BABY & TODDLER BREAKFASTS

November 2022

Action on Sugar

About Action on Sugar

Action on Sugar is a group of experts concerned with sugar and obesity and their effects on health. It is working to reach a consensus with the food industry and Government over the harmful effects of a high calorie diet, and bring about a reduction in the amount of sugar and fat in processed foods to prevent obesity, type 2 diabetes and tooth decay.

Acknowledgements

Report led by Zoe Davies ANutr, Nutritionist, with support from Sonia Pombo RNutr, Campaign Lead and Research Fellow and Mhairi Brown, RNutr, Policy and Public Affairs Manager.

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Impact on Urban Health

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Disclaimer

Product information was correct at time of publishing and checked with manufacturers. Just two manufacturers did not respond to this data check. For specific advice about feeding infants seek help from a health visitor, GP or dietitian.

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INTRODUCTION

Childhood is a crucial time to shape food preference and consuming a healthy diet early in life sets a precedent for future eating habits. A diet high in nutrient-dense, minimally processed foods which are high in vitamins and minerals is an important factor in helping children develop a healthy relationship with food, grow to their full potential and thrive in school. Such a diet can also help to prevent overweight, obesity and related illnesses including high blood pressure and type 2 diabetes later in life [1,2]. It is therefore important to ensure that all children have access to a healthy diet as early as possible.

From 6 months of age, it is recommended that complimentary foods, alongside breast milk or infant formula, are introduced, focusing on repeatedly offering a variety of foods to increase acceptance of new flavours [3,4]. The NHS recommends single vegetables and fruit, particularly less sweet vegetables, as first foods to help develop children's palates and prevent fussy eating habits, with no added salt or sugar to their food or drink [5].

However, these recommendations are not translating to actual consumption patterns. According to the latest National Diet and Nutrition Survey (2018/2019), children aged 1.5-3 years had a mean energy intake of 9.7% free sugars, more than the recommended maximum of 5% for those aged 2 years and older [6]. A high sugar intake is linked to an increased calorie intake and therefore obesity. The prevalence of children living with obesity doubles from when they start reception (10.1%) to when they leave Year 6 (23.4%) [7].

Sugar sweetened food and drinks are the main cause of tooth decay in children and consuming a lot of sweet foods at any age is associated with poor oral health This has a devastating impact on children across the UK, with the Local Government Association announcing in August 2020 that nearly 45,000 hospital operations were performed to remove rotten teeth, equivalent to nearly 180 operations a day and costing the NHS £40 million [8].

The main contributor for free sugars for children aged between 4 and 9 months has been found to be commercial infant foods, particularly fruit-based and cereal based foods [9]. Indeed, many infant foods have been shown to exceed the recommended intakes for sugar, which was raised as a concern for health by the previous Chief Medical Officer Dame Sally Davies in her independent 2019 report ***Time to Solve Childhood Obesity*** [10].

From the age of 7-9 months, infants are recommended to have three meals a day, with breakfast being a key opportunity to provide the calories and nutrients they need to grow while helping to develop a healthy routine before school age [11]. There are many infant breakfast products on the market such as porridge, cereals and yogurts, however, despite the fact that added sugars are not recommended in the first year of life, many of the products in the baby and infant aisle are sweetened. Many products use processed fruit or sweet vegetables as a way to sweeten the products which looks healthy on the outset, but when macerated and processed, these become free sugars and therefore are damaging to teeth.

Current UK Policy

In 2017, the Government's ***'Sugar Reduction: Achieving the 20%' report*** [12] stated: 'the focus of our work on the sugar reduction programme will now shift to the additional product categories that were included in the childhood obesity plan. These are baby, weaning and toddler foods (those targeted at children 4/6months to around 3 years).' However, it was not until June 2019 that the Government published their review [13] of how the commercial baby food and drink market in the UK aligns with dietary advice for children aged up to 36 months. Many commercial baby food and drinks contain added sugar and salt – or ingredients high in sugar or salt; displayed inappropriate age guidance on product packaging, displayed health and nutrition claims on pack which may imply that the product had a healthier nutritional content than it actually did; and product names did not accurately reflect the balance of ingredients.

Following this review, in July 2019, the Government published the Green paper ***Advancing our health: prevention in the 2020s*** [14] where they committed to publishing nutrition guidelines for the food industry in 2020. The green paper stated that "Industry's progress will be monitored and reported to the government. If insufficient progress is made, the government will consider other levers", and also committed to improving the marketing and labelling of products targeted to young children.

Draft ***Commercial baby food and drink guidelines*** were published in 2020 (originally intended to be met by the food industry by 2023) for consultation with limited stakeholders [15] but to date, these guidelines have not been implemented. Earlier this year, the Scientific Advisory Committee on Nutrition (SACN) released their draft report: ***Feeding young children aged 1 to 5 years*** [16], which reviewed evidence on young child eating and feeding behaviours, dietary patterns, weight status and oral health. Again, commercial baby food and drinks were noted as a key contributor of sugar but still the government has failed to take action to improve their nutritional content.

Since the start of the sugar reduction programme, which was implemented to reduce sugar in the food categories that contribute the most sugar to children's diets, baby and toddler food and drink (namely down the baby aisle) have not been subject to any guidelines that would ensure reduced sugar content and thereby benefit child health.

EU Baby Food Composition Regulations: Processed-cereal based food and baby foods

Restrictions are only placed on the maximum total carbohydrate content of certain processed-cereal and baby foods, meaning there is a gap in the regulation of free sugars in these products. As long as the products meets the carbohydrate criteria, it doesn't matter (in some products) where this sugar comes from. There are limited restrictions on the type of sugars (i.e. glucose, honey) in processed-cereal based food and drinks but at high levels of either 5g or 7.5g per 100kcal, or 0.9g / 0.6g of fructose per 100kcal [17].

