



Public Health
England

Protecting and improving the nation's health

External Reference Group - 5 A Day logo

Paper for information: Including composite foods in the PHE 5 A Day logo and portion indicator scheme – background paper

Agenda item 3

Please see attached paper for information.

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

Background

1. This paper provides background to current policy and activity relating to fruit and vegetables.

5 A Day Government advice

2. The Government recommends that we eat at least five portions of a variety of fruit and vegetables per day. This is based on epidemiological evidence indicating an association with consumption of more than 400g a day of fruit and vegetables (not including potatoes) with reduced risk of certain diet related chronic diseases.
3. The 5 A Day communications programme aims to increase consumption of a variety of fruit and vegetables, and awareness of their health benefits.
4. The eatwell plate pictorially depicts the types and proportions of food groups that constitute a healthy diet consistent with Government recommendations, based on advice from COMA and SACN. This indicates that fruit and vegetables (at least 5 portions every day) should make up about a third of the food consumed. The eatwell plate messaging is supplemented with recommendations to eat 'plenty of fruit and vegetables' which is a consistent message across Government, the food industry, the media and civil society organisations.

What counts/portion size

5. All types of fruit and vegetables, fresh, frozen, canned, dried, or pure juices (fruit, vegetable or smoothie), including those within composite foods, count towards the five or more daily portions. A portion is generally taken to be 80g (or equivalent if dried or a concentrated puree, see appendix 1 for portion advice) or 150ml of 100% pure fruit juice.

Limitations and exceptions

6. Juice/smoothies
Since extraction of juice from fruits or vegetables reduces the fibre content and releases non-milk extrinsic sugars, fruit or vegetable juices are not counted as more than one portion in a day, however much is drunk. Smoothies may only count as more than one portion if they contain all the edible pulped fruit or vegetables and one portion as juice. The general assumption is that this would be from more than one type of fruit/vegetable.
7. Beans and other pulses
Because their nutrient content differs from that of most vegetables it is recommended that, however much is eaten, beans and pulses should only count once. This restriction refers to beans such as haricot, butter, soya and kidney beans

and includes chickpeas and lentils. The restriction does not apply to green beans, such as French beans and broad beans as these are classified as vegetables.

8. Potatoes

Potatoes are botanically classified as a vegetable, but they are classified nutritionally as a starchy food. This is because when eaten as part of a meal in the UK they are generally used in place of other sources of carbohydrate/starch, such as bread, pasta or rice. As such, they have a different role to vegetables in the average diet and thus do not count towards the recommended five portions of fruit and veg per day.

9. Other vegetables that do not count towards 5 A Day are yams, cassava and plantain, when they are usually also eaten as a starchy food.

Consumption

10. The most accurate method of assessing fruit and vegetable consumption is that used in the National Diet and Nutrition Survey (NDNS) which includes the contribution of fruit and vegetables in composite foods such as homemade recipe dishes, ready meals and other manufactured products which also include other ingredients (such as tomatoes in a bolognese sauce) and calculates portions according to the 5-a-day criteria¹. This methodology has been in place since 2008.
11. Latest results from the NDNS (2008/09-2011/12)² report that adult men and women aged 19 to 64 years consumed 4.1 portions of fruit and vegetables per day on average, with a range³ from 0.8 portions per day to 9.7 portions per day for men, and 0.7 to 8.8 portions per day for women. Older adults aged 65 years and over consumed 4.6 portions per day on average. For those aged 11 to 18 years, mean consumption was 3.0 portions per day for boys and 2.7 portions per day for girls.
12. The proportion of survey participants meeting the “5-a-day” guideline was 7% of girls and 10% of boys aged 11 to 18 years, 30% of men and women aged 19-64 years and 41% of older adults.
13. These figures cannot be directly compared to previous NDNS data owing to methodological differences, in particular the use of improved methods to capture the contribution to fruit and vegetable consumption from composite foods and homemade recipe dishes in the current survey. An earlier national survey of adults aged 19-64 years in 2000/01 used a cruder method to estimate consumption which did not fully take account of consumption from composite dishes. Comparing these results with data from NDNS 2008/10 re-analysed using the earlier method

