



## External Reference Group – 5 A Day logo

**Paper for discussion:** Including composite foods in the PHE 5 A Day logo and portion indicator scheme – analysis paper

### Agenda item 4

Given the need for consistent approaches members are invited to consider the following during their discussions:

- Principles for calculating the number of portions of fruit and/or vegetables per serving of a composite food carrying the logo, whilst not promoting overconsumption of calories, saturated fat, salt and sugar
- The minimum, incremental and maximum portions permitted per serving of a composite food carrying the logo
- General principles and nutrient criteria to assess eligibility for composite foods to use the PHE 5 A Day logo and portion indicator. For example:
  - Is setting stringent nutrient criteria (ie based on 'low' ('all green')) inappropriate/unhelpful?
  - Should we move towards setting nutrient criteria based on 'not high' ('not red') and public health salt targets? If so, what nutrients should be included?
  - Should products carrying the 5 A Day logo have an energy cap?
- Any other approaches and how these relate to the IGD guidance

# Including composite foods in the PHE 5 A Day logo and portion indicator scheme – analysis paper

## Background

1. Consumption of fruit and vegetables as part of a healthy, balanced diet can help reduce the risk of cardiovascular disease and some cancers. The National Diet and Nutrition Survey shows that we currently eat too few fruit and vegetables<sup>1</sup>.
2. The 5 A Day programme aims to increase the consumption of fruit and vegetables through local activity and awareness of their health benefits through both industry and public health (public and charity sector) campaigns.
3. The 5 A Day logo and portion indicator scheme, launched by the Department of Health in 2003, was developed to help people recognise the 5 A Day message, identify healthier products and introduce consistency of messages in all settings. Its use is limited to plain fruit and vegetables (eg fresh, chilled, frozen, juiced or dried) and fruit/vegetable products without any added fat, sugar or salt (eg some smoothies). Composite foods (a product which contains more than one ingredient such as cauliflower cheese or coleslaw) are currently excluded.
4. Previous discussions to extend the 5 A Day logo and licensing scheme to include composite foods took place in 2011. The Department of Health convened an external reference group to recommend a way forward (including which general principles and nutrient cut-offs to use). However, a decision was taken not to proceed at that time and one issue remained outstanding (namely which nutrient cut-offs to use). The principles and recommendations resulting from these earlier discussions are provided in appendix A of the background paper (ERG/5ADAY/14/2 - agenda item 3). This current paper takes account of these earlier discussions and considers revisiting areas where consensus was more difficult to achieve. It also questions whether new nutrient criteria should be developed (taking account of new EU legislation around nutrient labelling and revised salt targets published by the Department of Health).
5. More recently, the Institute of Grocery Distribution (IGD) further developed their best practice guide to calculating and communicating fruit and vegetable portions in composite foods to prompt a more consistent approach across the sector. Their revised guidance was published in April 2014. Many retailers are now following this approach.
6. We are re-visiting the possibility of extending the PHE 5 A Day logo and portion indicator scheme to include composite foods. This would potentially:

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<sup>1</sup> Bates B, Lennox A, Prentice A, Bates C, Page P, Nicholson S & Swan G. National Diet and Nutrition Survey: results from years 1 to 4 (combined) of the Rolling Programme (2008/2009 – 2011/2012) Available from: <https://www.gov.uk/government/publications/national-diet-and-nutrition-survey-results-from-years-1-to-4-combined-of-the-rolling-programme-for-2008-and-2009-to-2011-and-2012>

- Allow more products that meet strict nutrition criteria to display the logo
- Increase popularity of the scheme and elicit wider support of its use
- Enable discussions with industry with a view to reaching industry wide support for use of the logo
- Enable discussions with local authorities to promote wider uptake