RESEARCH AIMS

The aim of this current research was to review the nutrition content, labelling and marketing of breakfast items located in the baby aisle of the UK's major supermarkets and identify opportunities for action. The research included:

- A consultation with stakeholders
- A public opinion poll
- A product survey
- Engagement with food companies

CONSULTING WITH EARLY YEARS STAKEHOLDERS

As part of our funding with Impact on Urban Health, we have been consulting with several experts in the early year's nutrition field to discuss the development of this project. We held a stakeholder advisory workshop on 10th October 2022 to review initial findings of the research, including public health, NGO and charity representatives.

While this was a closed workshop, key concerns were raised which can be shared:

- Companies are aware of the innate preference of infants for sweet tastes and will likely add fruit in various forms to breakfast products to encourage consumption. However, there is a need to train a child's palate to accept a range of flavours, which companies may not be enabling

- 'Free sugars' are misunderstood and there must be more clarity from the government, the food industry and the NHS on the impact these types of sugars can have on child health

- Parents should not be made to feel guilty for buying their children convenient options; the baby aisle should be a safe space for parents and children alike and the government and the food industry must ensure that products in that aisle are nutritionally sound

PUBLIC OPINION POLL

Action on Sugar commissioned Censuswide to conduct a public opinion poll of 1,000 UK parents with children aged 6 – 36 months and hear their views on commercial baby foods [18]. The majority (77%) confirmed the popularity of these products, with many offering them to their child several times a week.

Key Findings
65% of parents are concerned about the levels of sugar in ready-made/pre-packaged baby and toddler breakfast items
87% of parents would find it useful if the amount of sugars added to baby and infant food and drinks were displayed clearly on the front packaging
91% of parents would support the government taking action to make sure all food and drinks available in the baby aisle are nutritionally appropriate according to NHS recommendations

The top 5 reasons parents gave for buying these products were:

1. Convenience
2. Child likes them
3. Recognised and trusted brand
4. No added sugar / naturally occurring sugars only
5. More vitamins / minerals

Products in that aisle are expensive and still have lots of sugar in them

I tend to find better cheaper and healthier alternatives in the other parts of supermarket

My child eats what we eat I don't add any salt or sugar to the meals and the majority are cooked from scratch

We asked parents ***'What, if any, ingredients do you think children should limit in order to maintain good oral (dental) health?'*** and found whilst 62% knew that fruit juice needs to be limited, fewer realised that fruit puree (37%), vegetable juice (18%) and vegetable puree (6%) should also be limited in order to maintain good oral (dental) health.

PRODUCT SURVEY

We surveyed baby and toddler breakfast items located in the baby aisle (see Appendix 1 for inclusion criteria), including porridge, cereal, muesli and baby rice, examining their nutrition content, labelling, and nutrition and health claim messages.

There are other foods available for babies and toddlers, and this category was chosen in line with our commitment to explore the availability and affordability of healthy nutritious foods for infants and toddlers. Previous research has looked at the sugars content of fruit snacks and baby and toddler sweet snacks [19, 20].

Methods

Data Collection

10 major retailers were visited in August 2022 (Aldi, Asda, Boots, Lidl, Marks & Spencer's, Morrisons, Sainsburys, Tesco, The Co-operative, Waitrose & Partners). Data was collected directly from the products using the FoodSwitch Data Collector App [21], and their nutrition, ingredients, health and nutrition claims, and price was inputted onto the FoodSwitch Database. All companies were approached in October 2022 and given the opportunity to verify the data.

Data Analysis

Analysis was conducted of the sugars content, per 100g and per serve, ingredients, and nutrition and health claims.

Products were categorised to allow for reasonable comparisons. Products were a mix between ready to eat meal items, and dried versions that required additional preparation with baby's usual milk or water. The data used for sugars per serve related to either the serving as suggested on pack, unprepared, or the entire contents of a ready to eat pouch/jar unless otherwise specified.

Table 1. Baby and Toddler Breakfast Categories included in this report

Category	No. Products
Porridge	37
Cereal	10
Muesli	4
Ambient Yogurt Based Products	35
Baby Rice	11

RESULTS

- **Some products contain up to 14.5g of sugars per serve but there are large variations in sugars content proving that reductions are possible**
- **The majority (70%) of products are flavoured with fruit, thereby overexposing children to sweet tastes**
- **Over three quarters claim to have 'no added sugars' or 'only naturally occurring sugars' despite many containing sugars from fruit juices, concentrates and purees**
- **16 products declare they are suitable from 4+ months, contradicting public health guidance**
- **Unprocessed, less sweet foods from outside the baby aisle can be cheaper to buy**

SUGARS

The sugars declared on the nutritional tables of food and drink products are 'total sugars'. These include fruit, vegetables, dairy and added sugars such as honey, table sugar and fruit juices. The sugars particularly harmful to health are known as 'free sugars'. These sugars have been defined by Public Health England (PHE) following the recommendation of the Scientific Advisory Committee on Nutrition (SACN) 2015's report on **Carbohydrates and Health** (Figure 1).