¹ To calculate number of portions according to the 5-a-day criteria: Fruit juice consumption limited to 150g/day; Baked beans and other pulses consumption limited to 80g/day; Tomato puree multiplied by 5; Dried fruit multiplied by 3. Total fruit (excluding fruit juice) and vegetables and beans/pulses (maximum 80g/day) consumption per day is divided by 80 to get portions/day and added to portion of fruit juice (maximum of 1 per day) to get total portions per day of fruit, vegetables and fruit juice

² Bates B, Lennox A, Prentice A, Bates C, Page P, Nicholson S, Swan G. National Diet and Nutrition Survey results from Years 1-4 (combined) of the Rolling Programme (2008/2009 – 2011/12); <https://www.gov.uk/government/statistics/national-diet-and-nutrition-survey-results-from-years-1-to-4-combined-of-the-rolling-programme-for-2008-and-2009-to-2011-and-2012>

³ Range is given as the 2.5th and 97.5th percentile

suggests that there was a small increase in consumption in adults over this period. However most of the difference in the current estimate from NDNS compared with the previous estimate in 2000/01 can be explained by methodological differences.

14. A statistical analysis comparing fruit and vegetable consumption in years 1 and 2 of the NDNS rolling programme (2008/09-09/10) with years 3 and 4 (2010/11-11/12) showed no statistically significant differences in consumption in any age group over this period².

5 A Day logo and portion indicator scheme

15. The 5 A Day logo and portion indicator were developed and launched by the Department of Health in 2003 as part of the communications programme to help people recognise the 5 A Day message and to introduce consistency in the message in all settings. Subsequently, this remit moved to Public Health England (PHE) in 2013.
16. Certain criteria that apply to the logo scheme do not necessarily apply to the 5 A Day health promotion message. Although a particular food/product would not necessarily be able to carry a 5 A Day logo, if it contains a sufficient amount of fruit/vegetables it would count towards an individual's intake as consumed. For example, currently a vegetarian chilli ready meal would not be able to apply for a 5 A Day logo as it is a composite food. However, an individual consuming this would be able to count the vegetable content as contributing to their own 5 A Day.
17. A license application needs to be completed for products and/or promotional material/activity.
18. The logo and portion indicator may currently only be used to promote fruit and vegetables products without any added fats, sugars and/or salt, and can be used to promote fresh, chilled, frozen, canned and dried fruit and vegetables, 100% unsweetened fruit and vegetable juice and some smoothies.
19. The 5 A Day logo and portion indicator may only be used to promote fruit and vegetable products that provide at least 1 portion per serving. The exceptions are individual whole fresh fruit and vegetables on which the 5 A Day logo may be used and on packs of whole fruit/vegetables (where the individual fruit or vegetable provides less than 1 portion), provided it is accompanied by an explanation of how many of the fruit/vegetables constitutes a portion.
20. The current criterion aims to increase consumption of a variety of fruit and vegetables. No information or product may state or suggest that any one product provides more than 2 portions towards the 5 A Day target.
21. Promotion of the 5 A Day message must be placed within the context of a healthy, balanced diet.
22. Products specifically aimed at children are not able to use the logo scheme. The exception is use of the 5 A Day logo on fruit and vegetables supplied as part of the School Fruit Scheme.

IGD activity

23. 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. Further papers to the reference group at agenda item 4 will highlight these criteria.

