

# Early Years Series: Report 3

## Technical Appendix

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## Scope of work

This report is the third and final report in a series that has progressed, stage-by-stage, through a child's early years. This report focused specifically on early years nutrition and diet and health inequalities in 1-5 year olds. It looks at the commercial baby and toddler food market, as well as food provision in childcare settings for under 5s. Furthermore, reflecting the fact children under 5 also consume family food beyond the commercial baby food aisle, wider considerations related to the nutritional quality, promotion and price of key categories of food from across the retail sector are also explored. The report focuses primarily on England, and policies that exist in England and the UK.

In addition to a literature review, the report draws on a range of new research commissioned by The Food Foundation for this report including:

- Citizen interviews, ActivMob CIC (pg. 4)
- Focus groups with childcare providers, Bremner & Co and Early Years Alliance (pg.5)
- Parent survey, You Gov Plc (pg.6)
- Claims on commercial baby and toddler snacks, Action on Salt and Sugar, Queen Mary University of London (pg. 7)
- Relative price of healthy and less healthy commercial baby and toddler snacks, University of Leeds (pg.11)
- Healthy Start value vs inflation, Imperial College London (pg.12)
- Proxy data on Free Early Years meals, Bremner & Co (pg.13)

## Literature review

To inform this report, we conducted a literature review exploring how the diets of babies and toddlers influence childhood obesity and the factors shaping their dietary behaviours. The review drew on a range of sources, including government policies and publications, peer-reviewed articles, and grey literature reports. During the writing process, we also conducted follow-up searches to identify any additional published reports or studies relevant to the scope of this work.

### The literature review covered the following key areas:

- *Public health recommendations on early years nutrition:* We examined public health guidelines and policies related to the nutrition of babies and toddlers, at the UK wide and within each of the devolved nations. This included official publications from the Department of Health and Social Care (DHSC), the Scientific Advisory Committee on Nutrition (SACN), and the National Health Service (NHS), alongside regional and global recommendations, such as those from the World Health Organization (WHO).
- *Health status and diets of young children:* To understand the current dietary landscape, we reviewed data on food and drink consumption, nutrient intakes, and status among babies and toddlers in the UK. This included evidence on how dietary patterns vary by socio-economic characteristics. The review primarily drew on the latest official report on Feeding Young Children aged 1 to 5 years (SACN, 2023)<sup>1</sup>.
- *Factors that shape parental food provision for babies and toddlers:* This included evidence identifying enablers and barriers perceived by parents and how external influences, such as marketing, impact feeding choices.
- *Challenges of food provision early years settings:* The review examined the barriers perceived by childcare providers to supply healthy and nutritious food within settings.
- *Commercial baby and toddler food:* This review covered regulations around commercial baby food marketed to young children, and evidence available on marketing practices and nutritional composition of these products.
- *Policy recommendations:* We examined policy recommendations from leading organisations advocating for improved early years nutrition. This included reports and position statements from First Steps Nutrition Trust, Obesity Health Alliance, Action on Salt and Sugar, The Children's Food Campaign, Early Years Alliance, and London Early Years Foundation.

<sup>1</sup> <https://assets.publishing.service.gov.uk/media/662a4a4d690acb1c0ba7e616/SACN-Feeding-young-children-aged-1-to-5-full-report-revised.pdf>

## Citizen interviews

### Contributor:

ActivMob CIC

### Method:

An independent qualitative study was commissioned by The Food Foundation and undertaken by ActivMob CIC, a social enterprise, working within communities, using asset-based methodologies. In depth 1-2-1 interviews were conducted with participants, with a topic guide used for each interview. The research questions were developed by ActivMob CIC in collaboration with The Food Foundation and the project advisors. ActivMob then co-created the topic guide with families to ensure we ask the right questions in the right way, capturing what truly matters to them.

### Sample:

Participants were recruited in Kent, London, Manchester and Cornwall to secure geographical diversity, working with trusted community assets to engage and recruit participants, ensuring reach, credibility, and meaningful participation. The selected participants included 10 parents with an age range of 19-45. Additional characteristics of the sample included:

- Age ranges of children: Participants with children aged 1-2 years old (n=7), Participants with children aged 3-4 (n=6), participant with children aged 5 (n=1)
- Benefit recipients: In receipt of universal credit (n=8), have or currently do receive Healthy Start (n=6)

ActivMob also developed two case studies with families involved in the study, providing deeper insight into two key themes: 1) the challenges families face and 2) the impact of marketing pressures

## Focus groups with childcare providers

### Contributor:

Bremner & Co and Early Years Alliance

### Method:

The Food Foundation commissioned the Early Years Alliance and Bremner & Co to organise and facilitate two focus groups with childcare providers to enrich the findings of the research. The aim of the focus groups was to understand, from the participants' perspectives, what the barriers and opportunities are for delivering healthy food to under-fives in early years settings. Two 2-hour focus groups with early years settings were conducted, following a semi-structured approach. The discussions were analysed under key themes that emerged from the groups.

