Technical report – The Kid's Food Guarantee

The Kid's Food Guarantee is a set of actions which the Food Foundation think supermarkets should have in place as a minimum in order to effectively tackle rising levels of food insecurity. These are actions that citizens have told us they are eager to see, and which align with existing areas of focus for food retailers.

In the coming months we will spot-check each of the guarantee areas to see where the best offers are for families and share the findings. The intention is that the findings can be used by consumers, supporting them to access healthy and affordable diets and helping them to navigate the cost of living crisis.

To evaluate progress against each guarantee area will use a mix of qualitative and quantitative tracking of progress depending on what is most appropriate for each guarantee area.

We also intend to highlight examples of best practice, both on our Kids Food Guarantee dashboard and as part of our forthcoming 2023 *State of the Food Industry* report.

Kids Food Categories

Yogurt

For this Guarantee area we worked with Questionmark Foundation, an international non-profit think tank, to look at available yogurts and their price and nutritional information as available online for five of the major UK retailers: Aldi, ASDA, Morrison's, Sainsbury's and Tesco. Data was collected for the period 18th to 24th April 2023, and the search will be run on a monthly basis for the next three months to continually assess progress.

We looked at yogurt pots containing roughly a single portion; all yogurts with a packaged portion size of 200g or less. Packaged single portion pots were selected to provide a more realistic reflection of how citizens shop and snack (i.e. you can't buy 100g of yogurt, you buy the pot). Larger pots also come with a higher upfront cost. We looked at single portion pots sold separately and as part of a multipack.

We included both plain and flavoured yogurts, with and without children's figures on the packaging, and both animal-based and plant-based products.

Specifically excluded were cheesecake desserts and yogurt drinks (e.g. in pouches).

To assess the nutrition profile of the yogurts in scope we looked at the sugar content of yogurt per 100g. The Nutrition Profiling Model (NPM), takes a broader range of nutrients into account in order to calculate a score, and marks down products that are high in fat. Given that fat is a key nutrient for young children and that many dairy products are naturally high in fat we focused on the sugar content.

We used the upper limit of total daily (free) sugar intake recommended for children as our guide for assessing sugar levels. For children aged 7-10 this is 24g, equivalent to 6 cubes of sugar. For children aged 4-6 it is 19g, equivalent to 5 cubes of sugar.

The UK government recommends that free sugars – sugars added to food or drinks, and sugars found naturally in honey, syrups, and unsweetened fruit and vegetable juices, smoothies and purées – should not make up more than 5% of the energy (calories) you get from food and drink each day.

This means:

- Adults should have no more than 30g of free sugars a day, (roughly equivalent to 7 sugar cubes).
- Children aged 7 to 10 should have no more than 24g of free sugars a day (6 sugar cubes).
- Children aged 4 to 6 should have no more than 19g of free sugars a day (5 sugar cubes).
- There's no guideline limit for children under the age of 4, but it's recommended they avoid sugar-sweetened drinks and food with sugar added to it.

4g of sugar is equivalent to a teaspoon or cube of sugar, with the first 3.8g of sugar (roughly 1 cube) contained in each yogurt derived from naturally occurring milk sugars found in dairy products.

Although sugar in whole fruit is not considered a health risk, the process of pureeing releases the sugars from their cells. These 'free sugars' are more harmful than in the whole fruit form and can contribute to tooth decay. Fruit purees or fruit juice from concentrate when added to yogurt are therefore considered to be added, or free sugars.

Data were exported into an excel spreadsheet and analysed on the basis of total sugar content and price per single portion pot. Where yogurts were on offer, the promotional price was taken as the price.

Our method was as follows: To find the cheapest yogurts, we ranked single packaged yoghurt pots by price and by retailer, and then selected the cheapest product for each retailer.

To find the highest sugar options available for <£1, we ranked single packaged yogurt by sugar content (high to low) and by retailer and selected the first product which was <£1.

For analysis of the April dataset, we used the following methodology to identify those yogurts that were low cost and low sugar: We ranked single yogurt pots by sugar content (low to high) and by retailer, and then selected the first product which was <£1.