Figure 1. Summary of the types and sources of sugars included and excluded from the definition of free sugars from 'A definition of free sugars for the UK, Swan et al.'xix

Included in the definition of free sugars	Excluded from the definition of free sugars
All added sugar in whatever form, including honey, syrups and nectars whether added to products during manufacture or by the consumer during cooking or at the table. This includes ingredients such as malt extract and glucose syrup	Ingredients not included in the definition of sugar used for nutrition labelling, that is, monosaccharides and disaccharides
	Maltodextrins, oligofructose and sugar substitutes such as polyols (sorbitol) are excluded from the definition
Lactose and galactose added as an ingredient to foods or drinks, including lactose in whey powder added as an ingredient	Lactose and galactose when naturally present in milk and dairy products including milk powder
All the sugars naturally present in fruit and vegetable juices, concentrates, smoothies, purées, pastes, powders and extruded fruit and vegetable products	All the sugars naturally present in fresh and most types of processed (dried, stewed, canned and frozen) fruit and vegetables (including beans and pulses) except for juices, smoothies, purées, pastes, powders and extruded products
	Sugars naturally present in puréed and powdered potatoes and other starchy staples
All sugars in drinks except for milk and other dairy-based drinks. Including: • all sugars in unsweetened fruit and vegetable juices, fruit and vegetable juice concentrates and smoothies; • all sugars in alcoholic drinks; • all sugars naturally present in dairy-alternative drinks such as soya, rice, oat and nut-based drinks	Lactose and galactose naturally present in milk and other dairy-based drinks
	All sugars naturally present in cereal grains including rice, pasta and flour regardless of processing (other than cereal-based drinks)
	All sugars naturally present in nuts and seeds regardless of processing (other than nut-based drinks)

Many of the products surveyed contain a mixture of sources of sugars, including lactose from yogurt and milk powder which are not considered free sugars. Free sugars are not currently declared on nutrition tables in the UK. Based on the information provided on packaging, we are unable to accurately estimate the free sugars content of these products. Therefore, for reporting purposes we will be referring to the 'total sugars' in these products unless otherwise specified.

Calculating free sugars

We contacted manufacturers and asked for clarification and details of the free sugars content in their products, with a view to use this information over the 'total' sugars declared on pack.

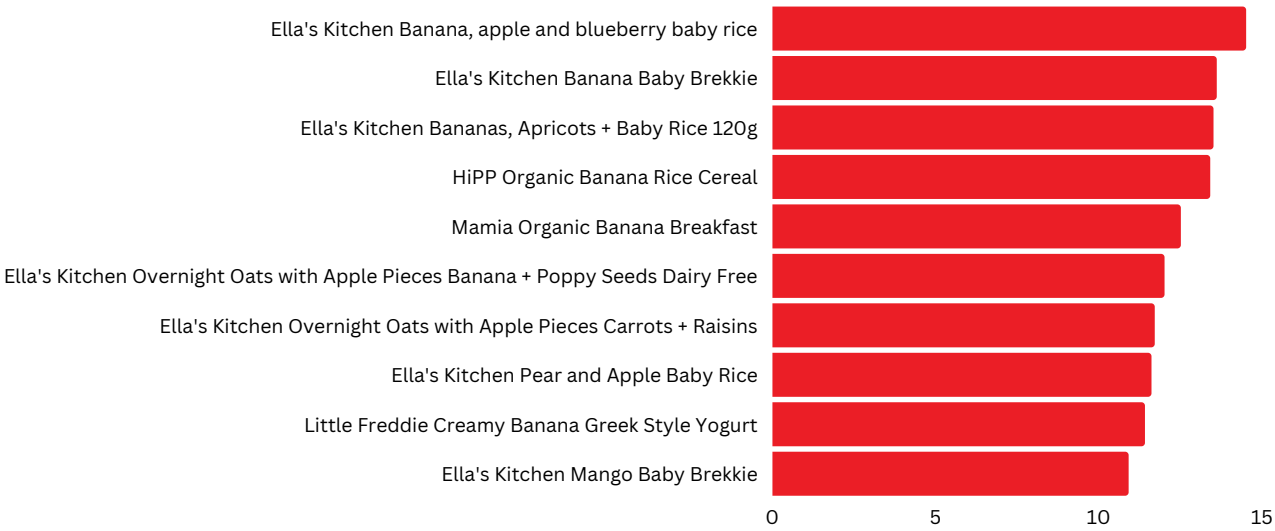
Responses varied and gave us an insight into the complications and barriers in obtaining this information:

- One manufacturer's supplier declared there were no free sugars in their products despite containing processed fruit
- Some expressed their concern over inconsistencies in calculating free sugars content
- Some had not calculated the free sugars content and/or did not want to share the data
- Just two manufacturers, ***Ella's Kitchen*** and ***Little Freddies***, we were able to provide us with the free sugars information, and from the information received, confirmed lactose contributed just a small percentage of sugars to these products

Sugars per 100g / per serve

The sugars content of the products surveyed ranged from <0.1g to 14.5g per serve and 0.3g to 33.9g per 100g. Ella's Kitchen dominated the top 10 highest sugar products (Figure 2), and all 10 products contained 'added' sugar in the form of processed fruit, meaning the total sugars in most of these products are likely 'free sugars'.

Figure 2. Top 10 Surveyed Baby and Toddler Breakfast Items with the Highest Total Sugars Per Serve



Three products also contained sugar from lactose in milk or yogurt ingredients. Table 2 gives an estimated calculation of what the free sugars content of these three products would be, taking into account the sugars from lactose. Even with the recalculations, these products would still remain in the top 10 highest sugar per serve, and shows that only a small amount of sugars come from lactose.

Table 2. Estimated calculation of three of the products in the top 10 highest total sugars per serve that contained lactose

Product	Dairy ingredient	Total sugars per serve (g)	Estimated free sugars per serve (g)
Ella's Kitchen Banana Baby Brekkie	41% Whole Milk Natural Yogurt [23]	13.6	12.0
Mamia Organic Banana Breakfast	41% Natural Yogurt	12.5	10.9
Ella's Kitchen Overnight Oats with Apple Pieces Carrots + Raisins	35% Whole Milk [24]	11.7	10.1*

*Ella's Kitchen shared their free sugars information and for this product calculated it to have 8.2g/serve

Variations in Sugars Content

The variation in sugars content of similar products (Table 3) shows that lower sugars versions are possible, making the case for reformulation.

