



## External reference group – 5 A DAY

### **Paper for information: correspondence and feedback received**

This paper provides a summary of the comments and views PHE has received relating to the work of the group.

#### **Members are invited to:**

- Note the summary of correspondence received and consider whether these comments and views impact on the principles and options for the nutrient-based criteria under discussion

**Agenda item 3**



## 5 A Day external reference group – correspondence and comments

Sector	ID No.	Key points for consideration	Other feedback or contributions
Industry	1	<p>Highlights a piece of published work commissioned on the National Diet and Nutrition Survey (NDNS, 2008-2010 dataset) to identify associations between juice consumption and diet quality as well as anthropometric measures.</p> <p>Conclusions:</p> <ul style="list-style-type: none"> <li>– although no causal inferences can be drawn, consuming 100% fruit juice was associated with leanness rather than increased adiposity</li> <li>– 100% orange juice is a source of vitamin C, potassium, folate and a range of phytochemicals</li> <li>– On basis of NDNS findings, responsible consumption of 100% juice can be positively encouraged as part of a healthy balanced diet</li> </ul>	<p>Key findings of NDNS analysis:</p> <ul style="list-style-type: none"> <li>• Average intake of 100% FJ in the total population (consumers + non-consumers) was 70g/d and amongst consumers of juice 146g/d</li> <li>• FJ consumption was associated with higher dietary quality (% RNI) and lower risk of inadequate intakes of micronutrients (% &lt; LRNI)</li> <li>• Consumers of 100% FJ consumed more whole fruits and vegetables than non-consumers</li> <li>• Consumers of 100% FJ were more likely to meet 5 a day recommendation</li> <li>• 100% FJ consuming adults and children had significantly lower BMI than non-consumers and adults had a significantly lower waist circumference</li> </ul>
Industry	2	<p>Correspondence to highlight the positive contribution that 100% fruit juice and smoothies make to the diet, and to help reduce the risk of heart disease, stroke and</p>	<p>Health experts support the inclusion of 100% fruit juices and smoothies as part of the 5-a-day scheme. [Quotes provided by a dietitian/registered nutritionist and a GP]</p>

some cancers

The current debate on sugars and the proposal to introduce a 'free sugars' definition, has meant that the nutritional value and the role of 100% fruit juice and smoothies in a healthy balanced diet have been overlooked

For their nutritional contribution and the lack of association with negative health markers 100% fruit juices and smoothies are a convenient way to help people towards the 5-a-day target when consumed as part of a healthy and balanced diet. Given their positive contribution to nutrient density and the fact that Government dietary intake data (NDNS) gives no indication of excessive consumption, would urge PHE to retain current advice relating to 100% fruit juice and smoothies

**1) The majority of adults and children in the UK are not meeting the current recommended 5 A Day target**

- Only 30% of adults and 41% of older adults meet 5 A Day recommendation
- Consumption of fruit and vegetables by children aged 11 to 18 years is 3.0 portions per day for boys and 2.7 portions per day for girls. Only 10% of boys and 7% of girls in this age group meet the 5 A Day recommendation
- Juice and smoothies contribute over 20% of the total fruit and vegetable intake of school children and teenagers who are among the groups with the lowest

	<p>fruit intake in the population</p> <ul style="list-style-type: none"> <li>– No evidence of widespread overconsumption of juice with average intakes across all age groups falling just below 150ml/day</li> </ul> <p><b>2) 100% fruit juices and smoothies contain essential vitamins and minerals</b></p> <ul style="list-style-type: none"> <li>– 100% fruit juice provides essential nutrients and minerals (eg, 100% orange juice is an excellent source of vitamin C as well as being a source of folate and potassium). Recommended intake levels of folate and potassium are not being reached by some sections of the population</li> <li>– NDNS data notes there is an increased risk of iron deficiency in girls aged 11 to 18 years and women aged 19 to 64 years. 100% orange juice is an excellent source of vitamin C and this can help increase the uptake of iron from plant sources including cereal foods, if the two are consumed together</li> <li>– A 200ml glass of orange juice delivers 80% of the Reference Intake of vitamin C and is a good source of folate and potassium as well as containing a wide range of phytochemicals for which emerging research indicates health benefits. 100% fruit juice provides children with between 14-19% of their daily vitamin C intake</li> <li>– Smoothies also contain the benefits of fruit puree (whole crushed fruit)</li> <li>– The NHS recommends that people should be consuming more fibre. A 250ml smoothie can deliver up to 13% of an adult's daily requirement of fibre</li> <li>– The classification of smoothies as two portions of fruit is helpful to consumers in communicating these</li> </ul>	
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		<p>additional benefits:  150ml of juice = 1 portion  80g fruit puree =1 portion  250ml = 150ml juice + 80g fruit puree = 2 portions</p> <p><b>3) The 100% fruit juice consumer</b></p> <ul style="list-style-type: none"> <li>– Adults and children who drink 100% fruit juice eat more portions of fruit and vegetables than non-juice consumers</li> <li>– 100% fruit juice consumers have a lower body weight, BMI and waist circumference than people who do not drink juice.</li> <li>– 100% fruit juice drinkers have higher intake levels of essential nutrients which are not found in 100% fruit juice so juice consumers are enjoying healthier diets than their non-juice drinking counterparts</li> <li>– 100% fruit juice does not displace whole fruit in the diet. No evidence that discouraging people from drinking juice will switch to eating whole fruit instead - there is a risk that 5 a day consumption will be further reduced by an average of 0.5 portions per person</li> </ul>	
Industry	3		<p>If it is proposed to extend the range of food in the scheme, it would be timely if this review encompassed peanuts, tree nuts and nut butters without added salt, fat or sugar (30g/day servings). Since the original 5 a day criteria were formulated, a wealth of evidence confirming the health benefits of regular nut consumption as part of a balanced diet which has become available and nuts are more widely recognised in healthy eating guidance and recommendations in various countries. Interested to hear whether PHE is considering nuts and nut butters as part of its review</p>