For analysis of July's dataset we improved our methodology for identifying low cost and low sugar yogurt options in order to place a greater emphasis on price over sugar content. We therefore used the following methodology: We ranked single yogurt pots by price (low to high) and by retailer, and then selected the first product which contained less than 5g of sugar per 100g. We used the same methodology on April's dataset to ensure we were comparing like with like in September's update report.

Cereals

To monitor this Guarantee area we worked with Questionmark Foundation, an international non-profit think tank, to look at available cereals, their price, and nutritional information for the largest five major UK retailers: Aldi, ASDA, Morrisons, Sainsbury's and Tesco. Data was collected for the period 18th to 24th April 2023.

We looked at all dry, 'ready to eat' cereals available across the retailers. We excluded cereals that require heating in acknowledgement of the barriers to food preparation that low income families can face, such as fuel poverty and accessing kitchen appliances (ref).

We used broad inclusion criteria to accurately reflect the range of cereals available in retailers. We included both those with and without children's figures on the packaging. We excluded cereal sold in single serve pots as these mostly required heating or are typically targeted towards adult commuters. Our final sample included 830 cereals in total, and 476 cereals when duplicate brands (i.e. the same product) sold across multiple retailers were removed. We excluded 14 cereals sold in boxes over 1kg in size as these come with a higher upfront cost to consumers.

We assessed price and nutrition per 100g given the wide variety of box sizes available when buying cereal, but a portion size of cereal for children is likely to be less than this. The majority of cereal products use 30g as a recommended serving size for adults, but there is disagreement as to how realistic this is of typical serving sizes and children may be eating a wide range of portion sizes. The British Nutrition Foundation suggest 3-6 tbsps of cereal as an appropriate portion size for children aged 1-4 years old, which roughly equates to 45-90g.

We used the Government's Nutrition Profiling Model to assess the healthiness of cereals. Using this criteria foods scoring 4 or more points are classified as high in sugar, salt and/or fat (HFSS). For all products, the NPM score (Department of Health 2011) was computed based on nutrients and, if needed, category averages (fruits, nuts, vegetables and pulses, as well as fibres).

As many cereals are high in sugar we also looked at the sugar content per 100g. We used the upper limit of total daily (free) sugar intake recommended for children as our guide for assessing sugar levels. For children aged 7-10 this is 24g, equivalent to 6 cubes of sugar. For children aged 4-6 it is 19g, equivalent to 5 cubes of sugar.

The UK government recommends that free sugars – sugars added to food or drinks, and sugars found naturally in honey, syrups, and unsweetened fruit and vegetable juices, smoothies and purées – should not make up more than 5% of the energy (calories) you get from food and drink each day.

This means:

- Adults should have no more than 30g of free sugars a day, (roughly equivalent to 7 sugar cubes).
- Children aged 7 to 10 should have no more than 24g of free sugars a day (6 sugar cubes).
- Children aged 4 to 6 should have no more than 19g of free sugars a day (5 sugar cubes).
- There's no guideline limit for children under the age of 4, but it's recommended they avoid sugar-sweetened drinks and food with sugar added to it.

To look at whether cereals could be categorized as marketed towards children or not, we defined these as products with images on the packaging that are designed to appeal to children (e.g. animals, cartoon characters, UFOs and fireworks).

Staples Guarantee

First infant milk formula

We selected six standard first infant formula milk products sold in the UK at the major supermarkets. Manufacturers for each are listed in brackets. These are; Aptamil 1 First Infant Milk From Birth (Danone), Cow & Gate 1 First Milk Powder (Danone), HiPP Organic Infant Milk (HiPP), Kendamil First Infant Milk Stage 1 (Kendal Nutricare), Mamia First Infant Milk (Aldi), and SMA Little Steps First Milk 1 From Birth (Nestle). We then found the price of these brands as listed online at each of the nine major UK retailers: Aldi, Asda, Co-op, Iceland, Morrisons, Ocado, Sainsbury's, Tesco, and Waitrose.

