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# DRAFT PROPOSALS: Commercial baby food and drink guidelines

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## Draft proposals for 2023 commercial baby food and drink guidelines

The Foods and drinks aimed at infants and young children: evidence and opportunities for action report (June 2019) set out Public Health England's (PHE's) advice to government on the opportunities for action to improve foods and drinks aimed at infants and young children aged up to 3 years (36 months).

Children's food preferences and eating habits are formed early in life, and have consequences for a range of health and development outcomes in later life. Many children are growing up in an obesogenic environment that encourages weight gain and obesity.<sup>1</sup> Obesity in children and adults can lead to a range of health and social problems - children who are overweight or obese are more likely to be obese adults,<sup>2</sup> and excess weight increases the risk of conditions such as heart disease, some cancers and type 2 diabetes in adulthood.<sup>3</sup>

Evidence reviewed for the report highlighted the need for action, showing that infants and young children are eating too much sugar and salt, and energy intakes are exceeding requirements. Commercial baby foods and drinks are widely available and used in the UK, particularly for infants aged between 6 to 12 months, so there is an opportunity for these products to support the development of good eating habits at this early age.

The report highlighted some clear inconsistencies between government infant feeding advice and some commercial baby foods and drinks in terms of the types of products available, their ingredient and nutrient composition, and the labelling and marketing of products.

Infant and young child feeding advice states that sugar and salt should not be added to foods, the frequency and amount of sugary foods should be reduced, and sugary foods (including dried fruit) should not be provided between meals. Analysis carried out for the report showed that two-thirds of commercial baby finger foods were sweet, and these products had the highest average sugar content across all products. Savoury finger foods contain higher levels of salt than products in all other subcategories. Many finger foods/snacks, and some products in other categories, contain added sugar (including fruit juice/juice concentrates), and some products contain added salt.

The government's Prevention Green Paper, published in July 2019, made a commitment to improve the nutritional content, and the marketing and labelling, of product ranges aimed at infants and young children.

PHE was commissioned to develop and publish voluntary guidelines for the food industry to improve the nutritional content of commercial baby food and drinks.

This document sets out the draft proposed guidelines.

The aim of the guidelines is to address the nutrient composition issues highlighted in PHE's report by reducing the sugar content and sweetness of products and limiting the salt content. This will ensure greater consistency between commercial baby food and drinks and government advice on introducing solid foods, to contribute to improving dietary intakes and protecting dental health. Baby drinks and finger foods (often marketed as snacks) are a particular focus, as these products are considered the most confusing for parents and carers and do not support them to make the best choices for babies.

Separately, the Department of Health and Social Care (DHSC) will consult on proposals to improve the marketing and labelling of commercial food and drink products for infants and young children, so that parents and carers have clear and honest information that aligns with Government advice on the products they feed their babies.

### Draft proposed guidelines

Guidelines will apply to commercial foods and drinks aimed at children aged up to 3 years (36 months).

The scope of this programme of work does not include formula milks and growing up milks.

The products considered to be within the scope of this programme include those defined in EU legislation as 'processed cereal-based foods' and 'baby food'. Food and drink products that may be considered to fall outside of the definition of 'baby foods' and 'processed cereal-based foods' but are marketed towards, or labelled as suitable for, infants and young children under 36 months (for example finger foods and snacks), are also considered to be within the scope of this programme.

Although the UK has now left the EU, we remain in a transition period until 31 December 2020. This means that, during the transition period, baby food and drinks in the UK remain governed by EU legislation.

A range of 'reducing sugar' and 'reducing salt' guidelines are proposed. These have been informed by:

- the range and distribution of salt and sugar content of products (based on data for the year ending September 2018 - see Annex 2)
- World Health Organization recommendations (see Annex 3 for a summary)
- government infant feeding advice (see Annex 4)
- technical function and food safety considerations
- EU legislation

### Reducing sugar

In the UK, dietary intake recommendations are based on free sugars. For children aged 2 and over, average population intakes should not exceed 5% of total energy. Although recommendations have not been set for children under the age of 2, advice is to limit these sugars in the diet.

The definition of free sugars for the UK includes:

- all monosaccharides and disaccharides added to foods, including honey, syrups and nectars
- all sugars naturally present in fruit and vegetable juices, purées and pastes and similar products in which the structure has been broken down
- all sugars in drinks (except for lactose and galactose naturally present in milk and dairy products)
- lactose and galactose added as ingredients.

For more detail please see PHE's 'A definition of free sugars for the UK'.4

Table 1 sets out the proposed 'reducing sugar' guidelines for commercial baby foods and drinks, designed to limit the free sugar content and reduce sweetness.