Table 3. Examples of baby and toddler breakfasts with highest and lowest levels of sugars per serve

Product Name		Sugars / Serve (g)
Flavoured Baby Rice		
Highest	Ella's Kitchen Banana, Apple and blueberry Baby Rice	14.5
Lowest	Ella's Kitchen Pear and Peach Baby Rice Pouch	10.0
Prepared Flavoured Porridge		
Highest	Ella's Kitchen Overnight Oats with Apple Pieces Banana + Poppy Seeds Dairy Free	12.0
Lowest	Ella's Kitchen Dairy Free with Coconut milk pear and fig porridge	7.3
Yogurt Based Breakfast (Fruit Flavoured)		
Highest	Ella's Kitchen Banana Baby Brekkie	13.6
Lowest	Little Freddie Creamy Pink Lady Apple Greek Style Yogurt Pouch	5.3

Nestle, Aptamil, Cow & Gate, Organix and Sainsburys had lower sugar products in their portfolio averaging 1-5g total sugars per serve (Table 4). Noticeably, the brands with lower average sugars mostly consist of cereals and porridges that require some form of additional preparation compared to the other brands with more ready to eat pouches and jars in their portfolio.

Table 4. Average Sugars per Serve per Brand

Brand	No. Products	Average Sugars Per Serve (g)
Ella's Kitchen	17	9.0
Mamia	5	8.8
Little Freddie	6	8.7
Piccolo	2	8.1
Heinz	10	7.9
Asda	2	7.7
Babease	6	7.4
HiPP UK	11	6.9
Aptamil	8	4.6
Nestle	5	4.5
Cow & Gate	9	4.4
Organix	8	3.2
Sainsburys	3	1.1
Milupa	5	Not Available

INGREDIENTS

There was a noticeable difference in sugars content of unprepared vs ready to eat options and flavoured vs plain options (Table 5). Noticeably, there were no unflavoured options available for prepared baby rice, ambient yogurt-based items or muesli. Outside of the baby aisle, parents and caregivers can buy plain versions of porridge oats, wheat or oat style cereals and yogurts and add unprocessed fruit which would significantly reduce, or even eliminate, the free sugars content.

Table 5. Average sugars per serve per sub-category

Sub-Category	Average Sugars Per Serve (g)
Unprepared Plain Baby Rice	<0.1
Unprepared Flavoured Baby Rice	0.5
Unprepared Plain Cereal	3.1
Unprepared Flavoured Porridge	4.7
Unprepared Flavoured Cereal	4.7
Ready to Eat Plain Porridge	4.8
Unprepared Muesli	5.0
Unprepared Plain Porridge	5.4
Ready to Eat Yogurt Based Breakfast	8.7
Ready to Eat Flavoured Porridge	10.3
Ready to Eat Baby Rice	12.6

Two thirds of the products surveyed used processed fruit and/or vegetables, with the most common flavour found in these baby and infant products being fruit (70%). By comparison, only 6% used vegetables as a flavour [25, 26]. The products containing the highest amount of sugars per serve (Figure 2) were all ready to eat products that used between 50% and 97% fruit puree as their main ingredient, 7 of which contained banana, a particularly sweet fruit.

Fruit and vegetables provide a variety of essential vitamins and minerals, however, the processed fruit and vegetables used in these products should not be compared to whole versions. Processed fruits have a reduced fibre content, have a less authentic taste and contain free sugars [27, 28]. Preparing fruit and vegetables at home that is suitable for baby through cooking and mashing, does not release the sugars in the same way highly processed fruit/vegetables do in these products.

The overuse of fruit in baby and toddler foods regularly exposes them to unnecessarily sweet foods, reinforcing their innate preference for sweet flavours and likelihood of continuing to prefer a sweet diet into childhood, adolescence and adulthood [29].

The use of vegetables rather than fruits as a flavour in products provide an option to significantly lower the sugars content compared to fruit only products and is an option for reformulation. However, processed vegetables are still a source of free sugars and therefore percentage of processed vegetable used still needs to be low

Babease Simply Smooth Avocado Breakfast with Yogurt, Spinach & Oats **(3.5g sugars per serve**)

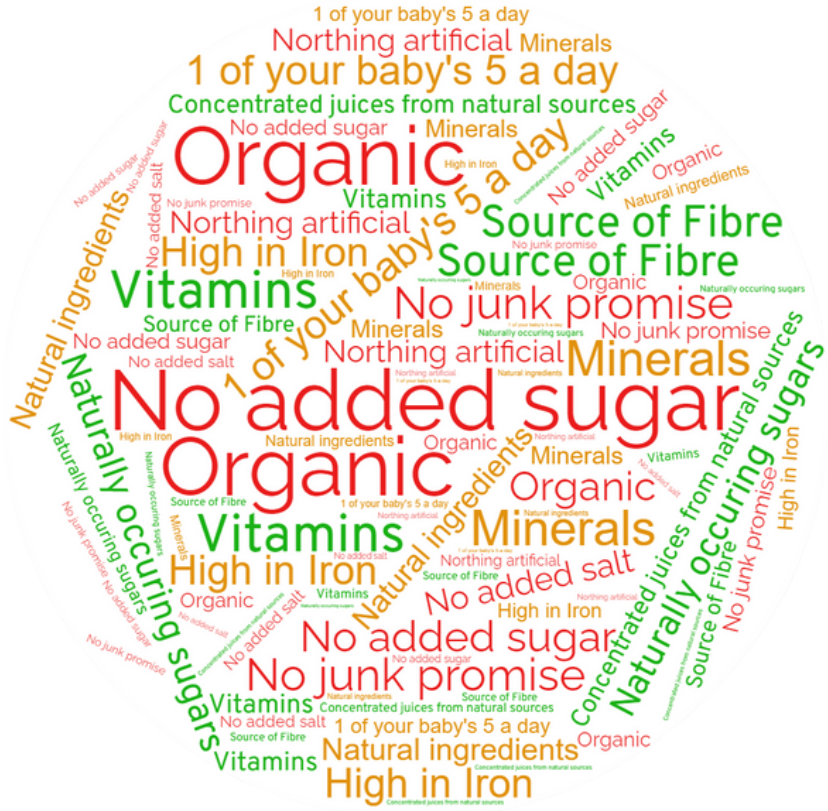
Reducing the percentage of processed fruit and vegetables as an ingredient can drastically cut the amount of sugars by half