We excluded pharmacies, such as Boots and Superdrug, from our search as the Kids Food Guarantee is focussed on food retailers and manufacturers. The majority of retailers store three or more of the above-mentioned brands. Aldi is the exception with its own-brand Mamia First Infant Milk formula, and does not store any other branded products that we could find. As powdered infant formula is the cheapest format available and is the most widely used (as opposed to liquid ready-to-feed infant formula and formula tablets), we focus on this in this analysis in line with First Steps Nutrition's analysis of formula. This is first stage infant formula made with cows' milk, and we excluded hungry baby, anti-reflux, lactose free or comfort milks. More expensive goat milks are also excluded.

The listed products above are the cheapest product in each range (with the exception of Mamia which is not in a range) as many formula brand also sell a premium and an organic version at a higher price point even though all first infant milk formulas are required to meet the same regulations.

Kendamil first infant milk is sold in both 800g and 900g tins across different retailers. We therefore included Kendamil in our pricing analysis per 100g of formula but excluded the product from our price analysis per unit/tin.

The data was first collected on 5th June 2023, and the search will run on a monthly basis for the next 3 months as we continually assess the price and availability of first infant milk formula. Data was exported into an excel spreadsheet and was analysed based on the price/weight of the product and retailer. We separately looked at both price/100g and the unit price of a tin of formula. The price of the larger tins (typically containing 800-900g of formula) provides a more realistic reflection of shopping behaviour, as consumers do not buy formula in 100g portions. In the tables, we have highlighted the cheapest options available in green and the highest prices in orange.

Multibuys

To monitor this Guarantee area we worked with Questionmark Foundation, an international non-profit think tank, to look at what type of foods are included as part of multibuy promotions. Data was collected for the period 18th to 24th April 2023.

We looked at food promotions available across the five largest UK retailers; Aldi, ASDA, Morrisons, Sainsbury's and Tesco. Promotions were all volume promotions, for example "buy one get one free" (BOGOF) deals where customers benefit if more than one item (of the same) product is bought. Sainsbury's and Aldi run price reduction promotions online but do not offer volume promotions or multibuys on food. Volume promotions or multibuy deals were found at three retailers, ASDA, Morrisons and Tesco.

We looked at whether such offers were on High Fat, Salt, Sugar (HFSS) foods, staple carbohydrate products, and other healthy essentials such as fruit and veg. Staple carbohydrate foods were defined as plain carbohydrates in their simplest form, including rice, pasta, grains, potatoes, lentils, beans (including dried and tinned), and loaves of bread (excluding rolls and pitta breads etc). The Government's Eatwell Guide recommends that 38% of our diets consist of starchy carbohydrates such as bread and rice, 40% from fruit and veg, and 12% from beans, pulses and other animal protein. HFSS foods are recommended only to be consumed infrequently and in small amounts. For children aged under 4, it is recommended that 50% of their daily energy intake come from carbohydrate, and that .

Vitamins, medicines, and other non-food products were excluded. Alcohol was included in analysis looking broadly at the type of deals currently offered in the UK, but excluded where we looked at the types of foods on offer and how healthy or unhealthy they are. Non-alcoholic drinks were included in the nutrition profiling analysis.

The category 'Other' includes those products where nutrient information is missing online, which makes it difficult to calculate an (accurate) NPM score and determine whether the product is HFSS or not. It initially included fruit and vegetables which were recategorised as non-HFSS.

The non HFSS category includes a wide range of foods with an NPM score of less than 4, including tea and coffee, herbs and spices, composite foods, as well as some healthier foods such as fruit, veg and milk.

We used the Government's Nutrition Profiling Model to assess the healthiness of offers. Using this criteria foods scoring 4 or more points, and drinks scoring 1 or more points, are classified as high in sugar, salt and/or fat (HFSS).

Note that this definition of HFSS, as defined by the Government's Nutrition Profiling Model, differs from the government's definition of foods within scope for the restriction of location based and volume promotion of HFSS foods. For example, unless battered or breaded, red and processed meats are excluded from the definition of HFSS food as part of the restriction of location based promotions for HFSS foods.