Table 1: Draft proposed voluntary commercial baby food and drink guidelines for sugar

	Guideline	
Free sugars	All monosaccharides and disaccharides added to foods (including sugar, honey, syrups, nectars, malt extract, glucose syrup)	Not permitted in any products
	All sugars naturally present in fruit and vegetable juices and juice concentrates	Not permitted in any products except for small amounts of lemon or lime juice as a preservative
	All sugars naturally present in fruit and vegetable purees, pastes and similar products in which the structure has been broken down (e.g. powders, flakes)	Limit on <u>fruit</u> ingredients in:  • Main meals*  (≤5% ingredients by weight)  • Dry cereals*  (≤10% ingredients by weight)
	Lactose and galactose added as ingredients	Not permitted in any products except lactose in whey powder in dry cereals intended for reconstitution with water
Total sugars	Not more than 12g/100g in dess Not more than 30% of energy in	

<sup>\*</sup>As defined in Table 3

The guidelines restrict most types of free sugars. In acknowledgement of the use of fruit and vegetable purees, in particular, as foods and food ingredients for babies, the use of processed fruit and vegetables (other than juices and juice concentrates) is permitted. To ensure that levels of free sugars associated with these types of foods and ingredients are limited, there are restrictions on the use of processed fruit (but not vegetables) as an ingredient in some categories, and limits on total sugars in other categories. Businesses should aim to reduce levels of free sugars wherever possible in all food and drink products.

### Reducing salt

Table 2 sets out the proposed 'reducing salt' guidelines, designed to limit the salt content of commercial baby foods and drinks. These guidelines apply to foods but not drinks.

Table 2: Draft proposed voluntary commercial baby food and drink guidelines for salt

	Guideline
Salt	Not permitted as an ingredient in any products
Sodium	Not more than 75mg/100kcal or 125mg/100kcal if cheese is
	mentioned in the front of pack product name

### Product categorisation

Table 3 sets out the categorisation for commercial baby food and drinks.

More information and examples of the application of the guidelines are provided in Annex 1.



Table 3: Commercial baby food and drink product categorisation

Product categorisation is based on products available in the commercial baby food and drink market in 2018.

Commercial product type	Product category	Product sub-category	Detail		Product examples
Baby	Fruit and	Single vegetables	• 100% (or nearly) fruit and/or vegetab	oles, usually purees	100% carrot
meals	vegetable foods	Single fruit	Includes products with functional ingli	redients (i.e. ascorbic acid, water)	100% apple
		Mixed vegetables (>1)	<ul> <li>Excludes products with legumes, bea</li> </ul>	ans, starchy ingredients or oils (e.g.	Carrot, swede and potato
		Mixed fruit (>1)	cooking sauces and soups)	· ·	Apple, banana and pear
		Mixed fruit and vegetables			Carrot, beetroot and apple
	Main meals		Product name suggests savoury (e.g.)	g. vegetable flavour)	Spaghetti bolognese
			Composite main meals		Sweet potato, tomato and rice
			<ul> <li>Combinations of protein/starchy/vege</li> </ul>	etable and fruit foods	Chicken tagine
			<ul> <li>Excludes fruit and vegetable only pro</li> </ul>	Squash, grains and chickpeas	
				Cheese and vegetable pasta	
	Desserts and breakfasts		<ul> <li>Combinations of fruit/dairy/starchy fo</li> </ul>	ods	Apple, oats and yogurt
	breaktasts		<ul> <li>Includes ambient yogurts, desserts, t</li> </ul>	breakfasts (not dry, e.g.	Fruit with cereals
			porridge/muesli made up) including p	plain flavours	Custard
			<ul> <li>Includes fruit purees with added cere</li> </ul>	eals/grains/rice and or	Rice pudding
			water/milk/dairy alternatives		Fruit porridge (ready to eat)
			<ul> <li>Includes products made with dairy al</li> </ul>		
			Excludes chilled yogurts (included in	the sugar reduction programme)	
	Dry cereals/foods	Savoury	Product name suggests savoury	Excludes plain starchy foods (e.g.	Vegetables and rice
	3.54.5,15546		(e.g. vegetable flavour)	baby rice, plain pasta, couscous,	
		Sweet	Product name suggests sweet     (e.g. fruit flavour)	oats)     Excludes ready to eat products	Fruity porridge mix

Commercial product type	Product category	Product sub-category	Detail	Product examples
	Soups, cooking sauces and stocks		Excludes oils	Tomato and carrot sauce Bolognese sauce Vegetable stock cubes
Baby finger foods and snacks	Savoury finger foods and snacks		<ul> <li>Product name suggests savoury/plain, not sweet (e.g. vegetable flavour)</li> <li>Includes products with up to 25% fruit or vegetable ingredients</li> <li>Includes savoury puffs, breadsticks, rice cakes, biscuits, wafers and grain-based crisps</li> </ul>	Carrot rice cakes Vegetable puffs Cheese crackers
	Fruit and vegetable based finger	Vegetable based crisps/waffles	<ul> <li>Includes products with more than 25% fruit or vegetable ingredients</li> <li>Includes fruit/vegetable based products with added cereal/oats (e.g. fruit</li> </ul>	Parsnip crisps
	foods and	Fruit crisps	bakes/bites, fruit shapes)	Apple crisps
	snacks	Fruit based bars with cereal/oats	<ul> <li>Includes coated/flavoured and pressed/shaped dried fruit/vegetables</li> <li>Excludes 100% dried fruit and vegetables (e.g. raisins)</li> </ul>	Apple, banana and grain bars
		Other fruit-based snacks		Strawberry stars/shapes
	Sweet finger foods and snacks	Biscuits/biscotti/wafers	<ul> <li>Product name suggests sweet, not savoury (e.g. fruit flavour)</li> <li>Includes fruit flavoured products</li> </ul>	Rusks Chocolate biscotti
		Rice cakes	Includes products with up to 25% fruit or vegetable ingredients	Plum rice cakes
		Puffs		Orange puffs
		Cereal/oat bars		Banana flavoured oat bars
Baby drinks	Baby drinks		<ul> <li>Includes fruit drinks and juices</li> <li>Includes sweetened milk/milk alternatives</li> <li>Excludes formula milks, growing up milks, plain water, and unsweetened milk/milk alternatives</li> </ul>	Apple and blackcurrant juicy water