Including composite foods in the 5 A Day logo and portion indicator scheme

24. The Department of Health established an external reference group to provide advice to the Department on possible criteria for extending the licence scheme to include composite foods in 2011. A consensus was achieved on many principles that might apply to any expanded 5 a day logo and portion indicator scheme (see appendix A for previous group's conclusions). These were:
- Products applying to be included in the scheme will be subject to meeting specified nutrient criteria related to saturated fat, added sugars and salt
 - In expanding the scheme, the ethos of including a variety of fruit and vegetables in the diet should be maintained
 - The minimum portion size for food and drinks should be ½ a portion
 - Portions should increase in ½ portions from the minimum portion starting point
 - The upper maximum for the number of portions of fruit and/or vegetables in a product should be left open. The ethos of including a variety of fruit and vegetables would need to be maintained. 100% fruit juice, dried fruit, beans and pulses, concentrated/single strength purees would only count once in the product regardless of the amount present
 - 100% juice should only count as a maximum of 1 portion (assumed to be 150ml)
 - The maximum portion size for fruit and/or vegetable based smoothies should be left open, as long as the claimed portions can be consumed within a single serving
 - A portion may contain a combination of different fruits and/or vegetables
 - Composite drinks are subject to meeting specified nutrient criteria
 - 100% juices, fruit and/or vegetable based smoothies, tinned fruit in natural juice, tinned vegetables in water, and plain frozen vegetables or fruit will not need to meet specified nutrient criteria
 - Products aimed at children should be treated in the same manner as those aimed at adults
 - The addition of artificial sweeteners to products would not exclude products from applying to the 5 A Day logo and licensing scheme
 - It is recommended that fruit or vegetable powders, extracts or flavourings used in any product (be it in soups, sauces, drinks etc.) do not contribute to the fruit and vegetable portion for products applying to the 5 A Day logo and licensing scheme
25. PHE are now looking to review the potential for expanding the 5 A Day logo and indicator scheme to include composite foods. In doing so, PHE acknowledges that the EU have implemented a Food Information Regulation that helps standardise approaches to nutrition labelling, the Department of Health have updated voluntary

salt targets and the IGD have revised their best practice for incorporating fruit and vegetables into composite products.

26. PHE recognises that:

- Where a single approach across all relevant partners could be achieved this would reduce potential for consumer confusion
- Any government backed scheme would need to be consistent in its approach, reflect current legislation and expectations that consumers may have relating to meaning and understanding
- Many stakeholders are keen to revisit children's portion sizes but there is no evidence upon which to develop any further advice
- Given the draft SACN report on carbohydrates and health the issue of strengthening messages in relation to fruit juice and how they apply to smoothies within the diet is required.

27. PHE has convened this expert reference group to help revisit this issue. Draft Terms of Reference (paper ERG/5ADAY/14/1) have been provided for discussion at agenda item 2. These draft terms of reference accept the key areas previously discussed by the reference group convened by DH in 2011. However, the group will also be asked to revisit some areas where they were unable to reach consensus.

Next Steps

28. PHE will listen to the views of the external reference group and make recommendations on whether to extend the 5 a day logo and portion indicator licensing scheme to include composite foods, and if so identify a set of criteria for achieving this. PHE will simultaneously consider refreshing the messages and logo to reflect these discussions and develop proposals for agreement if appropriate.

Nutrition Advice Team
Health and Wellbeing
3 November 2014

Appendix A

Recommendations for the inclusion of composite foods in the 5 A Day logo and licensing scheme from the External Reference Group on composites to the Department of Health

Background

1. Following the recommendation from Defra's Fruit and Vegetable Task Force "that "healthy" fruit and vegetable containing composite foods are considered for inclusion in the 5ADAY licensing scheme", the Department established an External Reference Group to provide advice on possible criteria.
2. The group have considered a number of issues relating to the inclusion of composite foods in the 5 A Day Logo and Licensing scheme, their recommendations are outlined below.

Definition of composite foods

3. To enable the group in their considerations, they agreed a definition of a composite product for 5 A Day.

A food or drink comprising of two or more ingredients⁴, at least one of which is a fruit and/or vegetable⁵

Recommendations

4. Agreement was reached for most of the recommendations, however for some; a majority decision has been taken. Where this is the case, issues of concern are identified.