## Methodology

7. 339 products across 27 composite food categories currently available within the retail sector were analysed<sup>2</sup>.
8. Fruit and vegetable content and number of portions per serving size were estimated at 80g fresh weight with the following provisos:
  - Pulses were capped at a maximum of one portion if they contributed more than 80g per serving
  - Dried fruit was capped at a maximum of one portion if it contributed more than 30g per serving (equivalent to 80g fresh weight)
  - Fruit juice was capped at a maximum of one portion if it contributed more than 150ml per serving
  - All concentrated pastes and purees in a product, such as tomato puree, were multiplied by 5 to account for the effects of concentration to provide a general fresh weight equivalent. The contribution from tomato puree was capped at a maximum of one portion if amounted to more than 80g (fresh weight) per serving
9. The relevant principles previously agreed by the earlier Department of Health external reference group in 2011 were utilised as the basis of the assessment with some amendments:
  - Nutrient data provided on labels was assessed using Reference Intakes for total fat, saturated fat, total sugars and salt to take account of recent changes in EU legislation<sup>3</sup> and current Public Health Responsibility Deal salt targets<sup>4</sup>.
10. The results of this analysis were used to compare the number of products in different categories meeting different possible criteria.
11. This approach and associated underlying principles were compared to the principles within IGD's best practice guide to calculating and communicating fruit

<sup>2</sup> Using data obtained from a range of manufacturers' and retailers' websites and manufacturers' information on food packaging. Data was collected between 3 February 2014 and 8 April 2014.

<sup>3</sup> Using the Department of Health's 'Front of Pack' nutrition label guidance (which incorporates recent changes in EU legislation). Available at: Department of Health. Guide to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets. Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/300886/2902158\\_FoP\\_Nutrition\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300886/2902158_FoP_Nutrition_2014.pdf)

<sup>4</sup> Public Health Responsibility Deal salt targets for 2017 and 2012 are available at: <https://responsibilitydeal.dh.gov.uk/responsibility-deal-food-network-new-salt-targets-f9-salt-reduction-2017-pledge-f10-out-of-home-salt-reduction-pledge/>  
<https://responsibilitydeal.dh.gov.uk/wp-content/uploads/2012/01/Salt-Targets-for-Responsibility-Deal.pdf>

and vegetable portions in composite foods to determine differences and similarities. These are summarised in table 1 below<sup>5</sup>.

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<sup>5</sup> IGD's best practice guide to calculating and communicating fruit and vegetable portions in composite foods is available at: <http://www.igd.com/our-expertise/Nutrition-food-and-farming/Fruit-vegetables-and-wholegrain/17569/Calculating-and-communicating-fruit-and-vegetable-portions-in-composite-foods/>

**Table 1: Principles used for current PHE analysis to extend the PHE 5 A Day logo to include composite foods and principles within current IGD best practice guide to calculating and communicating fruit and vegetable portions in composite foods**

General principles	Principles used for analysis to inform discussions to extend the PHE 5 A Day logo to include composite foods	IGD guidance	Differences and similarities
<b>Definition of 'composite foods'</b>	A food or drink comprising of two or more ingredients <sup>6</sup> , at least one of which is a fruit and/or vegetable <sup>7</sup> .	Those foods and drinks comprised of two or more ingredients at least one of which is a food that is not a fruit or vegetable (water is not included as an ingredient)	√
<b>Exclusion criteria</b>	<p>Composite foods <b>must</b>:</p> <ul style="list-style-type: none"> <li>• provide at least one portion of fruit and/or vegetables per serving</li> <li>• have an appropriate variety of fruit and vegetables in a portion of the product if more than one portion is declared</li> <li>• provide appropriate portion sizes</li> <li>• meet specific nutrient criteria based Reference Intakes for total fat, saturates, total sugars and salt (ie not 'high') and Public Health Responsibility Deal salt targets</li> </ul>	<p>Composite foods <b>must</b>:</p> <ul style="list-style-type: none"> <li>• have at least one portion of fruit and vegetables in a portion of the product</li> <li>• have an appropriate variety of fruit and vegetables in a portion of the product if more than one portion is declared</li> <li>• provide appropriate portion sizes</li> <li>• composites must not exceed disqualifying criteria based on the Reference Intakes for saturated fat, total sugars and salt and take into account the amount per 100g/100ml and the amount per portion where greater than 100g or 150ml in the case of drinks, but with the following additions: <ul style="list-style-type: none"> <li>○ <b>Salt:</b> OR adhere to current Public Health Responsibility Deal salt reduction targets</li> <li>○ <b>Total sugars:</b> The only exception is when ALL the sugars are from the fruit and/or vegetables</li> </ul> </li> </ul>	<p>√</p> <p>√</p> <p>√</p> <p>X</p>