HiPP Organic Banana Yogurt Breakfast, 6.9g/100g uses around 40% less banana than **Ella's Kitchen Banana Baby Brekkie**, 13.6g/100g

The majority of these baby and toddler breakfast items contain several different types of sugars, namely fruit, but also honey (***Nestle Cerelac Honey & Wheat with Milk)*** and sugar in itself (***Heinz By Nature Creamed Porridge)***. Some also include lactose, maltodextrin and oligosaccharides, which are not included in the definition of free sugars. They will however, alongside free sugars, contribute to the overall sweetness of the product, reinforcing babies and toddlers innate preference for sweet foods [30].

LABELLING

The overuse of health/nutrition claims is evident in the baby and infant food and drink market [31]. All of the products surveyed for this report displayed at least one of these 'health halo' statements on-pack, which is thought to encourage consumers to overestimate the healthiness of an item as they assume it means that the product is healthy overall [32].



Over three quarters of the products surveyed displayed a 'No Added Sugar' or 'Naturally Occurring Sugars' claim on pack. Manufacturers are legally able to use such claims under the EU Regulation (EC) 1924/2006 [33], which excludes sugars found naturally occurring in processed fruit or vegetables in their definition of added sugars [34]. This is concerning considering the use of these claims on products which still contain free sugars, causing confusion and misleading parents into believing these products contain no sugar, and that the product is healthy [32, 35].

Heinz By Nature Creamed Porridge contains plain sugar as an ingredient and uses the claims 'Only Natural Ingredients' and 'Sugar from a natural source'. These are not listed as legally permitted claims [33].

The World Health Organization states:
"Promotional claims idealize the product, imply that it is better than family foods, and mask the risks. Promotional claims put unprocessed family foods at a disadvantage. Nutrition and health claims shall not be permitted for foods and infants and young children except where specifically provided for in relevant Codex standards or national legislation." [36]

AGE SUITABILITY

In the UK, it is recommended that complimentary feeding starts after 6+ months of age when the baby is showing signs of readiness. However, several infant feeding companies still declare some of their products are suitable from 4+ months. This contradicts UK public health guidance [37] and creates inconsistent messaging for families looking for information on the introduction of solid foods.

Of the 16 breakfast products that declare they are suitable from 4+ months (Table 6), 10 were baby rice, a product described by infant feeding companies as 'perfect for first tastes' [38] or 'perfect puree for the start of your little foodies weaning journey'[39].

Table 6 Brands with products labelled as suitable for 4+ months

Brand	No. Products
Nutricia	6
Ella's Kitchen	5
HiPP Organic	2
Milupa	1
Sainsburys	1
The Kraft Heinz Company	1

There is often a misconception that a baby's weaning journey needs to start with baby rice, and some introduce it before 6 months as a recommendation by a friend or family remember that moving onto solid foods will help their baby sleep better. The NHS states, however, that babies do not need baby rice for either of these reasons [40].

Despite being marketed as suitable for first tastes, these products seem to be the least appropriate, containing the highest sugars per serve and second highest sugars per 100g.

PACKAGING

The convenient nature of pouches shows in the popularity of their use in ready to eat products, with over 70% of the prepared products in our survey being in a pouch. Many manufacturers now display a feeding suggestion such as 'Squeeze me into a bowl of straight onto a spoon', however, 30% of the children from our opinion poll were found to consume the product straight from the pouch. This means the product, often high in sugars, spends more time in contact with the baby's teeth, increasing the risk of tooth decay.

PRICE

These products ranged from £0.02 - 1.50 per serve, with an average price per serve being £0.65. Whilst these products are convenient, they are not necessarily good value for money, with ready to eat products costing more per serve (£1.07) compared to unprepared products (£0.27).

Often, it is cheaper to buy unprocessed, less sweet foods from outside of the baby aisle (Table 7).

Table 7 Examples of suitable and more affordable products for baby and infants outside of the baby aisle

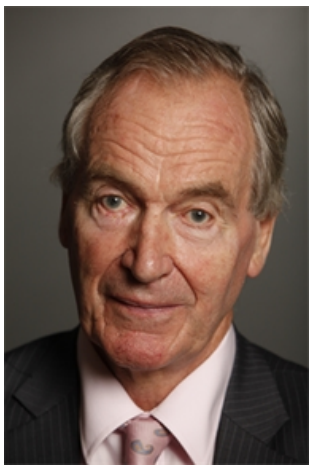
Category	Product Name	Product Size	Servings	Price	Price per Serve
Porridge	Heinz First Steps Baby Porridge	240g	12 (20g)	£3.00	£0.25
	Supermarket Own Brand Porridge Oats	1000g	50 (20g)	£1.25	£0.03
Yogurt	Little Freddie Creamy Banana Greek Style Yogurt	100g	1 (100g)	£1.30	£1.30
	Supermarket Own Brand Full Fat Greek Style Yogurts	4 x 100g	4 (100g)	£1.10	£0.28

Zoe Davies (ANutr), Nutritionist at Action on Sugar

"This survey has shown that there is an overwhelming number of products that taste too sweet and contain too much sugar, especially since this age group is recommended to avoid eating food with added sugar including sugar from fruit juices, concentrates and purees. Parents put their trust in these companies to produce healthy age-appropriate meals for their babies but are misled by clever marketing and misleading claims dominating product packaging. The baby aisle should be seen as a safe space for parents and carers to go to for food that is suitable - not only texture wise, but nutritionally as well."