#### Additional considerations

The guidelines focus on improving the nutritional content of commercial baby foods and drinks. As highlighted in PHE's report, it is also important to:

- promote development of good eating habits including texture progression, development of taste preferences, dietary diversification and variety, and food recognition
- enable parents and carers to make informed choices at the point of purchase.

Food producers may therefore wish to consider the following:

- produce more vegetable and savoury foods than fruit based and sweet foods
- use more bitter vegetables as ingredients
- refrain from masking the flavour of vegetables
- produce more single-flavour first foods
- produce fewer highly blended foods
- reduce the total and free sugar contents of foods wherever possible
- consider appropriate portion sizes, particularly for finger foods/snacks, and products aimed at children aged under 12 months
- avoid producing treats or desserts.

DHSC will consult separately on proposals to improve the marketing and labelling of commercial food and drink products for infants and young children. In the meantime, food producers may wish to consider the following from PHE's report:

- ensure product marketing is consistent with scientific advice to introduce solid foods at around 6 months of age
- ensure honest labelling so that product names are not misleading and are aligned with the primary ingredients
- restrict use of nutrition and implied health claims and health halo statements
- ensure that clear feeding instructions (use a spoon/do not suck) are present on the front of pack of products packaged in pouches with a nozzle
- ensure that products high in sugars are labelled as not being suitable for eating between meals.

#### **Timelines**

The government is committed to action in this area. Final guidelines are expected to be achieved by industry by 2023.

PHE will monitor and report to government on industry's progress towards achieving the guidelines. If insufficient progress is made, government has stated that other levers will be considered.

#### Feedback

### You are invited to provide written feedback on these draft guideline proposals.

We are interested in hearing your further views on the scope for reformulation, technical considerations and challenges, as well as the opportunities, within the commercial baby food and drink sector. PHE will consider all feedback and provide advice to government before final guidelines are published.

Key questions are below. Please answer for each product type/category/sub-category relevant to your portfolio. It would be helpful if you could please provide full reasoning and any relevant data and wider evidence to support your comments.

## Throughout your response please ensure that the guideline and the product type/category/sub-category that comments relate to is clearly stated.

- 1. Do you agree with the draft proposed commercial baby food and drink guidelines (Table 1 and Table 2)? Do you consider the guidelines to be broadly achievable? Do you have any alternative proposals?
- 2. Do you agree with the draft proposed commercial baby food and drink product categorisation (Table 3)? Are there any other types of products which you would expect to be included?
- 3. Are there any technical or other challenges associated with achieving the draft proposed commercial baby food and drink guidelines?

### Annex 1: Methodology and examples

### **Example calculations**

The nutrition information provided on a product can be used to calculate whether the product is compliant with the:

**Salt guideline (all foods):** Sodium <75mg/100 kcal and <125mg/100 kcal if cheese is mentioned in front of pack name

Sodium content per 100kcal = 
$$\frac{100}{\text{Total energy content of food per 100g} \times \text{Sodium content of food per 100g}}$$

**Total sugars guideline (finger foods and snacks)**: Less than 30% of energy from total sugar

Percentage energy provided by sugar = 
$$100 \times \left(\frac{\text{Energy provided from sugar per } 100g}{\text{Total energy content of food per } 100g}\right)$$

The nutrition information below is for a savoury finger food/snack product.

Nutrition information	Per 100g
Energy (kcal)	441
Protein (g)	9.2
Carbohydrates (g)	67.7
Sugar (g)	3.8
Fat (g)	14
Saturates (g)	2.2
Fibre (g)	3.6
Sodium (g)	0.14

### Calculating compliance with the total sugars guideline:

1. Total sugar content (g) per  $100g \times 4^i$  = Energy provided by sugar

$$3.8 \times 4 = 15.2 \text{ kcal}$$

2.  $100 \times \left(\frac{\text{energy provided from sugar per 100g}}{\text{total energy content of food per 100g}}\right) = Percentage of energy provided by sugar$ 

 $100 \times \left(\frac{15.2}{441}\right) = 3.4\%$  of energy content of food provided by sugar

<sup>1 1</sup>g sugar provides approximately 4 kcal for the purpose of food labelling

The product provides less than 30% energy from sugar and complies with this guideline.

### Calculating compliance with the salt guideline:

1. 
$$\frac{100}{\text{Total energy content of food per }100g \times \text{Sodium content of food (mg) per }100g} = \text{Total sodium content per }100\text{kcal}$$

2. 
$$\frac{100}{441 \times 140} = 31.7$$
mg sodium per 100kcal

The product contains less than 75mg sodium per 100 kcal and complies with this guideline.

### Impact of guidelines on example products

Table A1 and Table A2 below indicate the impact the different guidelines will have on a range of example products. Many products will already be compliant with the draft proposed guidelines. Others may require reformulation based on one or multiple elements of the guidelines.