1. Specified nutrient criteria

Recommendation:

Products applying to be included in the scheme will be subject to meeting specified nutrient criteria related to saturated fat, added sugars and salt

Supporting text:

- The secretariat obtained data for 297 products across 19 product categories. This data was largely limited to information that the secretariat could obtain via websites (n = 259), due to the timescale and resource required to collate it, industry could only supply limited information. This meant the calculations included several assumptions. The group would have liked to have seen data on a greater number of product categories with fewer assumptions based on website data. However, given the timescale for the work it was unlikely the secretariat would

⁴ This does not include additives or water

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

receive any additional data to enable them to be able to make these calculations. The group was unable to reach agreement on the specific detail of nutrient criteria for use of the 5 A Day logo scheme including composite foods

- Some members of the group expressed interest in the IGD approach to defining criteria for this purpose (% GDA and a modified definition for added sugars), while others preferred the traffic light criteria
- In order for the detail of the criteria to be agreed, the group recommended that further work would be required to determine the most appropriate approach. It was recommended that the 3 options presented should be subjected to further analysis with a larger database of products to objectively assess their performance alongside other options.

2. Variety

Recommendation:

In expanding the scheme, the ethos of including a variety of fruit and vegetables in the diet should be maintained

Supporting text:

- Variety is a key aspect to the ethos of 5 A Day and healthy eating guidelines. The more types of fruit and vegetables included in the diet the better, as different fruit and vegetables contain different nutrients
- The issue of including variety becomes even more important with the inclusion of composite foods and the suggested removal of a maximum portion size, see point 5.

3. Minimum portion size

Recommendation:

The minimum portion size for food and drinks should be ½ a portion

Supporting text:

- The majority of the group supported starting with a minimum of ½ a portion to encourage low fruit and vegetable consumers to increase their consumption by recognising the contribution that may already be within their diet. Further ½ portions may then be more attainable and thus, reaching 5 A Day more achievable
- This reduction could also encourage reformulation where the target of ½ a portion is more achievable, or realistic, than reaching 1 portion. It is acknowledged that this minimum starting point may be more relevant to some products than others
- BHF and Which? supported the minimum portion size remaining at 1. Their concerns included, the evidence base to support this amendment, consumer understanding (whether the 5 A Day message would be confused by being achievable with 10 x 1/2 portions A DAY), the range of product categories this would apply to, and whether this approach would encourage reformulation or act as a disincentive

- In addition, 'BHF' and 'Which?' expressed concerns related to minimum portion size of fruit and vegetables for all drinks on consumer messaging and understanding, particularly with the maximum portion for 100% juice being capped at 1.

4. Portion increments

Recommendation:

Portions should increase in ½ portions from the minimum portion starting point

Supporting text:

- The majority of the group agreed that increasing by ½ portions would further promote the ease of consuming (at least) 5 A Day and is consistent with promoting the importance of variety
- BHF and Which? supported portion increase remaining at 1. Their concerns were centred on consumer understanding of portions contained, including when comparing products. Both organisations felt that before adopting a ½ portion increment research should be undertaken to understand whether this approach would be an incentive or disincentive to consumers

5. Maximum portion

Recommendation:

The upper maximum for the number of portions of fruit and/or vegetables in a product should be left open. The ethos of including a variety of fruit and vegetables would need to be maintained. 100% fruit juice, dried fruit, beans and pulses, concentrated/single strength purees would only count once in the product regardless of the amount present

Supporting text:

- Removing the upper maximum number of portions of fruit and/or vegetables that can be claimed in a product recognises the potential to nudge manufacturers, retailers and caterers to include more fruit and vegetables in their products
- Through marketing, the ethos of including a variety of fruit and vegetables in the diet would need to be reinforced to prevent foods with, for example, all 5 portions in one serving of the food being seen as a 'dose' solution. In addition, advice would remain that 100% juice, dried fruit, beans and pulses and concentrated/single strength purees can provide only 1 portion, regardless of the maximum level and the quantity contained or consumed.