<sup>6</sup> This does not include additives or water

<sup>7</sup> Potatoes do not count towards 5 A Day. 100% fruit and/or vegetable juices, pulps and purees are included

	<ul style="list-style-type: none"> <li>Composites must not be aimed specifically at children. This includes products marketed specifically at children, but not all products necessarily consumed by children</li> </ul>	<ul style="list-style-type: none"> <li>Applies to adults and children over 11 years only<sup>8</sup></li> </ul>	√
<b>Incremental portions</b>	Must provide at least one portion of fruit and/or vegetables per serving; thereafter 1 portion increments	Minimum content per serving of a product set at one portion of fruit and vegetables; thereafter half portions may be included	X
<b>Maximum number of portions a product can declare</b>	No upper limit to the number of portions a product can declare, providing there is the appropriate amount and variety of fruit and/or vegetables and the portion size of the product is realistic, and appropriate. 100% fruit juice, dried fruit, beans and pulses, concentrated/single strength purees would only count once in the product regardless of the amount present. Smoothies would count a maximum of two portions	No upper limit to the number of portions a product can declare, providing there is the appropriate amount and variety of fruit and/or vegetables and the portion size of the product is realistic, and appropriate	√

<sup>8</sup> IGD guidance states 'Note there is currently no epidemiological evidence on which to base children's portions. An adult portion of 80g is likely to be too much for children younger than 11 and this should be considered when developing products specifically for children.'

Fruit and vegetables within composite foods	Principles used for analysis to inform discussions to extend the PHE 5 A Day logo to include composite foods		IGD guidance		
	Conditions	Portion size	Conditions	Portion size	
Fresh	Excluding starchy vegetables usually eaten as starchy staples such as potatoes, yams, cassava	80g whole fruit or veg  150mls of 100% fruit or vegetable juice	Excluding starchy vegetables eaten as carbohydrate part of the meal (and not in addition to this) such as potatoes, yams, cassava and plantain	80g whole fruit or vegetables  150mls of 100% fruit or vegetable juice	√
Frozen	N/A	80g	N/A	80g	√
Dried	Maximum of 1 portion	30g (or fresh weight equivalent)	Maximum of one portion. The need for a variety of fruit and vegetables in the diet should be emphasised in products containing these fruit and vegetable formats	30g	√
Freeze-dried	Maximum of 1 portion	30g (or fresh weight equivalent) based on robust evidence	Maximum of one portion. The need for a variety of fruit and vegetables in the diet should be emphasised in products containing these fruit and vegetable formats	80g fresh equivalent based on supplier information	√
Canned (excluding pulses)	N/A	80g	N/A	80g	√
Pulses	Maximum of 1 portion	80g cooked weight	Maximum of 1 portion. The need for a variety of fruit and vegetables in the diet should be emphasised in products	80g cooked/reconstituted weight  40g dried weight	√

			containing these fruit and vegetable formats		
Juices	Maximum of 1 portion	150mls	Maximum of 1 portion. The need for a variety of fruit and vegetables in the diet should be emphasised in products containing these fruit and vegetable formats	150mls	√
Smoothies	Maximum of 2 portions	at least 80g of one variety of whole fruit /vegetable and 150mls of a different variety of 100% fruit and/or vegetable juice <b>OR</b> a minimum of 80g of one variety of whole fruit/vegetable and/or at least 80g of another variety of whole fruit and/or vegetable	100% smoothie, prepared from crushed fruit/vegetables only or a mixture of juice and pulp (juice from a single variety or mixture of juices)	May contain either: <ul style="list-style-type: none"> <li>• 150ml of 100% juice AND 80g crushed fruit/veg or pulp</li> <li>• 160g crushed fruit/veg or pulp</li> <li>• 80g crushed fruit/veg or pulp AND a combination of crushed fruit/veg or pulp and juice equivalent to a portion</li> </ul> [These quantities would contribute 2 portions, half of these quantities would contribute 1 portion]	X
Concentrated purees	Maximum of 1 portion	80g based on fresh weight	Maximum of 1 portion. The need for a variety of fruit and vegetables in the diet should be emphasised in products containing these fruit and vegetable formats	The equivalent of 80g fresh weight should be calculated according to information from the supplier	√