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ii Product examples are based on products available in 2018

### Table A1. Impact of the draft proposed guidelines on example products – baby meals categories

Product categorisation is set out in Table 3

Product examples are based on products available in 2018; product names and ingredients have been standardised Nutrition information is for products 'as consumed'

Red text indicates ingredients which are not permitted (salt, sugars), or present in amounts exceeding category limits (sugars).

		Example product Ingredients name				Sugar guidelines met?	Salt g	uidelines met?	
Product category	product		Energy kcal/100g	Sugar g/100g	Sodium mg/100g	Free sugars	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
Fruit and vegetable	Carrot	Carrots (82%), Water (18%)	26	3.8	0	<b>~</b>	<b>✓</b>	✓	Υ
foods	Mango	Mango (98%), Lemon Concentrate (2%)	44	8.8	0	✓	<b>✓</b>	✓	Y
	Carrots and potatoes	Vegetables (80%) [Carrots (60%), Potatoes (20%)], Water	32	3.0	0	✓	<b>✓</b>	✓	Y
	Apple, peach & mango	Apple Puree (62%), Apple (15%), Peach Puree (14%), Mango Puree (9%), Ascorbic Acid, Lemon Juice from Concentrate.	53	10.9	0	<b>~</b>	~	<b>~</b>	Y
	Peas, parsnip & pears	Peas (35%), Parsnip (25%), Water, Pear (15%) [Pear Purée, Antioxidant (Ascorbic Acid].	44	3.9	0	<b>✓</b>	<b>✓</b>	<b>✓</b>	Υ
	Sweet potato, beetroot, pear & apple	Sweet Potato (45%), Apples (22.5%), Pear (22.5%), Beetroot Juice (10%), Lemon Juice.	59	8.2	0	x	<b>✓</b>	~	N

				Sugar g/100g	Sodium mg/100g	Sugar guidelines met?	Salt guidelines met?		
Product category	Example product name	Ingredients	Energy kcal/100g			Free sugars	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
Main meals	Shepherd's pie	Potato, Lamb (13%), Chopped Tomato (9%), Carrot (7%), Pineapple, Haricot Beans (6%), Onion (5%), Swede, Water, Cornflour, Parsnip (2%), Crushed Tomato (2%), Vegetable Oil, Butter, Milk, Parsley, Garlic Purée, Spices	97	2.5	20	•	>	•	Y
	Spaghetti bolognese	Vegetables (53%) (Tomato (29%), Carrot, Peas, Onion), Pasta (25%) (Durum Wheat Semolina, Egg White), Beef (9.5%), Water, Corn Starch, Vegetable Oil, Oregano, Black Pepper	75	2.0	0	•	<b>~</b>	~	Y
	Vegetable & beef casserole	Vegetables (66%) [Potatoes 37%, Carrots 17%, Tomatoes 8%, Onions, Sweetcorn], Water, Beef (8.5%), Cream, Vegetable Oil, Rice Starch, Herbs and Spices, Lemon Juice from Lemon Juice Concentrate, Salt, Antioxidants (Ascorbic Acid, Tocopherol-Rich Extract)	70	1.4	90	<b>✓</b>	Х	x	N
	Sweet & sour chicken with rice	Vegetables ((45%), Tomato, Carrot, Onion, Potato, Red Pepper (5%)), Apple Juice from Concentrate, Rice (18%), Chicken (8%), Cornflour, Vegetable Oil, Iron Sulphate	77	4	0	x	<b>&gt;</b>	~	N

						Sugar guidelines met?	Salt (	guidelines met?	
Product category	Example product name	Ingredients	Energy kcal/100g	Sugar g/100g	Sodium mg/100g	Free sugars	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
	Spicy chicken with mango	Vegetables (37%) (Onion, Red Pepper, Sweetcorn), Tomato Puree (20%), Water, Halal Chicken (10%), Mango Puree (10%), White Rice (3%), Garlic, Ginger, Coriander Seed, Black Pepper, Thyme, Cinnamon	55	3.9	40	x	>	~	N

						Sugar gui	delines met?	Salt o	guidelines met?	
Product category	Example product name	Ingredients	Energy kcal/100g	Sugar g/100g	Sodium mg/100g	Free sugars	Total sugar ≤12g/100g	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
Desserts and breakfasts	Chocolate pudding	Whole Milk (79%), Water, Sugar, Cornflour, Fat Reduced Cocoa Powder (1%)	83	8.3	0	х	~	<b>✓</b>	<b>✓</b>	N
	Egg custard	Whole Milk (46%), Rice (24%), Skimmed Milk (17%), Water, Sugar, Egg (3%)	68	6.6	0	x	~	<b>✓</b>	~	N
	Rice pudding	Whole Milk (69%), Rice (27%), Cornflour.	71	7.0	0	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	Υ
	Blueberry & banana yoghurt	Greek Style Yoghurt (48%), Bananas (43%), Blueberries (7%), Wholemeal Oat Flour (1%), Barley Flour (1%), Lemon Juice Concentrate (<0.1%)	100	9.2	0	~	~	~	<b>~</b>	Y
	Apple and oat pudding	Fruit (43%) (Apple (25%), Banana (10%) Apricot (8%)), Water, Apple Juice from Concentrate, Cornflour, Cereals (3%, Oat (1%), Rice, Wheat), Concentrated Lemon Juice, Vitamin C	50	6.5	0	х	~	~	<b>✓</b>	N
	Fruity yoghurt	Pear (42%), Apple (18%), Milk, Yoghurt (10%), Banana (8%), Rice Flour, Water, Lemon Juice from Concentrate, Vitamin C	69	10	20	<b>✓</b>	~	~	<b>~</b>	Y
	Banana breakfast	Bananas (56%), natural yoghurt (41%), oat flour (2%), rice flour (1%), lemon juice concentrate	96	13.6	48	~	х	~	<b>✓</b>	N