Hattie Burt (ANutr), Policy and Communications Officer at Action on Sugar

"Without clear guidance and regulation, the baby and infant food industry remains a Wild West, putting the health of our future generations at risk. It's clear the food industry can do more to support parents in making the best food choices for their children, but they won't do this without government leadership. We urge the Health Minister Steve Barclay to publish and mandate the Commercial baby food and drink guidelines without further delay."



Professor Graham MacGregor, Professor of Cardiovascular Medicine at Queen Mary University of London and Chairman of Action on Sugar

"It's a scandal that certain food companies are being allowed to peddle their high sugar products to parents with very young children – despite being aware that babies and toddlers shouldn't be having any added sugar at all. An unhealthy diet, high in saturated fat, salt and sugar, and low in fruit and vegetables, is the biggest cause of death and disability globally and costs the UK alone more than £100 billion annually. Our children should not have to suffer unnecessarily from this. Manufacturers should act responsibly and commit to reducing sugar, salt and calories instead of foisting unhealthy products with misleading nutrition claims upon well-meaning parents."

ENGAGING WITH FOOD COMPANIES

We contacted all 13 companies included in this survey in October 2022 to discuss sugar reformulation experiences within this category, asking about any successes, challenges and future reformulation plans.

We received written correspondence from all apart from Piccolo and The Kraft Heinz Company, and met with three companies prior to the release of this report.

While we have been asked to keep most details confidential, we can share some key themes from our correspondence:

- **There seems to be a desire for a legal definition of 'free sugars' to avoid the confusion between 'added' and 'free sugar'**
- **There was some confusion among suppliers on the term 'free sugars', and some were either unaware of the free sugars content of their products or were unsure how to calculate them**
- **One company expressed their support for the release of commercial baby food and drink guidelines**
- **Many are reformulating their products, especially those higher in free sugars derived from fruit**

"At Ella's Kitchen, we take sugar reduction very seriously while maintaining the taste that little one's love. For many years, we have been reducing sugar, for example by using lower sugar fruits and reducing fruit content in our Baby Rice and Baby Brekkie products. We have also introduced lower sugar products over time to reduce the average sugar content of our range. We never add sugar to any of our pouches and the sugar content comes naturally from fruit puree, powder and yoghurt as well as dried fruit pieces. We also use fruit as a preservative, by virtue of its naturally acidic nature so a certain proportion of fruit (and a tiny squeeze of lemon juice) is necessary to keep our products safe."

"At Babease we take infant nutrition very seriously and always consider Department of Health recommendations when developing our products. That's why we always prioritise vegetables in our pouches and don't produce any pouches containing 100% fruit.

We understand that when fruit is pureed, whether at home or commercially, the sugars contained naturally in fruit are classified as 'free sugars'. Because of this we always combine blended fruit with vegetables, yoghurt and/or grains. Meaning none of our pouches have a high sugar content.

We are also proud to be transparent with our packaging and always list ingredients in weight order on the front of our packs as well as including an ingredient wheel on the back of the pack. This allows consumers to see, at a glance, what ingredients are included and in what quantities. We also make it clear that the food should be squeezed into a bowl and served with a spoon instead of sucking directly from the pouch."

""At Little Freddie we do not use the claim 'no added sugar' on any of our yoghurts, this is against PHE guidance which we are fully compliant with. We believe our Greek style yoghurt pouches are a great example of offering a balanced and responsible choice for children. We avoid juice concentrates, refined sugars and try to use fruit combinations that are lower in sugar.

Our yogurts are a great source of calcium and fat – making them a good addition to any weaning journey. Our nutritionist, Rhiannon Lambert, has commented on this below:

Natural sugars, found in food such as fruit, are an important part of our diets as they provide not only energy but other nutrients as well. Fruit, which provides a main base for many baby food products, is full of essential vitamins and minerals, like calcium and vitamin C as well as fibre. These nutrients are needed to help the optimal functioning and development of your growing baby. Whilst we need to be mindful of our own and our child's daily sugar intake and despite its bad reputation in the media, scientists have not proved that sugar has a detrimental effect on our health when it is not part of a high-calorie diet. However, an over-consumption of sugar, particularly in children can lead to dental issues such as tooth decay.

Using fruit as the basis for baby food can mean that the sugar content is high. However Little Freddie will often use fruits such as raspberries, that are naturally lower in sugar compared to perhaps strawberries. Given the natural sugars that occur in fruit it can be quite difficult to ensure that the sugar content doesn't become too high, therefore Little Freddie avoid fruit juice concentrates and refined sugars to help keep the sugar content low.

When looking at food labels, pay attention to the amount of "added" or "free" sugars in the product, as these have little to no nutritional benefit and when consumed in excess may be linked to negative health outcomes. It's also important to note that not all baby food pouches are high in sugar or contain foods which may increase its sugar content. For example, there are lots of vegetable-based options that still provide the essential vitamins, minerals, and fibre needed.

I would always recommend for your baby to not promote sucking from the pouch, as preventing this can help reduce tooth decay in children. Encouraging your child to eat from a bowl or a spoon also helps them to build a positive relationship with food and develop life skills such as using cutlery in the early stages of weaning. Little Freddie promotes this by having 'best fed from a spoon' on all pouches.

Yoghurt is an important source of calcium, helping to support bones and teeth, and protein for growth and development. Little Freddie's Greek yoghurt is made with organic whole milk, which has a higher fat content and is perfect for babies. It is also a source of iodine which is crucial for healthy cells and metabolic rate, as well as vitamin A which helps support healthy vision and the immune system. Delicious and nutritious for breakfast and as it has no added sugar it balanced out well with fruit toppings."