### Sample:

Participants were recruited by through the Early Years Alliance's network. A total of 15 participants attended across the two focus groups, representing state-maintained settings (n=3), PVI's (n=7) and childminders (n=3). One session was also attended by an early years consultant. Participants were drawn from a diversity of settings from urban and rural, and disadvantaged and affluent areas. Participants also represented settings offering varied meal or snack provisions. Informed consent was secured from all participants and their comments are cited according to their setting type.

## You Gov Survey of parents

**Contributor:**

You Gov Plc

**Method:**

The Food Foundation commissioned You Gov to undertake a survey of parents with children aged 1-4 years, to better understand their experiences of feeding their child, in particular focused on the barriers to providing a healthy and nutritious diet and their experience of food in childcare.

**Sample:**

The total sample size was 1000 parents of children aged 1-4 years. Fieldwork was undertaken between 24<sup>th</sup> to 31<sup>th</sup> March 2025. The survey was carried out online.

## Claims on snacks marketed to babies and toddlers

### Contributor:

Action on Salt and Sugar, Queen Mary University of London

### Method:

Action on Salt and Sugar collected data on baby and toddler snacks including nutritional content and claims on packaging. All products were initially collected in store and assessed against the inclusion and exclusion criteria.

#### *Inclusion criteria:*

- Incomplete meals often consumed on the go or in between meals, e.g. biscuits, bars, fruit-based snacks
- Located in the baby food aisle
- Products that have an age guidance on them for 4-36 months

#### *Exclusion criteria:*

- Snacks advertised for children without an age guidance
- Yogurts

Products were collected between January and April 2024 from Aldi, Asda, the Co-operative, Iceland, Lidl, Marks and Spencer's, Morrisons, Sainsbury's, Tesco and Waitrose.

A total of 136 snacks met the inclusion criteria, of which, 113 snacks had complete, readable photos of the full packaging.

The packaging was assessed for nutrition, health and marketing claims, and 2232 claims were identified across the 113 snacks- an average of twenty claims per product.

The claims on the packaging were classified using the [WHO's Nutrient and Promotion Profile Model \(NPPM\) for promoting products for infants and young children aged 6–36 months](#) (see Table 1). The NPPM's promotional requirements aim to improve messaging for caregivers by clarifying product age suitability, improving product naming, warning about high sugar content, and restricting health, nutrient, and marketing claims.

According to the WHO:

- **Nutrition claim** means any representation which states, suggests or implies that a food has nutritional properties, including but not limited to the energy value and the content of protein, fat and carbohydrates, as well as the content of vitamins and minerals.
- **Marketing claim** is defined as product promotion, distribution, selling, advertising, product public relations and information services.

- **Health claim** means any representation that states, suggests or implies that a relationship exists between a food (or a constituent of that food) and health.

Nutrition information was gathered for products that met the inclusion criteria and were available for sale at the time of collection. Sugar content is total sugars i.e. any added, free or naturally present sugars. Most of the sugars in these products are likely to be free sugars. 'Free' means that they are sugars not contained within a cell structure, and consuming too much can cause tooth decay.

There is no front-of-pack colour coding criteria specifically for baby foods. Therefore, the standard criteria, based on adult recommendations, has been used. It is important to note that the maximum amount that is healthy to consume is far less for children, especially infants, than for adults. Front-of-pack nutrition label thresholds are based on total sugars per 100g and are based on guidelines for total sugar intake among adult women. For the reasons exposed above, sugar per portion, free sugars and specific sugar recommendations for children are not taken into consideration and thus these figures likely underestimate the concerning level of sugar.