						Sugar guidelines met?	Salt guidelines met?		
Product category	Example product name	Ingredients	Energy kcal/100g	Sugar g/100g	Sodium mg/100g	Free sugars	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
Dry cereals/ foods	Multigrain cereal with cauliflower broccoli & cheese	Flours (Rice, Maize) (52%), Vegetables (Cauliflower, Broccoli, Spinach, Onion), Skimmed Milk Powder, Maltodextrin, Palm Oil, Cheese (4%), Milk Protein, Inulin, Natural Flavourings, Yeast Extract, Calcium Carbonate, Vitamin C, Vitamin E, Niacin, Zinc Sulphate, Iron, Riboflavin, Vitamin B6, Vitamin B1, Vitamin A, Folic Acid, Vitamin D, Vitamin B12,	97	7.4	19	*	<b>~</b>	<b>~</b>	Y
	Multigrain porridge	Oat Flour (41%), Oat Flakes (30%), Wheat Flour (19%), Rice Flour (5%), Rice Balls (5%) (Rice Flour, Vitamin B1), Vitamin B1	88	0.6	0	~	<b>✓</b>	<b>~</b>	Y
	Banana peach & apple muesli	Wholegrain Oat Flakes (64%), Wholegrain Rye Flour (12%), Banana Flakes (11%), Puffed Rice Flour (5%), Peach Flakes (contains rice flour) (4%), Dried Apple (4%), Vitamin B1 (<1%)	153	9.5	22	х	<b>~</b>	<b>~</b>	N
	Multigrain & apple cereal	Milled Cereals (32%) [Wholegrain Wheat (22%), Rice (5%), Wheat (3%), Wholegrain Oats, Rye, Wholegrain Barley, Millet, Spelt ], Demineralised Whey Powder (25%), Skimmed Milk Powder (16%), Apple Powder (10%), Vegetable Fat (Palm Oil, Rapeseed Oil, Coconut Oil,	96	9	19	~	<b>~</b>	<b>✓</b>	Y

Sunflower Oil) (Soy Le	ecithin),		
Oligosaccharides (Gal	acto-		
Oligosaccharides (GO	S) (Milk),		
Fructo-Oligosaccharid	es (FOS)),		
Minerals, Maltodextrin	, Vitamins		

						Sugar guidelines met?	Salt gu	uidelines met?	
Product category	Example product name	Ingredients	Energy kcal/100g	Sugar g/100g	Sodium mg/100g	Free sugars	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
Soups, cooking sauces and stocks	Tomato pasta sauce	Tomatoes (43%), Carrots (20%), Red Peppers (15%), Onions (11%), Tomato Purée, Olive Oil, Concentrated Lemon Juice, Garlic Purée, Basil, Black Pepper	47	4.7	0	~	<b>~</b>	*	Y
	Tomato soup	Water, Tomato (22%), Carrot (15%), Tomato Purée, Cauliflower, Onion, Red Onion, Maize Starch, Red Lentils, Cornflour, Rapeseed Oil, Garlic Purée, White Pepper	44	3.2	0	<b>~</b>	<b>~</b>	<b>&gt;</b>	Y

Table A2. Impact of the draft proposed guidelines on example products – baby finger foods and snacks, and baby drinks

Product categorisation is set out in Table 3

Product examples are based on products available in 2018; product names and ingredients have been standardised Red text indicates ingredients which are not permitted (sugars, salt)

							guidelines net?	Salt gui	delines met?	
Product category	Example product name	Ingredients	Energy kcal/100g	Sugar g /100g	Sodium mg /100g	Free sugars	<30% of energy from total sugar	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
Savoury finger foods and snacks	Veggie waffles	Carrot Puree (34%), Wheat Flour, Vegetable Oil, Concentrated Carrot Juice (6%), Rapeseed Lecithin, Vinegar, Cumin (0.5%), Curry Powder, Salt	442	23	19	х	<b>&gt;</b>	х	•	N
	Cheesy cracker shapes	Gouda Cheese (40%), Potato Starch, Tapioca Starch, Corn Starch, Paprika, Yeast Extract, Natural Cheese Flavour	466	0.8	600	<b>~</b>	<b>&lt;</b>	<b>✓</b>	X	N
	Cheese puffs	Corn (73%), Vegetable Oil (15%), Cheese Powder [50% mature cheddar cheese (milk), 50% skimmed milk powder] (12%), Dried parsley (<1%), Vitamin B1 (<1%)	468	3.8	100	~	*	✓	<b>✓</b>	Y
	Veg flavour sticks	Potato Starch, Dried Potato (30%), Salt, Sugar, (<2%), Tomato Powder, Kale Powder, Spinach Powder, Red Beet, Firming Agent: Calcium Chloride, Turmeric), Vegetable Oil (Rapeseed/Canola).	518	1	400	х	>	X	•	Z
	Cheese crackers	Wheat Flour (49%), Rice Flour (19%), Cheese (14%), Vegetable Oil (9%), Malt Extract (6%), Malted Wheat Flour (<1%), Raising Agents (Sodium Bicarbonate, Ammonium Bicarbonate) and Vitamin B1 (<1%)	449	4.3	200	х	<b>&gt;</b>	<b>✓</b>	•	Z

