that these are beneficial. We found statements such as "*brand X Growing Up Milk now contains 2'FL which is structurally identical to the most abundant oligosaccharide found in breast milk"*. By indicating a product contains 2'FL, and that 2'FL is found in breastmilk, it leads the consumer to infer the product compares favourably with breastmilk. This advertising strategy is called 'probabilogic', which can be used to position a brand with regard to the most important competitor - breastmilk [1]. The adjacent IF and FOF products (in highly similar packaging) to this GUF also highlighted the presence of 2'FL, but did not state the comparison to breastmilk, which would be a clear breach of the legislation. This is another example of cross-promotion and highlights the need for different formula milk products to be clearly distinguishable and for GUF to be included in formula milk legislation.
As we point out in our paper, we believe highlighting 2'FL is a breach of legislation, as claims are not permitted if the average consumer would be unlikely to understand them (Regulation (EU) No 1924/2006 only permits the use of nutrition claims if the average consumer can be expected to understand the beneficial effects as expressed in the claim). While claims that are unlikely to be understood are not permitted, the legislation does not list examples of such claims or nutrients that are likely to be (or not be) understood. More clarity in the legislation surrounding this matter would avoid confusion and protect consumers. The legislation around these claims would require regular updating to include evolving ingredients and marketing claims.

Regarding provisional conclusions (4.90), our findings support the premise that parents experience difficulties in differentiating between products – this is not surprising given that legislation ensures all products are nutritionally equivalent with regard to essential nutrients and comply with strict safety standards. Caregivers find it difficult to differentiate between products and choose a product that they feel is right for their baby. Although legislation ensures that all brands include essential nutrients, they can differ in other non-essential nutrients, which parents are not equipped to analyse and understand. Despite scrutinising labels, many felt a sense of failure at being unable to identify 'the best one', indicating that attempts to differentiate products simply adds to mothers' anxiety or confusion.
When analysing labels, we explored why some products are so much more expensive. Some of the most expensive products were organic, goat milk based or lactose free. However, some of the most expensive products had no tangible features to differentiate

them – they included novel ingredients which have not been shown to have any benefit, names suggesting scientific superiority, silver packaging and scientific imagery.
Many parents interpreted higher prices, labels with a scientific tone and appearance, and intangible claims as indicators of quality, although some still had slight doubts, as this quote illustrates:
"I know that [Aptamil Pro's] price point is higher, I find that in my mind to be the elite of feeding …it definitely appeased something in me that I was getting Aptamil Pro. It wasn't even that I was, "This is the best on the market. You can't get any better than this," and I thought in my head at that time, *well, if I was going to formula feed, then I had the best on the market and that was it*. But, if I wasn't a mum at 4am in an Asda, I would tell myself that is absolute nonsense, and there's probably little to no difference in any of them."

3. Do you agree with our provisional conclusions on the potential drivers of these market outcomes as set out in sections 5, 6, and 7 of this interim report? Please explain why you do or do not agree with regards to the following in particular:
a. consumer behaviour (section 5)

Findings from our research support your conclusion that brand awareness strongly influences brand choice, for example one mother told us:
"To be honest, I think most of it just came up from actually what I'd seen over just my lifetime of adverts actually and TV things, and what became like a familiar sort of brand that you'd heard of. So, I'd seen a lot of [brand X] adverts, I'd seen a lot of I think it's the [Brand Y] one as well, I've seen quite a few adverts…It's actually literally just been from advertising, sort of, I guess a trusted brand name that you've kind of heard, especially being a new mum, you want something you know."
This highlights the need to restrict brand advertising (whether products shown are IF, FOF or GUF) as it contributes to familiarity and brand loyalty (e.g. parental trust in particular brands). Brand advertising also reinforces the idea that brands vary in quality, which contributes to stress in trying to identify 'the best'. Parents also paid more for a familiar brand, despite them all being nutritionally equivalent. Long-term exposure to formula marketing also contributes to perceptions that formula, rather than breastfeeding, is the norm.

b. the regulatory framework (section 6)
Many of the findings outlined in the report, align those from our research with mothers. However, while the report concludes that there is broad compliance with legislation, our research found that current legislation lacks the detail to be able to assess this, which is a barrier to enforcement. Importantly, we found that most labels did not comply with DHSC guidance, including widespread use of implied claims such as the use of images and text suggesting similarity to breastmilk[1,4].
While we fully support reducing the price of formula, we do not support changing legislation to allow price reductions to be publicised.
Research conducted by us, yourselves and others shows that brand familiarity contributes to brand trust and informs feeding choices. Publicising price reductions would provide an opportunity to promote IF, which, as highlighted by the report, violates the WHO Code. As highlighted, current legislation has many loopholes, such as the marketing of IF by cross promotion, and the widespread use of implied claims. Current

legislation aims to prohibit marketing and promotion of IF, so as not to discourage breastfeeding. As highlighted by DHSC, there is considerable evidence that formula marketing influences parents' decisions about how to feed their infants. We support strengthening the legislation, not weakening it by permitting price reductions to be publicised.