## TECHNICAL APPENDIX: FUELLING THE FUTURE: ADDRESSING BARRIERS TO GOOD NUTRITION IN THE EARLY YEARS

Prohibited compositional, health and marketing claims on promotional materials (pack labels and other marketing materials) by WHO		
Category	Subcategory	Details / Examples
Composition and nutrition claims	Statements relating to the presence or absence of ingredients generally perceived to be harmful or beneficial	“no...”, “no added...”, “low in...” [sugar, salt, condiments, artificial flavour/colour, maltodextrin, modified starch, additives/preservatives, GMO, junk, etc.] “contains only naturally occurring...” [sugars, salt, etc.]
	Statements relating to the natural or healthful nature of ingredients	“contributes one of your five-a-day [fruit/vegetables]” “contains three types of vegetables”, “contains vegetables” “organic food”, “natural”, “fresh”, “100% natural”, “real fruit/vegetables”
	Statements implying nutritional idealism, high nutrient content or presence of nutrients generally not considered in home-prepared foods	No product should imply that commercial foods are nutritionally superior to home-prepared foods or otherwise undermine important public health recommendations. for example: “nutritionally balanced”, “perfect/unique balance of vitamins/minerals”, “ideal nutrients”, “provides good nutrition to children” “contains...” “a source of...” [minerals, vitamins, iron, vitamin B1 , a host of nutrients, dietary fibre, omega-3, probiotics, prebiotics, protein, amino acids, phospholipids, DHA, carbohydrate, arachidonic acid, etc.]
Health claims	Statements relating to beneficial health or development resulting from the food or ingredients	“good for...”, “supports...”, “improves...”, “...needed for...” [healthy growth, development, digestion, appetite, learning to chew, learning to hold, constipation, defecation, bones and teeth, enteric flora, the brain, eyes, vision, skin health, thyroxine synthesis, red blood cell synthesis, preventing iron deficiency anaemia, collagen synthesis, metabolism, cognitive development, immune system etc.]
	Statements relating to the general healthful nature of ingredients or recipes	“healthy” “goodness of cereals”, “extra goodness with wholegrain oats”, “infant cereal is the ideal foundation to a healthy and balanced diet”, “perfectly balanced to support growth” “draws inspiration from the Mediterranean approach to health and well-being”
Marketing claims	Statements relating to ideal taste	“delight for tiny taste buds/tiny tummies”, “tasty/yummy/delicious”, “suitable for picky eaters”, “in my home the whole family loves them”, “my flavours are a new journey for tiny taste buds”, “exotic dishes are full of variety and flavour”, “simple flavour”
	Statements relating to high product quality	“picked at the peak of ripeness”, “bursting with goodness and flavour”, “individually steam cooked”, “we use over 27 different fruits and vegetables”, “we only use specially selected ingredients”
	Statements relating to ideal food texture	“smooth”, “no bits/chunks”, “easy-to-swallow texture that is great for helping your little one as they start to explore solid foods”, “perfectly smooth texture has been specially developed as an ideal first weaning food” “I’m textured”, “yummy crispy bits will encourage your baby to begin to chew”, “ideally suited to promote exposure to textures”
	Statements relating to convenience or lifestyle	“convenient”, “great for a busy and active life”, “ideal for breakfast or meals on the go”, “simply to top up between meals” “great way to make fruit fun” “closest thing to homemade with all of the goodness and none of the guilt”

## TECHNICAL APPENDIX: FUELLING THE FUTURE: ADDRESSING BARRIERS TO GOOD NUTRITION IN THE EARLY YEARS

	Statements conveying ideals on optimum feeding	<ul style="list-style-type: none"> <li>• “making the right feeding choices for you and your baby”</li> <li>• “helps to build confidence and enjoyment with food”</li> <li>• “we’ve been pioneering research into infant and toddler nutrition for over 50 years to help you give your baby the best start in life”</li> <li>• “carefully prepared by our baby-food experts”</li> <li>• “grown by farmers we know and trust”</li> <li>• “nothing unnecessary”, “no junk”, “nothing nasty”</li> <li>• “encourages self-feeding”, “perfect for small hands”</li> <li>• “perfect/ideal/optimum... way to feed/introduce foods”</li> <li>• “breakfast is one of the most important meals of the day”</li> <li>• “we guarantee our products provide the best possible start for your baby”</li> </ul>
	Statements encouraging dismissal of public health recommendations,	<ul style="list-style-type: none"> <li>• “the government advises that you don’t need to wean your little one until they are 6 months old. Every baby is different!”</li> <li>• “the Department of Health and the World Health Organisation recommend exclusive breastfeeding for the first six months. However, if you choose to wean earlier, our ingredients are suitable from 4 months”</li> <li>• Any text or other representation that is likely to undermine or discourage breastfeeding, or that makes a comparison to breastmilk or that suggests that the product is nearly equivalent or superior to breastmilk;</li> </ul>
	Statements/labels implying product or brand support from experts and trustworthy or influential individuals, groups or organisations	<p>No product should convey an endorsement or anything that may be construed as an endorsement by a professional or other body, unless this has been specifically approved by relevant national, regional or international regulatory authorities. For example:</p> <ul style="list-style-type: none"> <li>• “quality approved by Mums”</li> <li>• “approved by nutrition experts/celebrities”</li> <li>• “endorsed by paediatricians/national child’s association”</li> </ul>
	Statements conveying other idealistic or charitable attributes of the product or brand	<ul style="list-style-type: none"> <li>• “committed to giving 10% of profits to help fund food education charities”</li> <li>• B corporation certification, Hain Celestial or other corporate certification implying superior or other ethical or charitable brand attributes and unrelated to product nutrition or content</li> </ul>
<b>Allowed promotional messages (packs, labelling and marketing) by WHO</b>		
No compositional, nutritional, health or marketing claims	Statements relating to common allergens	(such as containing or being “free from... [gluten, dairy/lactose, or nuts]” etc.)
	statements relating to religious or cultural requirements	(such as “meat-free”, “vegetarian”, “contains meat”, “Kosher”, “Halal”, etc.)
	descriptive words may be used within the ingredient list	(such as “organic carrots” and “wholegrain wheat flour”)
Promotion and protection of breastfeeding	Statement on the importance of continued breastfeeding for up to two years or beyond and the importance of not introducing complementary feeding before 6 months of age	<p>“Breastfeeding is recommended for at least the first two years of life. Complementary foods should not be introduced before six months of age.”</p> <p>“Our products are designed to complement your baby’s diet after six months.”</p>