							guidelines net?	Salt gu	idelines met?	
Product category	Example product name	Ingredients	Energy kcal/100g	Sugar g /100g	Sodium mg /100g	Free sugars	<30% of energy from total sugar	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
Fruit and vegetable-based finger foods and snacks	Whole wheat bars with fruit filling	Apple Filling (35%) (Apple Juice Concentrate, Apple Purée (20%), Gelling agent: Pectin, Apple Extract), Whole Wheat Flour, Apple Juice Concentrate, Wheat Flour, Vegetable Oil, Rice Flour, Raising Agent: Baking Powder, Vitamin B1	395	35.2	80	x	х	<b>✓</b>	~	N
	Fruit bars	Date Paste (86%), Apple Powder (13%), Rice Flour (<1%), Vegetable Oil (<1%)	311	62	10	<b>~</b>	Х	✓	<b>✓</b>	N
	Fruit puree shapes	100% Fruit, Apple Purée, Banana Purée, Concentrated Apple Juice, Blackcurrant Purée,	321	65.9	0	Х	х	<b>~</b>	<b>~</b>	N
	Oat and fruit bites	Wholegrain Gluten Free Oats (25%), Figs (22%), Sultanas (18%), Ground Sunflower Seeds (15%), Chicory Fibre, Flax & Chia Seed Mix (6%), Puffed Quinoa (3%).	339	25.8	0	<b>✓</b>	~	<b>✓</b>	~	Y
Sweet finger foods and snacks	Rusk	Wheat Flour, Sugar, Palm Oil, Raising Agents (Ammonium Carbonates), Calcium Carbonate, Emulsifier (Monoglycerides), Niacin, Iron, Vitamin B1, Riboflavin, Vitamin A, Vitamin D	414	29	10	х	<b>~</b>	<b>~</b>	~	N
	Strawberry baby biscuit	Wheat Flour (59%), Grape Juice Concentrate (26%), Palm Oil (6%), Vegetable Oil (5%), Strawberry Powder (3%), Raising Agent (Sodium Bicarbonate) (<1%), Vitamin B1 (<1%)	448	18.2	200	x	<b>~</b>	<b>✓</b>	•	N
	Ginger biscuits	Fortified Wheat Flour (Calcium Carbonate, Iron, Niacin, Vitamin B1), Vegetable Oils (Palm Oil, Rapeseed Oil), Salt, Natural Butter Flavouring, Sugar & Cane Molasses, Wholemeal Flour (Wheat), Oatmeal,	472	21.7	160	x	•	х	•	N

						Sugar guidelines met?		Salt gui		
Product category	Example product name	Ingredients	Energy kcal/100g			Free sugars	<30% of energy from total sugar	No added salt	Sodium <75mg/100 kcal or <125mg/100 kcal if cheese mentioned in FOP name	Product compliant with all guidelines?
		Partially Inverted Sugar Syrup, Ground Ginger (1%)								
	Strawberry fruit puffs (20g)	Maize Flour (75%), Vegetable Oil (13%), Dried Bananas (8%), Dried Strawberries (3%), Dried Raspberries (<1%), Wheat Bran (<1%), Vitamin B1 (<0.1%)	416	7.4	0	•	~	✓	•	Y

Product category	Example product name	Ingredients	Energy kcal/100g	Sugar g/100g	Sodium mg/100g	Sugar guidelines met? Free sugars	Product compliant with all guidelines?
Baby drinks	Apple and blackcurrant juicy water	Fruit Juice from Concentrate (50%, Apple (48%), Blackcurrant (2%)), Spring Water, Antioxidant - Ascorbic Acid	23	4.7	0	х	N

### **Annex 2: Nutrition information**

The proposed commercial baby food and drink guidelines have been informed by the range and distribution of the sugar and sodium content of products in each of the categories (as shown in Table A3 and Table A4 below). The data used for this analysis is from Kantar Worldpanel's take-home consumer panel, matched with nutrition information derived from food labels on individual products or which Kantar Worldpanel collected from third parties, for the 52 weeks ending September 2018. For more information on data sources see Appendix 4 of PHE's Foods and drinks aimed at infants and young children: evidence and opportunities for action report.

#### Conversions from sodium to salt

Kantar Worldpanel record all salt information in terms of sodium and guidelines are based on the sodium values provided in the dataset. Salt values can be produced using a standard conversion (sodium \* 2.5 = salt).