			Subsequent to the above additional correspondence has been received and this is provided in full in appendix A'
Industry	4	Fruit leathers: Is there any analytical data to compare the micronutrient retention vs. fresh fruit? If there are significant losses of unstable micronutrients (e.g. vitamin C and folate) on the manufacture of leathers then this could rule them out and end the debate on their inclusion (or not) in 5 a day	
Industry	5	Concern about proposal that if 5 a day logo was extended to composite foods, foods aimed at children would be excluded. This would exclude spaghetti and pasta shapes in tomato sauce as they are specifically marketed to children, even if they were to comply with 2017 salt targets and were low in fat, saturated fat, sugar or provided other micronutrients	
Industry	6	<p>It is difficult to explain to industry and health campaigners why children and their parents should not be encouraged to consume their 5 a Day and guidance will be needed on how to communicate the 5 a day message to families. Suspect many companies will continue to promote 5 a day to children in their own way and there is a risk that this undermines the use of the PHE icon</p> <p>Nutrient criteria:</p> <ul style="list-style-type: none"> <li>- Many retailers use fat as part of the criteria voluntarily as it supports their brand standards for certain ranges, although would still have exceptions if product development was limited</li> <li>- Worth noting that the brand standards of most</li> </ul>	

	<p>companies would be along the lines of foods with 'high' levels of fat, saturates, sugars and salt cannot be labelled with a 5 a day logo and 'high' is aligned with FIC complaint traffic light labelling. Fruit and vegetables containing naturally occurring sugars are an exception</p> <ul style="list-style-type: none"> <li>- Salt targets are often not included because:</li> </ul> <p>1) Compliance relates to the annual sales weighted average for a category (eg, sandwiches with high salt fillings) and not an individual product so this may not be representative and is impractical to apply at the approval stage for an individual recipe</p> <p>2) Meeting the 2017 target now includes maximums and 95% means the target can be met, again this may not apply an individual product recipe, may not be representative and is impractical to apply</p> <p>Non-concentrated purees:</p> <ul style="list-style-type: none"> <li>- Several companies are including purees of vegetables and pulses in order to boost the content of 5 a day. Companies tend to follow the principle of capping at one portion per variety. Vegetables "pureed" include peas, chickpeas for example and in some cases several purees are added to meet one portion</li> <li>- Cooking fruit and vegetables may also result in a puree once the consumer eats the product (whether the manufacturer or the consumer has cooked the product)</li> </ul> <p>Extruded fruit products:</p> <ul style="list-style-type: none"> <li>- For our branded fruit bars where we use dried fruits,</li> </ul>	
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		<p>minced and extruded, we work back the fresh fruit equivalent by adding the moisture back in, and comparing the weight to the fresh fruit. We are confident that the fresh fruit equivalent is greater than 80g hence we are confident that 1/5 day logo is applicable to that range</p> <ul style="list-style-type: none"> <li>– For fruit pieces made with fruit juices, we often (not in all products) also add some sugar, therefore we don't feel to be suitable for the 1/5 day logo. In addition, the product will not meet the 150ml fruit juice equivalent</li> <li>– For dried fruit bars, they are far closer to the real fruits, with minimum processing, whereas the fruit pieces are highly manufactured / processed, hence we feel these products are unsuitable for the 1/5 day logo</li> </ul> <p>5 A DAY logo – potential options</p> <ul style="list-style-type: none"> <li>– Comments received provided in Appendix A</li> </ul>	
Industry	7	Summary of feedback from the British Nutrition Foundation industry forum meeting provided in Appendix A	
Industry	8		<p>There have been a number of concerns raised in the past about the unofficial use of the 5 A DAY logo by manufacturers of processed foods, claiming that their products are healthy alternatives to fresh produce. We are keen to see how this proposal will sit alongside such existing claims and how it will be overseen to cut out the existing breaches of the 5 A DAY logo and good name</p> <p>We would also be interested to hear about Public Health</p>