We do not follow the logic of your argument ('Price Promotions', starting section 6.31) and are not aware of a strong evidence base indicating that revising the regulations which restrict price promotion would benefit parents or infants. In particular the argument set out in section 6.36 as providing a case for revising regulations is unclear. Strengthening and enforcing the legislation could reduce marketing suggesting some products are better than others and that some are more similar to breastmilk – which are common practices despite legislation aiming to prevent this. We set out specific recommendations in our policy brief[2]. We agree that the use of implied claims leads parents to purchase more expensive products, which are viewed as 'premium products' and effective regulation could therefore drive down the price of these products.

4. Are there any other factors which we have not addressed in the report which you consider could be contributing to the outcomes we observe?

We believe that the stigma parents experience around formula-feeding, and the reluctance of healthcare professionals to provide information, play a role in consumer behaviour – by encouraging families to use non-evidence-based sources instead, such as information provided by formula milk companies. As part of a project, funded by the UKRI Medical Research Council, we have undertaken research to develop a digital intervention to support formula-feeding best practices, for parents and caregivers who are using formula to feed their babies. This project involved in-depth research with caregivers and healthcare professional stakeholders, and co-development of new digital content on formula feeding for the Baby Buddy app (hosted by the UK parenting charity Best Beginnings, and used within the NHS). A major theme that emerged from this research is that parents who use formula to feed their babies feel stigmatised. This arises from a number of sources, such as public health messages about the superiority of breastfeeding, but also from the reluctance of healthcare professionals to provide them with information or support for formula feeding, and the absence of adequate information on the NHS website. Healthcare professionals themselves reported that they were reticent to provide families with formula feeding guidance because of the concern about inadvertently promoting formula feeding, and thereby violating the WHO International Code of Marketing of Breast-milk Substitutes. Parents are avid information-seekers and in the absence of sufficient evidence-informed information about formula-feeding from professional organisations or healthcare providers, parents use non-evidence-based sources such as industry websites, social media and friends/family. Families who feel stigmatised and judged by healthcare professionals for the way they feed their baby are also less likely to engage with healthcare services, which has ramifications for the health of infants beyond how they are fed. Appropriate support for families who are using formula to feed their babies is an important consideration for policies in this area going forward.

11. Are there any other possible remedy options which are not outlined in section 8 which we should consider? If so, please outline how the option would work and its likely impact on market outcomes (such as price, product differentiation and/or choice).

Whilst your report highlights cross-promotion of IF via FOF promotion and highly similar packaging, we would like to highlight the same problem exists with GUF, which is of equal concern.

The principal conclusion from our research is that text and images considered non-permitted according to DHSC guidance are widespread on products available in GB. Current legislation lacks sufficient detail to be able to identify breaches, leaving brands to present their products as superior to others (despite them being nutritionally equivalent). This contributes to the high price of formula products. Additionally, some specialist formulas are marketed as IF rather than FSMP and the labelling of products, including the need for use only under medical supervision, is not clearly stated.

We agree that healthcare providers should inform parents that products are nutritionally equivalent and adhere to strict safety standards. However, healthcare providers have limited contact with families and have told us that supporting parents to make informed feeding choices is made more challenging as they have to counter misinformation parents are presented with by industry[5,6]. We recently analysed interviews with healthcare providers that were collected for the WHO. Our analysis indicated that healthcare providers had to expend considerable time and effort countering marketing messages to support parents to make informed decisions about breast or formula feeding, and regarding different types of products - including stages, and specialist formula e.g. anti-reflux formula. Parents need consistent massaging from healthcare providers and industry.

To support families to make informed feeding choices and protect them from paying more than is necessary for IF, we recommend that formula legislation should be updated and enforced, as detailed in our policy brief[2].

In Section 8.88, the report alludes to a range of more interventionist “backstop” measures, which may be needed to bring prices down in the market more directly, and with more certainty, but that there may be "considerable trade-offs". For example, restrictions on pricing and profit margins. We advise proceeding with caution as policy research is needed to evaluate possible industry responses and the relative benefits and harms for parents and infants. It is unclear how consumer behaviour may change in response to price and profit restrictions on formula milk products or brands in a UK context, as well as to the idea of an NHS-branded formula milk. There may be lessons that could be learned from other industries that must adhere to price regulations (e.g. the pharmaceutical industry).

The Healthy Weight Policy Research Unit would value the opportunity to undertake new research to establish a robust evidence base for the relative benefits and harms of these types of policies for formula milk in a UK context, to inform the policymaking process. We are well-placed to do this, bringing interdisciplinary expertise across economics (Institute for Fiscal Studies), behavioural science (Dept of Behavioural Science & Health, University College London), modelling (Institute of Child Health, University College London)) and food systems (Centre for Food Policy, City St George’s).

We would be happy to engage with the CMA and provide further input as needed.

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