Table A3. Average and range of energy and nutrient content for baby meals

		Main ı	meals	Fruit and foo		Dry cerea	als/foods <sup>a</sup>	Desse break		Soups & saud	
Per 100g	Metric	All (n=367)	Top 10 selling products	All (n=170)	Top 10 selling products	All (n=66)	Top 10 selling products	All (n=110)	Top 10 selling products	All (n=5)	Top 10 selling products
	Average	71	67	55	60	108	107	76	73	46	n/a
Energy (kcal)	Min	32	62	23	50	45	96	37	63	20	n/a
	Max	254	75	96	85	156	128	147	89	67	n/a
	Average	3.3	2.9	0.7	0.4	3.4	3.6	1.7	1.8	1.2	n/a
Protein (g)	Min	0.0	2.4	0.0	0.0	0.8	1.9	0.6	0.6	0.9	n/a
(3)	Max	13.0	3.5	3.5	1.0	5.4	5.2	2.9	2.8	1.4	n/a
Carbohydrates	Average	8.7	8.6	11.5	12.7	17.2	17.2	13.2	13.0	4.6	n/a
•	Min	2.8	5.8	3.7	10.0	9.5	14.6	6.9	10.0	0.7	n/a
(g)	Max	32.3	10.3	20.2	18.0	25.8	20.9	21.4	15.5	8.6	n/a
	Average	2.5	1.7	9.4	10.7	7.5	8.6	8.9	8.8	3.0	n/a
Sugar (g)	Min	0.6	0.9	0.6	8.8	0.7	7.4	2.0	6.6	0.2	n/a
G (6)	Max	8.2	2.1	19.5	16.0	11	9.6	18.1	13.4	4.7	n/a
	Average	2.2	2.0	0.3	0.3	2.7	2.7	1.6	1.4	2.3	n/a
Fat (g)	Min	0.0	1.5	0.0	0.0	0.5	1.3	0.0	0.1	0.3	n/a
(3)	Max	19.0	2.7	1.8	0.9	4.3	4.1	6.5	2.6	4.7	n/a
	Average	0.8	0.5	0.1	0.1	1.1	1.2	1.0	0.9	0.8	n/a
Saturates (g)	Min	0.0	0.1	0.0	0.0	0.1	0.6	0.0	0.0	0.1	n/a
(3)	Max	4.1	1.6	1.7	0.7	2.3	1.9	5.5	1.7	2.3	n/a
	Average	1.6	1.3	2.0	2.1	4.4	4.3	1.1	0.8	1.5	n/a
Fibre (g)	Min	0.0	0.9	0.9	1.3	0.3	0.8	0.0	0.1	1.0	n/a
(3)	Max	5.2	1.8	4.7	3.9	11.0	9.6	3.1	1.9	1.9	n/a
	Average	0.03	0.01	0.00	0.00	0.03	0.03	0.01	0.00	0.00	n/a
Sodium (g)	Min	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	n/a
(5)	Max	0.20	0.10	0.06	0.00	0.04	0.04	0.10	0.00	0.00	n/a

n/a – figures not provided as number of products in the sub-category are below 10 <sup>a</sup> Values shown are for products as consumed <sup>b</sup> Data does not include stocks

Table A4. Average and range of energy and nutrient content for baby finger foods and snacks, and baby drinks

	Savoury finger foods and snacks		Fruit and vegetable and s			er foods and acks	Baby drinks		
Per 100g	Metric	All (n=77)	Top 10 selling products	All (n=43)	Top 10 selling products	All (n=104)	Top 10 selling products	All (n=17)	Top 10 selling products
Energy (kcal)	Average	441	470	344	328	415	409	19	19
Lileigy (Neal)	Min	362	428	248	275	280	378	8	8
	Max	532	532	497	395	553	424	26	26
Protein (g)	Average	9.2	6.9	2.8	3.2	7.5	8.0	0.1	0.1
1 1010111 (9)	Min	2.7	2.9	0.8	1.2	4.0	6.4	0.0	0.0
	Max	20.1	12.1	9.3	5.5	12.2	10.0	0.3	0.1
Carbohydrates	Average	67.7	66.9	68.4	67.6	71.7	68.1	4.1	4.1
•	Min	50.0	62.0	44.3	61.5	29.9	53.0	1.4	1.4
(g)	Max	91.0	78.0	81.2	80.3	92.8	86.0	5.6	5.6
Sugar (g)	Average	3.8	3.9	47.5	43.2	17.0	23.4	3.9	4.0
Odgai (g)	Min	0.0	1.0	13.0	23.0	0.8	9.5	1.4	1.4
	Max	13.1	7.3	67.7	67.5	29.0	29.0	5.2	5.2
Fat (g)	Average	14.0	18.7	5.5	3.8	10.0	10.7	0.1	0.2
. 4. (9)	Min	0.8	11.0	0.0	0.2	0.5	1.0	0.0	0.0
	Max	29.3	29.3	26.8	11.1	32.7	15.5	0.3	0.3
Saturates (g)	Average	2.2	2.6	1.6	0.8	2.7	2.6	0.0	0.0
Cataratoo (g)	Min	0.2	1.3	0.0	0.0	0.1	0.3	0.0	0.0
	Max	10.0	7.1	12.6	2.8	20.8	4.5	0.1	0.1
Fibre (g)	Average	3.6	3.0	6.2	5.4	3.8	4.7	n/a	n/a
i ibie (g)	Min	0.0	1.7	1.5	3.0	0.0	0.7	n/a	n/a
	Max	12.7	4.1	14.1	8.0	18.0	7.9	n/a	n/a
Sodium (g)	Average	0.14	0.17	0.04	0.04	0.07	0.06	0.00	0.00
Coalain (g)	Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Max	1.04	0.40	0.32	0.12	0.30	0.20	0.01	0.01

n/a – data not available

## Annex 3: WHO Europe recommendations

Development of the proposed draft guidelines has been informed by the draft nutrient profiling model (NPM) which the World Health Organization (WHO) Europe published in their discussion paper "Ending inappropriate promotion of commercially available complementary foods for infants and young children between 6 and 36 months in Europe" in June 2019.