			England's plans to ensure that fresh fruit and vegetables are maintained as the key essentials in achieving 5 A DAY, and the UK Government's promotion of fresh produce as affordable, convenience food
Health	9	<p>There needs to be clarity for consumer about the benefits/disadvantages of consuming a product marked with the 5 a day logo. Many parents will give fruit juice as an alternative to fizzy drinks or squash thinking it is really good for their child. In reality it would be better for them to have water with meals and milk with snacks than juice. That said, it is a good way of getting some vitamins into children who are fussy</p> <p>Smoothies seem to be deemed the answer to every weight loss plan too which in reality is not necessarily the best option. Need to be aware that manufacturers will manipulate the 5 a day logo for their sales even if they stay within the legislation</p>	
Health	10	<p>The epidemiology that led to 5 a day almost certainly did not include composite foods. That doesn't mean that the fruit and vegetables in such foods are not contributory but does mean that if they are included then the expected benefit of 5 a day would be less than expected</p> <p>In favour of allowing half portions to be counted</p> <p>Dried fruit and nuts etc... these need to be allowed only within strict "nutrient profile" for allowable foods - many grain and fruit bars are basically confectionery</p>	

		Unclear why smoothies are allowed. Regarding satiating properties: will not have the same physiological effect as whole fruit & veg even if nothing is extracted (simply due to the change in physical structure)	
Health	11	<p>Portions:</p> <ul style="list-style-type: none"> <li>– Products should have the equivalent of 1 portion of fruit or veg to be included. Half portions weaken the messages and should not be introduced without some consumer testing</li> </ul> <p>Nutrient criteria:</p> <ul style="list-style-type: none"> <li>– Happy for anything that had 80g of any combination of fruit and veg to be included. Some concerns about not including products which have fruit and veg but are also high in fat, sugar or salt as other approaches ie ‘traffic lights’ should identify these characteristics (though questions whether this is up for discussion)</li> </ul>	
Health	12	<ul style="list-style-type: none"> <li>– Concerned about smoothies counting as two portions (or as a recent product claimed, 3 portions) towards 5 a day. The displacement effect of fruit as a smoothie may be less than consuming the equivalent in whole fruit form. Previous studies have shown that fruit consumed whole is more satiating than the same fruit either consumed as a puree or juice, both in terms of the experience of appetite post-ingestion and subsequent test meal intake.</li> <li>– If fruit juice is taken out of ‘5-a-day’ it feeds into the public perceptions of "experts never agreeing" and could risk undermining the robustness of the whole</li> </ul>	<p>Provided an overview of research they are currently conducting comparing the impact on satiety of consuming fruit salad and glass water compared with fruit smoothie made from same ingredients, served as a drink or as a snack, and options for additional research</p> <p>The idea of increasing the target to 7 a day has been mooted and this has an element of progression as well as matching targets in some other countries</p>

		<p>initiative</p> <ul style="list-style-type: none"> <li>– Fruit juice remains a cheap ‘fruit’ portion, with a long fridge-life which is important for home storage and waste prevention, particularly amongst low income consumers</li> <li>– If we take fruit juice and smoothies out of ‘5 a day’, would we also have to take out passata or tomato puree? One possible way round this would be to include only one portion of processed fruit and vegetables. If any food no longer has the same shape, form or appearance of the fruit or vegetable it was derived from it can only count once. This way we push ‘5-a-day’ back to whole fruit and vegetables without negating previous messages. This adaption is in recognition that the new SACN report has a higher fibre recommendation as well as lower free sugars target, which need to be reflected in ‘5 a day’</li> <li>– If fruit juice does come out of ‘5 A Day’ should smoothies which contain all the fibre of the original fruit also come out?</li> </ul>	
Academia	13	<p>Children:</p> <ul style="list-style-type: none"> <li>– A clear definition of what constitutes a child is required in the guidance and a reference is need for the location of an equivalent for children. Age given needs to be actual age to avoid confusion but needs to allow for differences in developmental age</li> </ul> <p>Non-concentrated purees – should these be limited to total number of portions or portions per variety per serving:</p>	<ul style="list-style-type: none"> <li>– Highlighted British Heart Foundation 2013 publication indicating how portion sizes have increased</li> <li>– Proposed composite idea is not such an issue with fruit drinks but problematic with solid food</li> <li>– NDNS data highlight the issues in terms of fruit and veg consumption. The addition of the 5 a day logo to composite foods may be interpreted as ‘shifting the goal posts’ in order to - on paper - improve the consumption of fruit and veg</li> <li>– It is known that whole fruit and veg are low in salt and fat</li> </ul>