Price promotions

August's data on multibuys also captured data on price promotions offered by the five largest UK retailers; Aldi, ASDA, Morrisons, Sainsbury's and Tesco. Price promotions in scope were offers that discounted prices compared to an original price or discounted prices as part of customer loyalty schemes (e.g. Clubcard price). We excluded those offers involving points for future redemption (e.g. 200 bonus nectar points) and bundle deals which offer a price discount when different kinds of products are bought together, e.g. "pizza with drink", "pasta with one of a selection of sauces", etc. We excluded bundle deals given our focus on specific product categories rather than combinations of products.

Wholegrain Guarantee

To monitor this Guarantee area we worked with Questionmark Foundation, an international non-profit think tank, to look at whether wholegrain, whole wheat and/or 50:50 staple carbohydrates are available at price parity or at a lower cost to the white equivalent. We looked at seven major UK retailers; Aldi, ASDA, Morrisons, Iceland, Sainsbury's, Tesco and the Co-op. Data was collected between the 21st – 25th November 2023.

We looked at four categories of staple carbohydrates; bread, pasta, rice and noodles. For each retailer we looked at online product and price data for each of these four categories to calculate what proportion of each category was white, wholegrain and/or brown, or 50:50.

There is [no agreed definition]() of wholegrain in the UK nor a a legal minimum requirement for a product to be called wholegrain. To categorise products as wholegrain, we therefore looked first at the product name, and then at the first and second ingredient listed using a broad-brush definition of wholegrain to capture relevant products. Cereals described as brown, wholegrain, whole meal and black were categorized as being unrefined or wholegrain carbohydrates. Although this is not a foolproof methodology, and it is likely our figures are an overestimate of wholegrain products given the lack of regulation around wholegrain claims, it nevertheless still provides a useful indication of higher wholegrain (and therefore higher fibre) products within each category.

From this list we then selected the lowest priced 10 white products for each category and looked at the next cheapest wholegrain equivalent product and its price. This approach was deemed to be most representative both of how citizens tend to shop (where habit and preference play a key role), but also because the number of wholegrain products among the cheapest quartile of products is typically very low, so looking at the average price for white and wholegrain products overall gives a skewed overview.

For the equivalents, we selected products from the same brand and 'type' of product (e.g. easy cook for rice). For each white product, we looked for equivalent brown products matching brand, type of product, package size and took the price per unit. The process was as follows:

1. We selected the white products per category per retailer with the 10 cheapest prices. Where there were multiple white carbohydrate products with the same price these were all included.

2. Then, we put a 'pairing number' to each of the white products. Products with the same brand, type of product, package size and price per unit, were considered "the same" product, and were therefore given the same pairing number. Subsequently, the white products were paired with their equivalent brown product. One brown product could be equivalent to multiple white products, namely those with the same pairing number.

3. For a comparison in price, we took the price per 100g of the white products and their brown equivalents.

For each category we looked at the food item in its simplest form. For example, for the bread category we looked only at loaves of bread, excluding fresh loaves baked onsite (as the nutritional information is not listed online), rolls, wraps and flatbreads as well as other baked wheat products such as bagels.

For pasta, we included dried varieties and excluded gnocci (potato based), filled pasta, and any products sold with sauces. For noodles we included vermicelli noodles, and in line with pasta excluded legume based (non grain) products, diet products, and instant noodles sold as ready meals in pots or sachets with other ingredients.

Products marked as gluten free were excluded given their specialist nature and higher price point.

Lunchbox Guarantee

We conducted light touch research into how much a reasonably healthy packed lunch currently costs from the five retailers with the biggest share of the market.

These food items have been taken as indicative items that can form part of a healthy packed lunch and are not an exhaustive list. We have chosen these items to gain a balance between a nutritious lunch, and one which children may realistically eat, as it's important for low income families to provide food that their children will not reject so that it doesn't go to waste. Portion sizes would need to vary depending on the child's age, but this lunch is likely suitable for an older child, or a younger child including snacks eaten over the course of the school day.

The closest comparable product between retailers was selected. We have looked at the cost of the lunch across the five retailers with the biggest share of the market (Aldi, ASDA, Morrisons, Sainsbury's and Tesco).