## Relative price of healthy vs less healthy commercial baby and toddler snacks

### Contributor:

University of Leeds

### Data sources:

Threapleton D, Morpeth A, Cade J. Commercial Baby Foods In Crisis: Addressing Health, Marketing and Inequalities. 2025.

### Methods:

- Using data from 132 snack products identified in a review of baby and toddler foods on sale in the 5 largest UK grocery retailers in 2024
- Product evaluations have been made against the WHO Nutrient & Promotion Profile Model (NPPM)<sup>2</sup>.
- NPPM pass rates (pass percents) were generated based on assessment of each NPPM criterion, looking at the pass score and potential maximum score for each product, based on product characteristics:
  - Nutrient NPPM score
  - Marketing NPPM score
  - Overall NPPM score (nutrient + marketing scores)
- Statistical tests (Ttests) were performed to explore statistically significant differences in price for 'higher' or 'lower' scoring products (divided into 2 categories at the mean value)

*Note - as the comparison was within the baby food snack category (e.g. comparing like for like products) per 100g comparisons have been used. This differs to the data used for Broken Plate where a basket is compared, and therefore per calorie data is used<sup>3</sup>.*

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<sup>2</sup> World Health Organization European Region. Nutrient and promotion profile model. Supporting appropriate promotion of food products for infants and young children 6-36months in the European Region. 2022. Available at: <https://iris.who.int/bitstream/handle/10665/364678/WHO-EURO-2022-6681-46447-67287-eng.pdf>

<sup>3</sup> <https://www.tandfonline.com/doi/full/10.1080/19320248.2015.1095144#d1e566>

## Healthy Start Price change VS CPI

### Contributor:

Imperial College London

### Data sources:

All methods sourced from:

<https://researchbriefings.files.parliament.uk/documents/SN04944/SN04944.pdf>

All data sourced from: <https://www.ons.gov.uk/economy/inflationandpriceindices>

### Method:

*1. Re-referencing the CPI index base year from 2015 to 2006:* The base year in the CPI data is set to 2015, therefore I changed the base year to 2006 so that indices would rise relative the start of the Healthy Start programme. This is done by multiplying the index values by a conversion factor which is (CPI 2015 value / CPI 2006 value). See page 10 of the above document.

*2. Calculating an index for the Healthy Start voucher value:* To make the Healthy Start voucher value comparable with the CPI index, I computed an index whereby the 2006 price (£2.90) equalled 100. This used the same approach as above, I multiplied the HS voucher value by (100/2006 price). See page 10 of the above document.

*3. Estimating Healthy Start voucher value adjusted for food inflation:* I adjusted the Healthy Start voucher value using the CPI index for all food items. This was done by multiplying the 2006 value (£2.90) by (CPI food index year n / CPI food index 2006), where 'year n' represents the year of interest. See page 13 of above document.

*4. Converting inflation adjusted Healthy Start voucher value back into indices:* To show the inflation adjusted Healthy Start value vouchers on the graph, they need to be converted to indices. These of course are just the CPI indices calculated in steps 1 and 2. The year 2021 is the true index for the healthy voucher value. The years 2022-2024 are the CPI food indices.

## Proxy data on Free Early Years Meals

### Contributor:

Bremner & Co

### Data Sources:

This analysis draws upon publicly available datasets and reports, including, but not limited to:

- DfE (2024). Schools, pupils and their characteristics. <https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics/2023-24>
- DfE (2024) Childcare and early years provider survey. <https://explore-education-statistics.service.gov.uk/find-statistics/childcare-and-early-years-provider-survey/2024>
- ONS (2024) Estimates of the population for the UK, England, Wales, Scotland, and Northern Ireland. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland>
- IFS (2022) The Changing cost of childcare. [https://ifs.org.uk/sites/default/files/output\\_url\\_files/R210-The-changing-cost-of-childcare.pdf](https://ifs.org.uk/sites/default/files/output_url_files/R210-The-changing-cost-of-childcare.pdf)
- JRF (2025) UK poverty 2025: The essential guide to understanding poverty in the UK.
- (EPI (2024) How can we reduce food poverty for under-fives? [https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report\\_CORRECTED-figure5\\_29.11.24.pdf](https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report_CORRECTED-figure5_29.11.24.pdf)
- EPI (2025) Who has been registered for free school meals and pupil premium in the National Pupil Database? [https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025\\_PDF.pdf](https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf)