	<ul style="list-style-type: none"> <li>- 80g portion size can be a composite of different fruits or veg but needs to be clear to increase to 2 portions is a full incremental increase</li> <li>- However consideration needs to be given to the level of extrinsic sugar. A high level of extrinsic sugar should minimize the portion size (as with fruit juice) and should apply to other products where this happens (e.g. some smoothies and fruit desserts). This would be consistent with a health message that includes dental health and related issues. Excluding pulp from smoothies and fruit juice may reduce extrinsic sugar but has a negative impact on bowel health and potentially other nutrient intakes. There needs to be a rounded view not just focus on extrinsic sugar. Overall, consider if maximum is 1 portion</li> <li>- Should also be discussion on regulation of portion sizes of such products. There is a disparity between recommended portion sizes from health professionals and what the food industry suggests (particularly evident for fruit juices and smoothies).</li> </ul> <p>Sugars:</p> <ul style="list-style-type: none"> <li>- Logo should only be used on foods that meet the green sugar criteria. Should be the official 5 a day logo and not from the food industry</li> </ul> <p>Salt criteria:</p> <ul style="list-style-type: none"> <li>- Should be restricted to green to meet the new proposed 2017 targets. The majority of fruit and veg</li> </ul>	<p>and rich in micro and phytonutrients and therefore any composite food should mirror this</p> <ul style="list-style-type: none"> <li>- The proposed scheme may lead to the adoption of deleterious health behaviours, the reliance upon ready meals as a source of fruit and veg, rather than consuming them in their whole form. The likely impact upon the populations' health would be minimal as such "composite" foods are already being consumed</li> <li>- If the use of the logo on composite foods is to be approved, we would suggest that future nutrition surveys account for this in their methodology for assessing fruit and veg intake</li> </ul>
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		<p>consumed traditionally are low in in salt - any proposal to include composite foods should mirror this. Many foods with 5 day logos (not official Government logo) have significantly higher level of salt than would be found naturally in the fruit / veg [example provided]. There needs to be regulation into what the upper limit of such composite foods would be</p> <ul style="list-style-type: none"> <li>– Needs to be much greater regulation on the use of the 5 a day logo itself and food manufactures should be restricted to using the official Government logo</li> </ul> <p>Extruded fruit products:</p> <ul style="list-style-type: none"> <li>– These products are proportionally higher in sugar than equal weight of whole fruit due to their manufacturing process. Allowing extruded food products to carry 5 a day logo will likely lead to increased sugar consumption that is in excess of what would be consumed from eating whole fruit. The texture of these products (i.e. chewy and may adhere to teeth) may increase risk of dental caries</li> </ul>	
Academia	14	<p>Children:</p> <ul style="list-style-type: none"> <li>– The OFCOM definition should be used. It is evidence based and relevant. Foods high in fat, salt or sugar are harmful to children and adults; hence the nutrient profiling model and traffic light labels. Unless a product is ‘green’ for all categories, it should not receive the 5 a day logo</li> </ul>	<p><b>Comments on consensus paper:</b></p> <p>The emphasis on consensus may be slightly naïve. It apparently assumes that vested interests do not exist</p> <ul style="list-style-type: none"> <li>– <b>Para 1</b> implies that a consensus was reached in November. That is not our understanding</li> <li>– <b>Table 1:</b> Beans and pulses should be considered separately - both promote health unlike fruit juice.</li> <li>– <b>Table 2:</b> Unwise to conflate fruit juice (high ‘added’</li> </ul>