Products were available online from retailer websites when data was captured first on 30th August – 2nd September 2023 and again on 23rd October 2023.

Multibuys were not included, single promotions were included.

The price given is for the proportion of the product needed for the portion sizes given, not the full cost of the item.

The full list of products analysed from each retailer is available here.

Fruit and Veg Guarantee

To monitor this Guarantee area we worked with Questionmark Foundation, an international non-profit think tank, to look at

1) the price of fruit and veg across UK retailers, and

2) assess how easily accessible the ten most competitively priced fruit and veg products for each of the seven retailers we assessed are.

For 1), we looked at seven major UK retailers; Aldi, ASDA, Morrisons, Iceland, Sainsbury's, Tesco and The Co-operative Group. Price and product data as available online was collected between the 21st – 25th November 2023.

To capture price data we looked at the 70 lowest priced fruit and veg portions available online for each of the seven retailers. Fresh, frozen and tinned items were all included given that frozen and tinned fruit and veg can be more affordable options than fresh fruit and veg and offer comparable nutritional benefits. Fruit juice was also included. The price used was price as sold, including promoted prices and other promotions.

As there are no clear government guidelines on fruit and veg portion sizes for children, and because the Kids Food Guarantee looks at family or household shopping baskets, we used a standard 80g portion size to calculate price per portion of fruit and veg. A final basket of ten low-cost fruit and veg products was then selected for each retailer based on price per portion analysis.

In line with NHS guidelines we limited the number of bean/pulse and fruit juice portions (up to 150ml) included in the final basket of ten items to a maximum of one each. Items with added salt and/or sugar were excluded, with each basket containing 6 types of veg and 4 types of fruit. We included a higher proportion of veg to fruit in the final baskets given that vegetables can be more widely used as a cooking ingredient. To ensure that a variety of types of fruit and veg were included, we stipulated that for fruits a maximum of one could be juice and one a tinned fruit. For the vegetables, a maximum of one could be beans/pulses, and a maximum of one could be a tinned vegetable to ensure dietary variety.

Fruit and vegetables included in our analysis:

- Fresh (unprocessed), frozen and tinned.
- Smoothies and juices: max. 1 portion a day.
- Beans, pulses, legumes: max. 1 portion a day.
- Sweet potatoes, onion.

We excluded:

- Fresh herbs, garlic, ginger, lemon, lime as these are unlikely to be consumed in large enough quantities to significantly contribute to the 5-a-day target
- Potatoes, yam, cassava which are categorised as starchy carbohydrates rather than vegetables
- Ready meals and ready-to-go salads.
- Composite foods where non-vegetable/non-fruit ingredients have been added e.g. grain and veg mixes
- Carving pumpkin, halloween squash (during the Halloween season) as these tend to be sold for carving rather than consumption.

To calculate price per portion we looked at the price per weight or volume, which is taken to be either 80g (or 150ml for smoothies and juices). For those fruits and vegetables where the supermarket does not specify the weight (or volume) we looked at the number of pieces of fruit or vegetable available in the product. Combined with the number of pieces needed to constitute an 80g portion, we calculated the number of portions per product. For a number of fruits and vegetables, the NHS gives guidance on how many portions are present in a single piece e.g. half a grapefruit is considered a portion. For some products, we looked at the total weight of an average piece and divided the portion size (80g) by it to obtain the number of pieces per portion.

For 2) The Food Foundation's Youth Ambassadors and staff ran random spot-checks in 30 stores between 5th –and 16th February 2024 to explore how readily available the lowest priced fruit and veg products are across the retailers in scope. Data were captured using a Typeform survey and analysed across retailers visited.

Thirty stores were visited from across London, Halifax, Kent, Great Malvern and Bath to see how widely available the ten lowest cost fruit and veg items for each retailer are. Stores were chosen based on their proximity to the Food Foundation's youth ambassador and staff’s local areas, with a mix of different store sizes visited (standard, super stores and local/express formats). 14 stores were local/express stores, 9 were standard size supermarkets, and seven were superstores. Six of the seven retailers in scope were visited (no data was able to be captured for Aldi).