Non-concentrated purees	Maximum of 1 portion	80g	Maximum of 1 portion per variety	80g	X
Fruit or vegetable powders, extracts or flavourings	Not included				

## Results

12. Key differences between the principles used for analysis set out in this paper to inform discussions to extend the PHE 5 A Day logo to include composite foods and IGD best practice guidance are as follows:
- Nutrient criteria used (in particular inclusion of cut-offs for total fat and caveats around salt and sugars from fruit and/or vegetables)
  - Incremental portion size (1 portion vs ½ portion)
  - Limit on number of portions from smoothies
  - Non-concentrated purees – maximum of 1 portion in total vs per variety
13. A total of 339 products were assessed (across 27 composite food categories). Of these:
- 134 (40%) contained at least one portion of fruit and/or vegetables per serving
  - 94 products (28% of the total number of products assessed) contained at least one portion of fruit and/or vegetables and were not high in total fat, saturated fat, total sugars and salt (ie met Department of Health Front of Pack Guidance for green and amber). The majority of these also met Public Health Responsibility Deal salt targets (ie 26% on average of total number of products assessed)  
(see table 2 in appendix 1)
  - 7 products (2% of the total number of products assessed) contained at least one portion of fruit and/or vegetables and were low in total fat, saturated fat, total sugars and salt (ie all green). All 7 also meet Public Health Responsibility Deal salt targets.  
(see table 3 in appendix 1)
  - Of the 134 products that contained at least one portion of fruit and/or vegetables per serving, around half of these (65 products) contained at least a further half a portion, and around a fifth of these (26 products) contained at least a further whole portion (ie at least 2 portions).

## Questions for the Group

14. Given the need for consistent approaches members are invited to discuss/revisit:
- Principles for calculating the number of portions of fruit and/or vegetables per serving of a composite food carrying the logo, whilst not promoting overconsumption of calories, saturated fat, salt and sugar
  - The minimum, incremental and maximum portions permitted per serving of a composite food carrying the logo
  - General principles and nutrient criteria to assess eligibility for composite foods to use the PHE 5 A Day logo and portion indicator. For example:
    - Is setting stringent nutrient criteria (ie based on 'low' ('all green') inappropriate/unhelpful?)
    - Should we move towards setting nutrient criteria based on 'not high' (not red) and Public Health salt targets? If so, what nutrients should be included?
    - Should products carrying the 5 A Day logo have an energy cap?
  - Any other approaches and how these relate to the IGD guidance

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Health and Wellbeing  
3 November 2014

## Appendix 1

1. Table 1 provides detailed information on the number of composite food products within 27 categories which:
  - contain at least one portion of fruit and/or vegetables per serving
  - meet specific nutrient criteria based on reference intakes for total fat, saturated fat, total sugars and salt (ie 'not high' for any of these nutrients; 'green or amber' according to Department of Health Front of Pack Guidance)
  - meet Public Health Responsibility Deal salt targets (2012 and 2017) both within each food category and in total.
  
2. Table 2 provides detailed information on the number of composite food products within 27 categories which:
  - contain at least one portion of fruit and/or vegetables per serving
  - meet specific nutrient criteria based on reference intakes for total fat, saturated fat, total sugars and salt (ie 'low' for all these nutrients; 'all green' according to Department of Health Front of Pack guidance)
  - meet Public Health Responsibility Deal salt targets (2012 and 2017) both within each food category and in total.