	<p>Smoothies:</p> <ul style="list-style-type: none"> <li>– The proposal that smoothies can count as a maximum of 2 portions must be rejected due to their sugar content. One smoothie can grossly exceed the daily maximum free sugars intake recommended by WHO</li> </ul> <p>Nutrient criteria:</p> <ul style="list-style-type: none"> <li>– Unless a product is ‘green’ for all categories (fat, saturates, sugars, salt) it should not receive the 5 a day logo</li> <li>– It is not surprising that this limit might not maximise industry profits but this is not PHE’s role. PHE is committed to ‘protect and improve the nation’s health’ not commercial profits</li> <li>– Strongly agree that fat content for drinks should be restricted to only those products with ‘green’ FoP labels to minimise passive overconsumption of calories</li> </ul> <p>Salt:</p> <ul style="list-style-type: none"> <li>– Strongly recommend that in order to carry the logo, it should be restricted only to foods which meet the ‘green’ criteria for salt</li> </ul> <p>Sugars:</p> <ul style="list-style-type: none"> <li>– Extruded fruit products should be excluded from being eligible to carry the 5 a day logo</li> </ul> <p>The logo should be restricted only to products which are ‘green’ for all categories including sugars</p>	<p>sugars) and vegetable juice (usually not)</p> <ul style="list-style-type: none"> <li>– <b>Table 3:</b> Unwise to exclude energy particularly in light of the obesity problem. Vested interests can bias scientific discussions. For example, ample evidence of the public health importance of total fat as a source of calories and a source of saturated and trans fats</li> <li>– <b>Saturated fat:</b> These reference Intakes are ancient and unhealthy. They should be halved and a statement made that zero is preferred target</li> <li>– <b>Total sugars:</b> Values provided by the industry rather than by scientists. Absurd to recommend 22.5g per 100g in food or 11.5g per 100ml in drink</li> <li>– Example given of sugars in a fruit salad disingenuous; different from sugars concealed in processed foods.</li> <li>– <b>Salt:</b> British adults still consume vastly more salt than is recommended. For food would recommend a maximum of 1g per 100g, for drinks no more than 0.5g per 100ml</li> <li>– <b>Para 5, extruded fruits:</b> Should be excluded from the 5 a day logo</li> <li>– <b>Para 6, [fruit juice]:</b> Average intakes of concern as it means half the children are consuming more than 100ml, some considerably more</li> </ul> <p>PHE have a duty of care to adults and children in Britain. That includes providing clear, evidence-based advice on which foods are healthy, and which unhealthy. That should include advice requiring industry to progressively reduce the content of harmful salt, sugar and fat in junk foods and sugary drinks</p>
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			Only then can PHE convincingly claim to be 'protecting and improving the nation's health'
Academia	15	<p>Article on 5 a day published on The Conversation. Available at: <a href="http://theconversation.com/food-fight-is-business-trying-to-game-the-five-a-day-system-36524">http://theconversation.com/food-fight-is-business-trying-to-game-the-five-a-day-system-36524</a></p>	
Voluntary Sector	16	<p>Pulps and purees:</p> <ul style="list-style-type: none"> <li>– Would limit non-concentrated purees to total number of portions, which would provide consistency with juices</li> </ul> <p>Salt criteria:</p> <ul style="list-style-type: none"> <li>– Agree that the salt criteria should be limited to those products that comply with either green or amber threshold, as well as 2017 salt target. This will ensure that products are labelled appropriately for their category but also make it easier for consumers to identify healthier options in relation to salt when comparing products using the front-of-pack scheme</li> </ul> <p>Extruded fruit products:</p> <ul style="list-style-type: none"> <li>– Do not agree that all extruded fruit products should be excluded from carrying the 5 a day logo. If, however an extruded fruit product has additional ingredients, such as extra sugar or concentrated fruit juices then they should not feature the logo</li> </ul> <p>Sugar:</p> <ul style="list-style-type: none"> <li>– Given the high level of confusion and attention</li> </ul>	

		<p>around the role that sugar should or should not play in a healthy diet, agree that the logo should only feature on products that comply with the 'green' sugars threshold. If the scheme were to be applied to products that needed to be consumed in small sparing amounts then this may lead to great confusion and devalue the credibility of the scheme. Assume this would only apply to foods that have ingredients other than pure fruit and vegetables in them</p>	
Voluntary sector	17	<p>Children:</p> <ul style="list-style-type: none"> <li>- It is important that marketing and advertising of products to children and sustainability of the logo on products is carefully considered. Criteria for inclusion of the logo should take into account the overall nutrition of the product (eg, a higher sugar, fat or salt content could negate portions of 5 a day)</li> </ul> <p>Non-concentrated purees:</p> <ul style="list-style-type: none"> <li>- Due to the high level of extrinsic sugars in fruit purees and the removal of fibre during sieving, fruit purees should be limited to a maximum of two portions (even though they may contain the puree of more than two fruits)</li> <li>- Not considered necessary to differentiate between whether the fruit comes from one variety of fruit or from more than one variety of fruit</li> <li>- Agree that there should not be a limit on the number of 5 a day portions which can be listed from</li> </ul>	



	<p>vegetable puree</p> <p>Salt:</p> <ul style="list-style-type: none"><li>– As it is not clear how the voluntary front of pack labelling will progress, it would be helpful to use both green and amber criteria and the 2017 salt targets</li></ul> <p>Extruded fruit products:</p> <ul style="list-style-type: none"><li>– Due to potential conflict with oral health messaging, and importance of limiting these products to mealtimes, these products should be excluded from carrying the 5 a day logo</li><li>– Agree that these products are high in extrinsic sugars, stick to the teeth and are promoted as in between meals snacks, all of which are bad for the dental health</li><li>– Also implications around sugar intake and weight gain</li></ul> <p>Sugar criteria:</p> <ul style="list-style-type: none"><li>– Agree with criteria set out and with the exclusion of composite foods where all sugars are from whole fruit and vegetables</li></ul>	
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## Appendix A

### Full comments received in follow-up correspondence (Summary ID number 3)

#### Widening “Five a Day” to Include Nuts

Encouraging the British public to eat at least five portions of a variety of fruit and vegetables per day has the unreserved support of the nut industry in the United Kingdom. Widening the range of food choices included in “Five a day” would, we believe, improve compliance with this goal across all age groups and also create new opportunities for the public to make quality, affordable choices in their diets.