### Method:

This methodology follows a sequential process in data collection and analysis to understand current policy design on free early years meals (FEYM)<sup>4</sup> in England who is currently entitled<sup>5</sup> and eligible<sup>6</sup> for them, and who does not qualify based on current policy design. The figures calculated are estimates based on the best available data, however a number of assumptions have had to be made in order to come to the final numbers.

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<sup>4</sup> **Free early years meals (FEYM):** These are free meals provided to entitled children in formal childcare who meet certain eligibility criteria. They are legislated for under existing free school meals (FSM) policy, rather than a separate policy. FEYM eligibility criteria is similar to free school meals criteria, in the income and benefits-related criteria, but crucially differs on criteria such as setting-type or sessional-care requirements.

<sup>5</sup> **Entitlement:** DfE defines FSM entitlement as when a child meets all the necessary criteria in order to receive the free meal benefit<sup>5</sup>. A child must meet income-based criteria, place-based criteria, and attendance-based criteria in order to be entitled for FEYM<sup>5</sup>.

<sup>6</sup> **Eligibility:** DfE defines FSM eligibility as when a child is entitled to the free meal benefit, has had a claim made to receive that benefit, and that claim has been approved<sup>6</sup>. This means they must be entitled and registered. This is sometimes referred to as 'registered and claiming'<sup>6</sup>. The same applies to FEYM eligibility discussed in this research.

1. FEYM eligibility in state settings.
  - a) Extracted data on Early Years (EY) children<sup>7</sup> in state settings<sup>8</sup>, including the number of FEYM eligible children in state settings (hereby known as ‘current FEYM eligibility’).
  - b) Calculated the percentage of FEYM eligible children as a proportion of all EY children in state settings.
  - c) Cross-referenced our figure with that found in EPI’s food poverty for under-fives report<sup>9</sup> and found them to be the same.
  
2. Estimating the number of children in formal childcare and living in poverty, who currently do not qualify for FEYM.
  - a) Here, we started with the total number of children ages one, two or three in England according to ONS census mid-year estimates<sup>7</sup>. *(Note: ONS dataset is captured at a slightly different time in the year than DfE data. They are taken as mid-year estimates, whereas DfE data measures a child’s age on 31st August before the following school year, so slightly later. For this reason, the two datasets are not 100% equivalent, but we are using both with conservatism applied within our analysis under the assumption that this timing different in data collection would not significantly impact our overall findings).* Children aged 4 or 5 are assumed to be in/moving into Reception, and therefore fall out of the scope of FEYM and are excluded from this analysis.
  - b) Applied the rate of formal childcare use per age (36% for 1-year-olds, 57% for 2-year-olds, and 85% for 3-year-olds)<sup>10</sup> to estimate the number of children at each age in formal childcare. Please note that we use a different method of calculation that gives us a different figure for ‘number of children in childcare’ later. That calculation uses DfE data, but here, where we use ONS (population) and IFS (% childcare use) data, we have chosen the lower figure for conservatism.
  - c) Applied the rate of relative poverty for children aged 0-4 (32%)<sup>11</sup> to estimate the number of children at each age living in poverty. (Note: we do not know how many children attend childcare and are in poverty based on government data, so we use the assumption that national estimates for poverty rates for 0-4 year olds are likely to apply across those attending childcare in order to estimate a proxy for the number of children attending childcare who are living in poverty).

<sup>7</sup> **Early years (EY) children:** here, we refer only to children aged one, two, or three years on the 31<sup>st</sup> of August on the recording year. This is how DfE categorise their data, and we are following suit. Data on children under one is inconsistent, and we assume that a smaller percentage of these children are in formal childcare than children aged one, two, and three. As such, we have not included children under one in our analysis. Children aged 4 and 5 (on the 31<sup>st</sup> of August each year) are assumed to be moving into are already in Reception year at school and therefore fall outside the scope of FEYM. We do not include them in our analysis

<sup>8</sup> Department for Education (DfE) (2024e) *Schools, pupils and their characteristics: Academic year 2023/24*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics> [Accessed on: 19<sup>th</sup> March 2025]