RECOMMENDATIONS

There is currently a gap in legislation for baby and toddler foods & drinks and worrying reports of high obesity prevalence and tooth decay in children starting school. The data in this report signals a clear need for robust measures to incentivise the food industry to reduce sugar across any product marketed for babies and toddlers. The overdue government guidelines for baby & toddler products are desperately needed in order to guide manufacturers on how much sugars should be used; legislating these guidelines will ensure a level-playing field across the sector.

Government

- To urgently release the Commercial baby food and drink guidelines
- To initiate the legislative process to make these guidelines mandatory and create a level-playing field for the food industry
- To transparently monitor and evaluate food industry progress in improving commercial baby food and drinks, and implement further levers as necessary
- To include baby and infant food in the upcoming 9pm watershed, online advertising, place and promotions restrictions legislation

Food Industry

- To remove distracting and misleading marketing claims around 'no added sugar' on pack of products containing other sweetening ingredients such as fruit concentrates or purees which are defined as a free sugar and thus harmful to oral health
- To reduce the sugars content of any product intended for babies and toddlers
- To not recommend products as suitable for babies under 6 months
- To explore different packaging to avoid the use of pouches

Parents and Caregivers

- To limit consumption of processed foods as much as possible and choose low sugar breakfast items. Porridge, low sugar cereal and plain natural yogurt are great options for babies, with chopped fruit for extra flavour and nutrients.
- To watch out for ingredients in processed foods, such as fruit/vegetable juices, purees, concentrates and powders which include the type of sugars harmful to health
- Seek advice from trusted sources such as the NHS, Registered Nutritionists and
- Dietitians

Nurseries / Schools

- To only offer cereals that are low in sugar in nurseries and school breakfast clubs
- To offer a range of breakfast options including porridge and other sources of carbohydrates
- To offer whole fruit (or vegetables) with their breakfast
- To use plain yogurt instead of fruit flavoured yogurt

CONCLUSIONS

The use of processed fruit and vegetables for products marketed as suitable for those under the age of 2 years contradicts guidelines around free sugars intake for babies and toddlers. The use of misleading nutrition claims gives the impression that the product is healthy and appropriate for children, however our survey shows otherwise with many products containing excessive sugars for this age group [32].

For a busy parent, convenience is key. Manufacturers are therefore urged to make their products the healthiest they possibly can through reformulation. The variation in sugars content seen in these products, with commercially successful products containing much lower levels of free sugars, demonstrates it can be done.

What's clear is that without regulation, no amount of good-will will result in meaningful change. The Government must support all measures to provide a level-playing field, so that companies can lower the sugar levels in their products, allowing children to grow up enjoying less sweet foods.

The first years of life are among the most important for a child's development. We must therefore deliver from the start, with access to healthy, affordable and nutritionally appropriate food.

APPENDICES

Appendix I. Inclusion & Exclusion criteria

Inclusion	Exclusion
Baby and toddler breakfast products in the baby/infant isle of the supermarket • Ambient Yogurt Based Products • Baby Rice • Cereals • Muesli • Porridge	Baby and toddler breakfast products outside of the baby/infant isle of the supermarket

REFERENCES

[1]Sahoo K, Sahoo B, Choudhury AK, Sofi NY, Kumar R, Bhadoria AS. Childhood obesity: causes and consequences. J Family Med Prim Care. 2015 Apr-Jun;4(2):187-92. doi: 10.4103/2249-4863.154628. PMID: 25949965; PMCID: PMC4408699.

[2]National Child Measurement Programme 2022: https://www.gov.uk/government/publications/national-child-measurement-programme-operational-guidance/national-child-measurement-programme-2022-information-for-schools#overview-of-the-ncmp

[3]NHS Start for Life: Weaning. https://www.nhs.uk/start4life/weaning/

[4]Scientific Advisory Committee on Nutrition 2018. Feeding in the first Year of Life. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/725530/SACN_report_on_Feeding_in_the_First_Year_of_Life.pdf

[5] NHS Start for Life: What to feed your baby. https://www.nhs.uk/start4life/weaning/what-to-feed-your-baby/around-6-months/

[6] NDNS: results from years 9 to 11 (2016 to 2017 and 2018 to 2019) https://www.gov.uk/government/statistics/ndns-results-from-years-9-to-11-2016-to-2017-and-2018-to-2019

[7]National Child Measurement Programme, England, 2021/22 school year https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2021-22-school-year

[8]Local Government Association (2020): https://www.local.gov.uk/lga-nearly-180-operationsday-remove-rotten-teeth-children

[9] Public Health England. Food and drinks aimed at infants and young children: evidence and opportunities for action: Appendix 2. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812205/Foods_and_drinks_aimed_at_infants_and_young_children_Appendix_2.pdf

[10]Time to Solve Childhood Obesity. An Independent Report by the Chief Medical Officer, 2019 Professor Dame Sally Davies https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/837907/cmo-special-report-childhood-obesity-october-2019.pdf

[11]Government guidance National school breakfast club programme https://www.gov.uk/guidance/breakfast-clubs-programme-2021-2023

[12]Public Health England 2017. Sugar Reduction: Achieving the 20% A technical report outlining progress to date, guidelines for industry, 2015 baseline levels in key foods and next steps https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/604336/Sugar_reduction_achieving_the_20_.pdf

[13]Public Health England. 2019. Foods and drinks aimed at infants and young children: evidence and opportunities for action https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812204/Foods_and_drinks_aimed_at_infants_and_young_children_June_2019.pdf

[14]Department of Health & Social Care. 2019. Advancing our health: prevention in the 2020s – consultation document https://www.gov.uk/government/consultations/advancing-our-health-prevention-in-the-2020s/advancing-our-health-prevention-in-the-2020s-consultation-document