Since “Five a Day” began in the 1990s, the principle of what counts as fruit and vegetables has been widened by UK and European authorities to include nuts. This reflects the nutritional evidence for health benefits of regular nut consumption, particularly when substituting for foods higher in saturated fat, salt and sugar. Approved health and nutrition claims support this.

This paper identifies the original reasons for excluding nuts<sup>1</sup> from the policy development which culminated in the UK “Five a Day” campaign. It then identifies subsequent policy and scientific developments, which collectively form a rationale for including nuts in a widened definition of what “Five a Day” could mean.<sup>2</sup>

Nuts were excluded from “Five a Day” when it was being planned for very simple reasons:

- because of their high protein levels, they were grouped not with vegetables and fruits, but with the meat, fish and “alternatives” group.
- they were seen as snack foods and per capital consumption was low in the early 1990s, so the conclusion was that nuts would contribute little to the overall UK diet.<sup>3</sup>
- the issue of portions/serving sizes for nuts was not then established.

Much has changed about how nuts are regarded since the UK’s Five a Day campaign was being planned. We have highlighted key developments in the following section:

1. In 2001 the UK Advertising Standards Agency’s Committee of Advertising Practice approved three claims following an independent review by the British Nutrition Foundation of evidence submitted by the American Peanut Council and further scrutiny by the ASA’s external referee Dr Susan Jebb.<sup>4</sup> The three claims were:

“Peanut products are a source of unsaturated fats in the diet. Replacing some saturated fats with polyunsaturated and monounsaturated fats will help to improve the ratio of beneficial to harmful cholesterol in the blood and maintain normal cholesterol levels.”

“By reducing the amount of saturated fats and substituting with unsaturated fats, as found in peanuts, peanut butter and peanut oil, it is possible to achieve lower level of “bad” LDL cholesterol.”

1 “Nuts” in this context means peanuts (botanically legumes) and culinary tree nuts (botanically seeds or dried fruits) because of their strong nutritional similarities.

2 A database of nutritional studies on nuts is maintained by Loma Linda University in California [www.nutstudies.org/search.php](http://www.nutstudies.org/search.php) This nutritional research illustrates the normalisation of the notion of nut portions equating to small handfuls, roughly 30g or 1oz. 3 Sharp I ed, 1997. *At Least 5 a day – strategies to increase vegetable and fruit consumption*. National Heart Forum, London; Williams C, 1995. “Healthy eating: clarifying advice about fruit and vegetables” *British Medical Journal*; 310:1453-1455

4 American Peanut Council European Office, London. March 2001 data on file.

“Foods that are high in unsaturated fats including peanuts, peanut butter and peanut oil are reasonable choices to replace food sources of saturated fats in order to help achieve recommended cholesterol levels.”

2. The 2002 WHO/FAO expert report *Diet, Nutrition and the Prevention of Chronic Diseases* pointed a way forward for including nuts and peanuts in nutrient recommendations for the prevention of cardiovascular diseases and referenced clinical studies on peanuts, walnuts, almonds, macadamia nuts, pecans and pistachio nuts. It concluded that “collectively, these clinical studies indicate that inclusion of nuts in a lipid-lowering diet has favourable effects....”<sup>5</sup>

3. In 2003 in response to the accumulating wealth of scientific evidence, the United States Food and Drug Administration (FDA) approved a partial health claim for nuts and the prevention of coronary heart disease.<sup>6</sup> This states: “Scientific evidence suggests but does not prove that eating 1.5 ounces per day of most nuts as part of a diet low in saturated fat and cholesterol may reduce the risk of heart disease.” It applies to peanuts and some tree nuts (excluding Brazil nuts, macadamia nuts, cashew nuts and some varieties of pine nuts whose naturally occurring levels of saturated fatty acids exceeded thresholds set for claim purposes, and nut butters). The US health claim applies to “whole or chopped nuts that are raw, blanched, roasted, salted and/or lightly coated and/or flavoured, but any fat or carbohydrate added in the coating or flavoring of a whole or chopped nut should meet the definition of an insignificant amount”.