<sup>9</sup> Education Policy Institute (EPI) (2024) *How can we reduce food poverty for under-fives?* Available at: [https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report\\_CORRECTED-figure5\\_29.11.24.pdf](https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report_CORRECTED-figure5_29.11.24.pdf) [Accessed on: 19<sup>th</sup> March 2025]

<sup>10</sup> Institute of Fiscal Studies (IFS) (2024) *The changing cost of childcare*. Available at: [https://ifs.org.uk/sites/default/files/output\\_url\\_files/R210-The-changing-cost-of-childcare.pdf](https://ifs.org.uk/sites/default/files/output_url_files/R210-The-changing-cost-of-childcare.pdf) [Accessed on: 19<sup>th</sup> March 2025]

<sup>11</sup> Joseph Rowntree Foundation (JRF) (2025) *UK poverty 2025: The essential guide to understanding poverty in the UK*. Available at: <https://www.jrf.org.uk/uk-poverty-2025-the-essential-guide-to-understanding-poverty-in-the-uk> [Accessed on: 19<sup>th</sup> March 2025]



- d) Combined these figures to estimate the number of children in formal childcare and living in poverty.
  - e) Took this estimate and removed current FEYM eligibility. This gave us a figure for the number of children in formal childcare and living in poverty, who currently do not qualify for FEYM.
3. Estimating the number of children in childcare and eligible for a means-tested child poverty intervention, who currently do not qualify for FEYM.
    - a) Extracted data on the number of children who currently registered for a DfE-defined means-tested child poverty intervention<sup>12</sup>. These interventions are only available to children attending formal childcare.
    - b) Added the number of children registered for Early Years Pupil Premium (EYPP) to the number of children registered for the disadvantaged 2-year-old entitlement to calculate the total number of children registered for a DfE-defined means-tested child poverty intervention. *(Note: For these figures, we are stating the total number of children qualifying for two government-designated child poverty interventions, and assuming that because according to the eligibility criteria for those benefits they are considered to be living in disadvantage, that they might reasonably expected to be entitled to FEYM too. Based on the numbers (all of which are reported by DfE datasets, no extrapolations made) we can see most are not eligible.)*
    - c) Took this figure and removed current FEYM eligibility. This gave us a figure for the number of children in childcare and registered for a means-tested child poverty intervention, who currently do not qualify for FEYM.
  4. Estimating the number of children in childcare and attending non-state-maintained settings, who currently do not qualify for FEYM.
    - a) Data on the number of children in non-state settings is not publicly available, without a completing the National Pupil Database Data Sharing process<sup>13</sup>, and so required extrapolation based on available data.
    - b) Extracted data on the number of registered childcare places by provider type within England<sup>14</sup>, and data on the percentage of registered childcare places that go spare in England by provider type<sup>15</sup>.
    - c) Used that percentage to calculate the raw number of places that are spare, by provider type.
    - d) Removed the number of places that are spare from the number of registered places to calculate the number of places that are in use by provider type.

<sup>12</sup> Department for Education (DfE) (2024b) *Education provision: children under 5 years of age: Reporting year 2024*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/education-provision-children-under-5> [Accessed on: 19<sup>th</sup> March 2025]

<sup>13</sup> Department for Education (n.d.) *Find and explore data in the National Pupil Database*. Available at: <https://www.find-npd-data.education.gov.uk/categories> [Accessed on: 25<sup>th</sup> March 2025]

<sup>14</sup> Department for Education (DfE) (2024a) *Childcare and early years provider survey: Reporting year 2024*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/childcare-and-early-years-provider-survey> [Accessed on: 19<sup>th</sup> March 2025]

<sup>15</sup> Department for Education (DfE) (2024a) *Childcare and early years provider survey: Reporting year 2024*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/childcare-and-early-years-provider-survey> [Accessed on: 19<sup>th</sup> March 2025]