**Table 2: Summary table showing the number of composite food products containing at least one portion of fruit and/or vegetables per serving, meeting DH Front of Pack criteria for 'not high' (ie green and amber, no red) for total fat, saturated fat, total sugars and salt, and meeting Public Health Responsibility Deal salt targets (2012 and 2017)<sup>9</sup>**

Food category	Total number of products assessed		Number of products with one or more portions of fruit and/or vegetables per serving	AND all green and amber (NO RED)		
					AND meeting 2012 salt targets	AND meeting 2017 salt targets
Baked beans and sausages	13		11	10	7	7
Chilli ready meals	16		10	9	9	9
Fruit loaves	12		0	0	0	0
Fruit pies	11		0	0	0	0
Ham and pineapple pizzas	16		4	3	3	3
High-fibre cereals	5		1	0	0	0
Moussaka	4		1	0	0	0
Meatballs	7		5	5	3	2
Pickled beetroot	10		0	0	0	0
Prawn salads	4		2	2	2	2
Quiches	20		0	0	0	0
Quorn products	5		0	0	0	0
Risotto	15		5	2	2	2
Sandwiches	7		0	0	0	0
Sweet and sour sauces	22		5	2	2	2
Tomato soups	24		23	21	21	21
Vegetable lasagnes	7		7	1	1	1
Vegetarian pizzas	16		3	1	1	1
Yoghurts	29		0	0	0	0
Indian ready meals	6		4	2	2	2
Healthier Indian ready meals	10		9	9	9	9
Chinese ready meals	10		4	3	3	3
"British" ready meals <sup>10</sup>	13		7	2	2	2
Non-tomato vegetable soups	12		9	8	8	7
Non-tomato chicken soups	9		3	3	3	3
Italian ready meals	28		19	9	9	9
Fish dishes	8		2	2	2	2
<b>Total</b>	<b>339</b>		<b>134</b>	<b>94</b>	<b>89</b>	<b>87</b>

<sup>9</sup> These figures are an underestimate; in some cases fruit and/or vegetables were included in the ingredients list of a product but there was insufficient information available to allow this to be quantified

<sup>10</sup> Includes cottage pie, shepherd's pie and roast meat-based dinners

**Table 3: Summary table showing the number of composite food products containing at least one portion of fruit and/or vegetables per serving, meeting DH Front of Pack criteria for 'low' (ie all green ) for total fat, saturated fat, total sugars and salt, and meeting Public Health Responsibility Deal salt targets (2012 and 2017)<sup>11</sup>**

Food category	Total number of products assessed	Number of products with one or more portions of fruit and/or vegetables per serving	AND all green (NO AMBER OR RED)		
			AND meeting 2012 salt targets	AND meeting 2017 salt targets	
Baked beans and sausages	13	11	0	0	0
Chilli ready meals	16	10	2	2	2
Fruit loaves	12	0	0	0	0
Fruit pies	11	0	0	0	0
Ham and pineapple pizzas	16	4	0	0	0
High-fibre cereals	5	1	0	0	0
Moussaka	4	1	0	0	0
Meatballs	7	5	0	0	0
Pickled beetroot	10	0	0	0	0
Prawn salads	4	2	0	0	0
Quiches	20	0	0	0	0
Quorn products	5	0	0	0	0
Risotto	15	5	0	0	0
Sandwiches	7	0	0	0	0
Sweet and sour sauces	22	5	0	0	0
Tomato soups	24	23	2	2	2
Vegetable lasagnes	7	7	1	1	1
Vegetarian pizzas	16	3	0	0	0
Yoghurts	29	0	0	0	0
Indian ready meals	6	4	0	0	0
Healthier Indian ready meals	10	9	2	2	2
Chinese ready meals	10	4	0	0	0
"British" ready meals <sup>12</sup>	13	7	0	0	0
Non-tomato vegetable soups	12	9	0	0	0
Non-tomato chicken soups	9	3	0	0	0
Italian ready meals	28	19	0	0	0
Fish dishes	8	2	0	0	0
<b>Total</b>	<b>339</b>	<b>134</b>	<b>7</b>	<b>7</b>	<b>7</b>

<sup>11</sup> These figures are an underestimate; in some cases fruit and/or vegetables were included in the ingredients list of a product but there was insufficient information available to allow this to be quantified

<sup>12</sup> Includes cottage pie, shepherd's pie and roast meat-based dinners