4. During 2004-2005, the UK Foods Standards Agency (FSA) developed a nutrient profiling model as a tool for categorising foods on the basis of the quality of their nutrient content. This was for the use of the UK communications regulator Ofcom to help it in its work to tighten controls on the advertising to children of foods high in saturated fat, salt or sugar. As a result of the views during consultation on the model of the Scientific Advisory Committee on Nutrition (SACN) and the British Nutrition Foundation, the FSA board agreed in the final version of the nutrient profile scoring system to include nuts within the category of fruit and vegetables: “nuts to be scored in the same way as fruit and vegetables, in recognition of the contribution of nuts to a healthy balanced diet.”<sup>7</sup> This was agreed by the FSA Board meeting on 13 October 2005. It followed the recommendation of its expert group that “nuts, which are whole, roasted, chopped, grated and ground should count”.<sup>8</sup>

5. During 2006-2007, the European Food Safety Authority (EFSA) considered nutrient profile modelling in an EU context. In 2008 the European Commission adopted a position on nutrient profiles which grouped nuts together with fruits and vegetables, as recommended by EFSA, reflecting the earlier work of the UK’s FSA.<sup>9</sup> In the EU’s nutrient profiling expert discussions, nuts –specifically identified as peanuts and tree nuts - were clearly categorised with fruit and vegetables in respect of their nutrient content.<sup>10</sup>

5 WHO/FAO, 2002. *Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases*, Annex 4, pp 48, 60. Geneva.

6 FDA 2003. *Qualified Health Claims: Letter of Enforcement Discretion - Nuts and Coronary Heart Disease* (Docket No 02P-0505)

7 Food Standards Agency, 6 December 2005. *The Nutrient Profiling Model*.

<http://tna.europarchive.org/20110116113217/http://www.food.gov.uk/news/pressreleases/2005/dec/ofcompr>

8 British Heart Foundation Health Promotion Research Group, 2005. *Application of the Nutrient Profiling Model: Definition of ‘fruit, vegetables and nuts’ and guidance on quantifying the fruit, vegetable and nut content of a product*. Oxford.

9 [www.efsa.europa.eu/en/efsajournal/doc/644.pdf](http://www.efsa.europa.eu/en/efsajournal/doc/644.pdf)

10 [www.senat.fr/europe/textes\\_europeens/a0006.pdf](http://www.senat.fr/europe/textes_europeens/a0006.pdf)

6. The US *Dietary Guidelines for Americans, 2010*<sup>11</sup> recommended foods like nuts and nut butters because they are high protein packages that include healthy fats and nutrients like dietary fibre, potassium, folate, vitamin E, thiamin (B1), and magnesium. It reasoned that nutrient dense foods such as nuts help maintain good nutrition and calorie balance. It cited research showing that frequent peanut and tree nut eaters do not gain weight when following a healthy diet and replacing less healthy fats and snacks with nuts.

7. In 2011, the EFSA agreed a health claim in respect of the fatty acid composition of peanuts, peanut butter and peanut oil.<sup>12</sup> The expert decision took into account that the cholesterol-lowering effect of peanuts could be attributed to the content of MUFAs and PUFAs in peanuts, and that part of the effect is due to the replacement of mixtures of SFAs in the diet by MUFAs and PUFAs, which are the prevalent fatty acids in peanuts. In addition, the EU has agreed a wide range of functional nutrition claims that can be applied to peanuts and tree nuts due to their excellent nutrient content.<sup>13</sup>

8. The 2013 School Food Plan for England, written independently and adopted by Government, recommends that nuts are regularly available in two ways in schools.<sup>14</sup>

- as part of “other non-dairy, iron-rich sources of protein, such as eggs, beans, pulses, soya products and nuts and seeds [which] should be provided as a protein option every day for non-meat eaters and at least twice a week for all children.” (p 134)
- as snacks outside meal times, along with seeds, fruit and vegetables that do not have added fat, salt or sugar (p 135)

9. The Government’s current health promotion campaign in England, Change 4 Life, already encourages a “small handful of unsalted mixed nuts” as a healthy savoury snack idea.<sup>15</sup> With a focus on healthy snacking in schools, Change for Life also encourages teachers to promote “Snack Swaps”. Its 2015 teacher’s guide to “fun ways to help kids make healthier snacks” gives two nut “snack swap” examples:<sup>16</sup>

- swap biscuits for plain, unsalted nuts.
- swap chocolate for low fat, lower sugar yoghurt sprinkled with fruit or nuts.

## **Summary and conclusion**

Nuts are seen in a quite different way in 2015 than they were when the UK’s “Five a Day” programme was being planned in the 1990s.

Nuts are now clearly within the “fruit and vegetable” category for nutrient profiling purposes in the view of the Food Standards Agency and the European Food Safety Authority.

11 [www.health.gov/dietaryguidelines/2010.asp](http://www.health.gov/dietaryguidelines/2010.asp)

12 [www.efsa.europa.eu/en/efsajournal/doc/2045.pdf](http://www.efsa.europa.eu/en/efsajournal/doc/2045.pdf)

13 <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006R1924&from=EN>

14 [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/251020/The\\_School\\_Food\\_Plan.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/251020/The_School_Food_Plan.pdf)

15 [www.nhs.uk/Change4Life/Pages/healthy-snacks.aspx](http://www.nhs.uk/Change4Life/Pages/healthy-snacks.aspx)

16

[www.nhs.uk/change4life/Documents/PDF/Schools\\_January\\_documents/Change4Life\\_Schools\\_SnackSwaps\\_TeachingResourcePack\\_A4\\_HR.pdf](http://www.nhs.uk/change4life/Documents/PDF/Schools_January_documents/Change4Life_Schools_SnackSwaps_TeachingResourcePack_A4_HR.pdf)

The health benefits of regular nut consumption have been recognised by health and nutrient claims in the US and the EU and there is a rising level of nutritional research evidence to support such claims.