- e) Used this figure as a proxy for number of children in childcare by provider type to calculate the number of children in non-state settings, by adding all the non-state provider types together (private group-based, voluntary group-based, and childminders)
  - f) Took DfE's own figure on the percentage of FEYM eligibility of total children in childcare in state settings<sup>16</sup> (see Step 1b) as a proxy for FEYM eligibility across all settings. An assumption has been made here that the same FEYM rate, i.e. the same proportion of children would meet the eligibility criteria, across all setting types. Whilst in reality children in disadvantage may be more likely to attend some setting types than others, we believe making this assumption for this calculation is appropriate as the FEYM eligibility rate being applied to calculate for all settings is much lower than for school age children, so has significant conservatism built in.
  - g) Applied this proxy to the number of children in non-state settings, to calculate the number of children in non-state settings who would be eligible for FEYM if they were in the right setting. This gave us a figure for the number of children who would potentially be eligible for FEYM if they attended a setting where FEYM is provided, or if FEYM were available across all EY settings.
5. Estimating the number of children who currently do not qualify for FEYM for reasons including the sessional care criteria and FEYM under-registration.
- a) Took the percentage figure for FSM eligibility (18% of all Reception-aged children)<sup>17</sup>, and hypothesised that, without changing any policy, the same percentage of EY children who will begin Reception when they move up a National Curriculum year group will become eligible for FSM.
  - b) EPI<sup>18</sup> finds that databases on early years childcare can be inconsistent, and so looking at "future FSM" rates for children in Reception can be a more accurate poverty indicator than looking at numbers registered for FEYM. As the income criteria for FEYM and FSM is equal, we might expect to see 18% FEYM eligibility within state-maintained settings to match rates in Reception<sup>19</sup>, but instead find 8%<sup>20</sup>.
  - c) We hypothesise that the reasons for the discrepancy between the two current percentages of eligibility within state-maintained settings must include the sessional care criteria for FEYM eligibility (the child must attend before and after lunch to receive a meal), as well as under-registration which is a well-documented barrier to FEYM take-up<sup>21</sup>.

<sup>16</sup> Department for Education (DfE) (2024e) *Schools, pupils and their characteristics: Academic year 2023/24*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics> [Accessed on: 19<sup>th</sup> March 2025]

<sup>17</sup> Education Policy Institute (EPI) (2024) *How can we reduce food poverty for under-fives?* Available at: [https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report\\_CORRECTED-figure5\\_29.11.24.pdf](https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report_CORRECTED-figure5_29.11.24.pdf) [Accessed on: 19<sup>th</sup> March 2025]

<sup>18</sup> Education Policy Institute (EPI) (2025) *Who has been registered for free school meals and pupil premium in the National Pupil Database? Implications for research and policy*. Available at: [https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025\\_PDF.pdf](https://epi.org.uk/wp-content/uploads/2025/03/FSM-report-March-2025_PDF.pdf) [Accessed on: 25<sup>th</sup> March 2025]

<sup>19</sup> Education Policy Institute (EPI) (2024) *How can we reduce food poverty for under-fives?* Available at: [https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report\\_CORRECTED-figure5\\_29.11.24.pdf](https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report_CORRECTED-figure5_29.11.24.pdf) [Accessed on: 19<sup>th</sup> March 2025]

<sup>20</sup> Department for Education (DfE) (2024e) *Schools, pupils and their characteristics: Academic year 2023/24*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics> [Accessed on: 19<sup>th</sup> March 2025]

<sup>21</sup> Education Policy Institute (EPI) (2024) *How can we reduce food poverty for under-fives?* Available at: [https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report\\_CORRECTED-figure5\\_29.11.24.pdf](https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report_CORRECTED-figure5_29.11.24.pdf) [Accessed on: 19<sup>th</sup> March 2025]



- d) To calculate this discrepancy, we took 18% of all EY children in state-maintained settings and then removed current FEYM eligibility. This gave us a figure for the number of children who currently do not qualify for FEYM for reasons including the sessional care criteria and under-registration.

### Confidence

The figure for which we are most confident is the number of children who are eligible for a DfE-defined means-tested child poverty intervention who currently do not qualify for FEYM (see Step 3). It is based only on two sets of DfE data<sup>22</sup>. We do recognise that the household income criteria for the disadvantaged 2-year-old benefit is over twice as high as both the FEYM and the FSM household income criteria. However, we believe it's reasonable to suggest that children in early years in receipt of a benefit based on markers of disadvantage, even if different markers to those for other existing benefits, should be eligible to also receive FEYM.

We are confident with the number of children who currently do not qualify for FEYM for reasons including sessional care and general FEYM under-registration (see Step 5). This is based upon our own calculations of two DfE-based data points – Reception-age FSM eligibility<sup>23</sup> and current FEYM eligibility<sup>24</sup>. We recognise, however, that we cannot be certain the reasons for those children not qualifying, only that they may include the sessional care criteria and under-registration.

We must treat with more caution the figure on the number of children in formal childcare and living in poverty, who currently do not qualify for FEYM (see Step 2). This is because it is based upon estimated population-level statistics, rather than precise local data. The ONS mid-year estimates<sup>25</sup> also do not categorise age in the same way as the DfE's data, so cannot be directly comparable. We do not however, compare our proxy figures based upon the ONS mid-year estimates with any age-based DfE data.

Finally, the figure for the number of children in non-state settings who would be entitled to FEYM if in the right setting, and so currently do not qualify for FEYM (see Step 4), must be treated with caution too. As the raw data for the number of children in each type of childcare setting is not publicly available, our calculations are based upon proxy numbers that we have had to, themselves, calculate. As such, it's a figure based on additional layers of primary calculations, thereby further from government-stated figures, compared with the other scenarios.