Key points from the NPM on the nutritional composition of foods include:

- confectionery and sweet snacks should not be marketed as suitable for infants and young children up to 36 months
- fruit drinks and juices and sweetened cows' milk/milk alternatives should not be marketed as suitable for infants and young children up to 36 months
- savoury snacks and finger foods with greater than 15% energy from total sugars should not be marketed as suitable for infants and young children up to 36 months
- added sugars and other sweetening agents should not be used in foods for infants and young children up to 36 months
- limited amount of processed or concentrated 100% fruit (pureed or dried) as an ingredient in meals
- reducing the maximum permitted sodium content for commercial baby food

Recommendations made for food producers include:

- produce more vegetable and savoury foods than fruit based and sweet foods
- refrain from masking the flavour of vegetables
- produce more single-flavour blended foods
- produce fewer highly blended foods
- reduce the total sugar content of foods
- reduce the free sugar content of foods
- use no added sugars or sweetening agents
- avoid producing treats or desserts

### Annex 4: Infant feeding guidance

Table A5 provides a summary, by age group, of current government advice for feeding infants and young children aged from around 6 months of age, available online from Start4Life<sup>5</sup> and nhs.uk<sup>6</sup> webpages.

Table A5. Summary of Start4Life and NHS advice on introducing solid foods

Age of child	Feeding advice
Around 6 months	Small amount of solid food, once-a-day (breast milk (or infant formula) will still be providing most of the baby's energy and nutrients).
	The introduction of solid foods can start with single vegetables and fruits or baby rice mixed with a baby's usual milk.
	Gradually increase the amount and variety of food eaten offering a range of foods from the different food groups.
	Include vegetables that aren't so sweet (this will help your baby get used to a range of flavours).
	Babies don't need salt or sugar added to their food (or cooking water) – salty food isn't good for their kidneys and sugar can cause tooth decay.
	Once you have started introducing solid foods from around 6 months of age, try to move your baby on to mashed, lumpy or finger foods (from puréed or blended foods) as soon as they can manage them.
7-9 months	Eat together as much as possible.
	Gradually move towards eating three meals a day (breast milk (or infant formula) are still an important source of energy and nutrients at this age).
	Offering a wide variety of different foods is important to ensure they get enough energy and nutrients (such as iron). Keep offering a variety of foods, even the ones they don't seem to like, and let them get used to it in their own time.

Age of child	Feeding advice
	Babies don't need salt or sugar added to their food (or cooking water) – salty food isn't good for their kidneys and sugar can cause tooth decay.
	Babies under 12 months don't need snacks, offer extra milk feeds instead if a baby appears hungry between meals.
10-12 months	Should now be used to having three meals a day in addition to their milk feeds.
	Lunch and tea can include a main course and a pudding (such as fruit or unsweetened yogurt). Eat together as much as possible.
	Remember, your baby does not need salt or sugar added to their food or cooking water. Babies shouldn't eat salt as it isn't good for their kidneys and sugar can cause tooth decay.
12+ months	Infants should be having 3 meals a day. They may also need 2 healthy snacks in between (for example fruit, vegetable sticks, toast, bread or plain yogurt).
	Still no need for salt or sugar added to their food or cooking water.
	Can now drink whole cows' milk and have full fat dairy products (full fat for children under 2 years, and semi-skimmed milk from 2 years onwards if they're eating and growing well).
	Avoid sweet drinks.

### References

<sup>1</sup> World Health Organization. Report of the Commission on Ending Childhood Obesity 2016. Available from: www.who.int/end-childhood-obesity/final-report/en/

<sup>&</sup>lt;sup>2</sup> Singh AS, Mulder C, Twisk JW, van Mechelen W, Chinapaw MJ. Tracking of childhood overweight into adulthood: a systematic review of the literature 2008. Available from: https://pubmed.ncbi.nlm.nih.gov/18331423/

<sup>&</sup>lt;sup>3</sup> Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010 2012 Available from: https://pubmed.ncbi.nlm.nih.gov/23245609/

<sup>&</sup>lt;sup>4</sup> Swan GE, Powell NA, Knowles BL, Bush MT, Levy LB. A definition of free sugars for the UK 2018. Available from https://pubmed.ncbi.nlm.nih.gov/29587886/

<sup>&</sup>lt;sup>5</sup> https://www.nhs.uk/start4life/weaning/what-to-feed-your-baby/#12-months.

<sup>&</sup>lt;sup>6</sup> https://www.nhs.uk/conditions/pregnancy-and-baby/solid-foods-weaning/.