Nuts are now part of dietary recommendations for whole populations and specifically for school age groups.

Nuts are encouraged as healthy snacks and substitutes for higher fat, salt and sugar snacks for British school children.

Taken collectively, these developments argue for a widening of the “Five a Day” criteria to include nuts (peanuts and tree nuts). This is a logical step towards the goal of helping people make simple, affordable choices to increase their fruit and vegetable intake. The nut industry in the UK would be pleased to engage with Public Health England to further discuss the rationale and practicalities of this.

11th February 2015

**Comments received on potential options for the 5 A DAY logo (Summary table ID number 6)**

It seems obvious to go for the yellow and design approach as it follows the Change4Life but as a result these look quite childish and not suitable for all products. We understand that the aim is for a friendly and natural approach but this lacks credibility. It's trying to put too much personality into a very small space and from a customer's point of view we think it is more important to keep it clear on the message '1 of your 5 a day'. Keeping the colour yellow and the typeface can link back to the bigger health campaign and give it all the personality it needs.

It is also hard to read at a glance. The fruit images are so small they lack impact - does it need any image of specific fruit/veg at all? Potentially too literal - It needs to be simple and clear.

This logo needs to work for all print processes and a variety of sizes so currently the scale and colour breakdown for either of the proposed is pretty unworkable at a small size and hard to adapt to restricted number of colours. This logo is normally quite small so placing any images on here would be a waste as potentially printers will struggle to hold register and the actual image and what it represents will not be recognisable.

We would suggest removing the images and possibly put the numbering within a fruit shape reversed out of the yellow. For example 1 sat inside an apple shape which is 50% of the background yellow. The yellow colour would fill in slightly but by nature of the colour it wouldn't be visible. Add an asterisk and then the qualifying line of copy where preferred.

**Feedback from a British Nutrition Foundation Forum, 8 January 2015 (Summary table ID number 7)**

The following points were made in the general discussion, which focused around a list of outstanding questions/action points from the Reference Group meeting. The audience comprised 26 food industry representatives (from retail, manufacturing and food service). The structure of the session was to collate information and opinions that could be fed back to the Reference Group, rather than to provide answers.

- PHE has already strengthened advice around fruit juice consumption, recommending that consumers try to limit fruit juice to 150ml a day. To avoid unintended consequences, PHE has been asked by the Reference Group to check whether limiting fruit juice intake could have a detrimental effect for some population groups where it makes a considerable contribution to intakes of some micronutrients (e.g. potassium, vitamin C and folate). There is a need to understand who is consuming fruit juice within the population and the implications for micronutrient intakes if consumption levels reduce, and to identify any groups with very high intakes. NDNS can help with this.
- The Reference Group has debated the maximum salt content that would be permitted per serving of composite foods in order for fruit and vegetable portions to be declared, and whether to use the 2012/2017 salt targets or the criteria for front of pack (FOP) labelling, or both. IGD published a revised best practice guide in 2014 which outlines amended nutrition criteria for declaring portions of fruits and vegetables and incorporating these into composite products. This uses either front of pack criteria or salt targets but not both. Using the front of pack guidelines may prevent some food products (eg, ready prepared salads) from being able to carry the 5 a day logo because of the salt content per portion e.g. if smoked salmon is an ingredient. It was suggested that the 2012 salt targets should be used as these have already been met and 2017 targets are still a 'work in progress'. The Reference Group has been asked to consult with networks about the implications of any criteria for pulps, purees and extruded fruit products. Those attending the Forum suggested examining NDNS data to see what percentage of people consume extruded fruit products; perhaps it is too small a proportion to be of concern. Particular concern was expressed about purees for babies where there is a need to sieve the pulped fruit or vegetable to avoid lumps or fibres that might cause choking. If the sugars in such products were then to be considered as free sugars, this could be confusing for parents who wish to avoid feeding 'added' sugars. Consideration needs to be given to classifying free sugars vs total sugars in pulped and pureed products, as some free sugars are generated from intrinsic sugars in the manufacturing process.
- Products specifically aimed at children are currently excluded from displaying the 5 a day logo, as is consistent with IGD guidance, because there is currently no specific portion size recommendation for children. Some members of the group felt that this was unhelpful and potentially confusing if the products meet the 80g criterion and that this could limit the exposure of children and parents to the 5 a day logo.