<sup>22</sup> Department for Education (DfE) (2024b) *Education provision: children under 5 years of age: Reporting year 2024*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/education-provision-children-under-5> [Accessed on: 19<sup>th</sup> March 2025]; Department for Education (DfE) (2024e) *Schools, pupils and their characteristics: Academic year 2023/24*. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics> [Accessed on: 19<sup>th</sup> March 2025]

<sup>23</sup> Education Policy Institute (EPI) (2024) *How can we reduce food poverty for under-fives?* Available at: [https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report\\_CORRECTED-figure5\\_29.11.24.pdf](https://epi.org.uk/wp-content/uploads/2024/11/Food-poverty-report_CORRECTED-figure5_29.11.24.pdf) [Accessed on: 19<sup>th</sup> March 2025]

<sup>24</sup> Department for Education (DfE) (2024d) *Free school meals: Guidance for local authorities, maintained schools, academies and free schools*. Available at: [https://assets.publishing.service.gov.uk/media/65fdad5965ca2f00117da947/Free\\_school\\_meals.pdf](https://assets.publishing.service.gov.uk/media/65fdad5965ca2f00117da947/Free_school_meals.pdf) [Accessed on: 26<sup>th</sup> March 2025]

<sup>25</sup> Office for National Statistics (ONS) (2024) *Population estimates for UK, England and Wales, Scotland and Northern Ireland*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland> [Accessed on: 19<sup>th</sup> March 2025]

# TECHNICAL APPENDIX: FUELLING THE FUTURE: ADDRESSING BARRIERS TO GOOD NUTRITION IN THE EARLY YEARS

Headline Figures			
<b>Current FEYM Eligibility</b>	As recorded in DfE Schools, Pupils and their Characteristics data.		<b>23,710</b>
Number of children...	Why don't they qualify?	Calculation Explanation	Number
<b>Living in poverty and attending formal childcare, but do not qualify for FEYM</b>	Not all formal childcare can be eligible and a significant portion of children living in poverty do not meet the income criteria for FEYM	Took ONS data on children per age, applied IFS % figures on children using formal childcare specific to each age to get number in formal childcare. Then applied JRF 32% figure on families where the youngest child is 0-5 living in poverty. Totalled this number per age, then removed current number registered for FEYM.	<b>329,211</b>
<b>Registered for other means-tested child poverty interventions, but do not qualify for FEYM</b>	DfE provides EYPP and the disadvantaged 2-year old entitlement benefit to 2, 3 and 4 year olds in childcare who meet a marker of disadvantage. Not all children who are registered for a means-tested child poverty intervention meet the low income criteria for FEYM.	Added together DfE figures for number of children registered for EYPP and number registered for disadvantaged 2-year-old entitlement, then removed current number registered for FEYM.	<b>200,469</b>
<b>Meeting other eligibility criteria but do not qualify for FEYM because they attend the wrong setting type</b>	Children who are not entitled to FEYM because they do not attend state-maintained settings, despite an assumption that the same rate of children across setting types would meet other eligibility criteria.	Used DfE data on number of places per provider type and % of places going spare per provider type to calculate number of places going spare per provider type. Then took this figure off number of registered places to work out number of places in use per provider type (a proxy for number of children in childcare by provider type). Then took figure for places in use in non-state settings and applied DfE's 8% FEYM eligibility figure (which applies in state maintained settings) as a proxy for FEYM eligibility if eligibility was made possible across other setting types, to calculate children in non state settings who would be eligible. Alternatively, you could apply the 8% FEYM eligibility to total number of children in childcare to calculate cross-provider entitlement, and then remove current FEYM eligibility.	<b>83,857</b>

# TECHNICAL APPENDIX: FUELLING THE FUTURE: ADDRESSING BARRIERS TO GOOD NUTRITION IN THE EARLY YEARS

<p><b>Meeting eligibility criteria and attending a state-maintained setting, but do not qualify for FEYM</b></p>	<p>Children must attend 'before and after lunch' to be eligible for FEYM. We hypothesise that these children meet all other criteria (household income and setting type), but either do not attend before and after lunch (i.e. are in sessional care) or are simply not registered despite their entitlement.</p>	<p>Took 18% (Reception age FSM eligibility) of children in state-maintained early years settings i.e. those where FEYM applies (306,496), to find the total number of children who should potentially be eligible. We then hypothesise that this gap is due to sessional care use or under-registration (despite their entitlement). Then removed current FEYM eligibility.</p>	<p><b>31,459</b></p>
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The Waterloo Foundation is an independent grant-making charity based in Cardiff, supporting projects in the UK and globally. Its key areas include the Environment, World Development, Child Development, and Wales. Nutrition is a cross-cutting theme, with a particular focus on micronutrients and the developing brain.