[15]Public Health England. 2020. DRAFT PROPOSALS: Commercial baby food and drink guidelines http://www.babymilkaction.org/wp-content/uploads/2020/11/DRAFT-PHE-proposals-for-2023-commercial-baby-food-and-drink-guidelines.pdf

[16]Office for Health Improvement & Disparities. Summary of draft report: Feeding young children aged 1 to 5 years https://www.gov.uk/government/consultations/feeding-young-children-aged-1-to-5-years-draft-sacn-report/summary-of-draft-report-feeding-young-children-aged-1-to-5-years

[17]European Commission Directive 2006/125/EC on processed cereal-based foods and baby foods for infants and young children (Codified version) https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32006L0125

[18]The research was conducted by Censuswide with 1004 UK Parents of children ages 6-36 months between 02.11.2022 - 03.11.2022. Censuswide abide by and employ members of the Market Research Society which is based on the ESOMAR principles and are members of The British Polling Council.

REFERENCES

[19] Action on Sugar 2021. Call for Removal of Misleading Sugar Claims on Baby & Toddler Sweet Snacks such as Biscuits and Rusks
https://www.actiononsugar.org/surveys/2021/baby--toddler-sweet-snacks/#d.en.929872
[20]Action on Sugar 2020. Experts Call for Honest Labelling on So-Called 'Healthy' Fruit Snacks Loaded with Sugars and Misleading Claims https://www.actiononsugar.org/surveys/2020/fruit-snacks-/
[21] FoodSwitch App. http://www.foodswitch.co.uk/
[22]A definition of free sugars for the UK. Swan et al. Public Health Nutrition. 2018. 21(9), 1636 - 1638. https://doi.org/10.1017/S136898001800085X
[23] Dairy yogurts contain approx. 3.8g per 100g of naturally occurring sugars (lactose) from cow's milk. PHE. Sugar Reduction: Achieving the 20%. 2017.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/604336/Sugar_reduction_achieving_the_20_.pdf
[24] Based on Tesco Whole Milk, Sainsburys Whole Milk and Cravendale Whole Milk there are 4.7g sugars per 100g.
https://www.sciencedirect.com/science/article/abs/pii/S095032931300044X
[25] Barends, C., de Vries, J., Mojet, J., de Graaf, C. 2013. Effects of repeated exposure to either vegetables or fruits on infant's vegetable and fruit acceptance at the beginning of weaning. Food Quality and Preference, 29(2):157-165.
https://doi.org/10.1016/j.foodqual.2013.03.008.
[26] Fildes A, Lopes C, Moreira P, Moschonis G, Oliveira A, Mavrogianni C, Manios Y, Beeken R, Wardle J, Cooke L. An exploratory trial of parental advice for increasing vegetable acceptance in infancy. Br J Nutr. 2015 Jul;114(2):328-36. doi: 10.1017/S0007114515001695. Epub 2015 Jun 11. PMID: 26063588.
[27] Garcia AL, McLean K, Wright CM. Types of fruits and vegetables used in commercial baby foods and their contribution to sugar content. Matern Child Nutr. 2016 Oct;12(4):838-47. doi: 10.1111/mcn.12208. Epub 2015 Aug 23. PMID: 26299640; PMCID: PMC6860076.
[28] First Steps Nutrition Trust. A review of commercially produced jars and pouches of baby foods marketed in the UK.
https://static1.squarespace.com/static/59f75004f09ca48694070f3b/t/5a93f885085229b264ff6086/1519646858256/Baby_Food_in_the_UK+_2017.pdf
[29] Velázquez, A. L., Vidal, L., Varela, P., & Ares, G. Sugar reduction in products targeted at children: Why are we not there yet? J Sens Stud. 2021; 36:e12666. https://doi.org/10.1111/joss.12666
[30]Ventura A.K., Worobey, J. Early Influences on the Development of Food Preferences. 2013. Current Biology Volume 23(9): R401-R408. https://doi.org/10.1016/j.cub.2013.02.037.
[31] Garcia AL, Menon R, Parrett A. Extensive use of on-pack promotional claims on commercial baby foods in the UK Archives of Disease in Childhood 2022;107:606-611.
[32] Public Health England. Foods and drinks aimed at infants and young children: evidence and opportunities for action.2019.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812204/Foods_and_drinks_aimed_at_infants_and_young_children_June_2019.pdf
[33] Legally permitted claims under the Great Britain nutrition and claims (NHC) register. https://www.gov.uk/government/publications/great-britain-nutrition-and-health-claims-nhc-register
[34] The EU Register of permitted nutrition claims.
https://ec.europa.eu/food/safety/labelling_nutrition/claims/register/public/?event=register.home
[35]Garcia AL, Menon R, Parrett A Extensive use of on-pack promotional claims on commercial baby foods in the UK Archives of Disease in Childhood 2022;107:606-611.
[36] World Health Organisation. 2017. Guidance on ending the inappropriate promotion of foods for infants and children. Implementation Manual. https://apps.who.int/iris/bitstream/handle/10665/260137/9789241513470-eng.pdf
[37] Disclaimer - Solid food may need to be introduced before the age of 6 months, however this should always by under health professional guidance who will be able to advise on the best first foods to offer.
[38] Ella's Kitchen i.e. banana multigrain baby rice https://www.ellaskitchen.co.uk/shop/banana-multigrain-baby-rice?pg=1
[39] HiPP Organic Banana Rice Cereal https://shop.hipp.co.uk/shop/hipp-organic-banana-rice-cereal-baby-food-jar-4-months-125g.html
[40] NHS. Your baby's first solid foods. https://www.nhs.uk/conditions/baby/weaning-and-feeding/babys-first-solid-foods/

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