6. Maximum portion size for 100% juice

Recommendation:

100% juice should only count as a maximum of 1 portion (assumed to be 150ml)

Supporting text:

- Because of the non-milk extrinsic sugars (NMES) and the reduced fibre content 100% fruit or vegetable juice would be capped at a maximum of 1 portion. Although juice contains NMES, the additional nutrient contribution compared to some other drink options is recognised in this approach.

7. Maximum portion sizes for smoothies

Recommendation:

The maximum portion size for fruit and/or vegetable based smoothies should be left open, as long as the claimed portions can be consumed within a single serving

Supporting text:

- Provided fruit and/or vegetable based smoothies have a variety of fruit and/or vegetables and restrictions for juice and puree are adhered to, the maximum portions that can be claimed should have no upper limit. Smoothies that claim more than 2 portions would need to be in a volume that is likely to be consumed at one serving by an individual
- Smoothies that are considered a 'composite drink', for example a yogurt based smoothie, would need to meet specified nutrient criteria
- Through marketing, the ethos of including a variety of fruit and vegetables and the importance of consuming a varied diet would need to be reinforced to prevent consumers achieving all 5 portions through smoothies alone
- In addition, 100% juice, and concentrated/single strength purees can provide only 1 portion, regardless of the maximum level and the quantity contained or consumed
- Which? raised concerns that there were no limits on the number of portions a smoothie could contain due to dental health issues and concerns about the fibre content.

8. Mixed portions

Recommendation:

A portion may contain a combination of different fruits and/or vegetables

Supporting text:

- To embrace variety, a portion can contain a mix of different fruits and/or vegetables. In order for a product to contain more than 1 portion, it must contain different fruit and/or vegetables regardless of their form.

9. Composite drinks

Recommendation:

Composite drinks are subject to meeting specified nutrient criteria

Supporting text:

- Composite drinks are subject to meeting the specified nutrient criteria in the same manner as composite foods.

10. 100% juices, smoothies, tinned fruit in natural juice, tinned vegetables in water, and plain frozen vegetables or fruit

Recommendation:

100% juices, fruit and/or vegetable based smoothies, tinned fruit in natural juice, tinned vegetables in water, and plain frozen vegetables or fruit will not need to meet specified nutrient criteria

Supporting text:

- To ensure that products that are 100% fruits and/or vegetables are not eliminated from the scheme based on their sugar content, it is recommended that these products are exempt from meeting specified nutrient criteria. The rationale being that fruit juice although containing NMES has other additional nutrients
- Smoothies that are considered a 'composite drink', for example a yogurt based smoothie, would need to meet specified nutrient criteria.

11. Children's products

Recommendation:

Products aimed at children should be treated in the same manner as those aimed at adults

Supporting text:

- Until there is a legal definition of what constitutes a children's food, or there is epidemiological evidence to support the determination of children's portion sizes for fruit and vegetables, it was agreed that children's products can only be included in the scheme if they contain the minimum adult portion of fruit and/or vegetables. It is noted that the IGD have agreed, across its membership, a pragmatic fruit and vegetable portion size value for fruit and vegetables for children
- The Department should revisit this decision should relevant and robust evidence to support the development of children's fruit and vegetable portion sizes, and/or a legal definition of what constitutes a children's food, becomes available.

12. Artificial sweeteners

Recommendation:

The addition of artificial sweeteners to products would not exclude products from applying to the 5 A Day logo and licensing scheme

Supporting text:

- Health promotion messages promote sugar substitutes as a way of encouraging consumers to reduce sugar consumption. Therefore, composite products with artificial sweeteners would not be excluded from the scheme, as long as the product contained the minimum portion of fruit and vegetables per serving and met the specified nutrient criteria.

13. Fruit or vegetable powders, extracts or flavourings

Recommendation:

It is recommended that fruit or vegetable powders, extracts or flavourings used in any product (be it in soups, sauces, drinks etc) do not contribute to the fruit and vegetable portion for products applying to the 5 A Day logo and licensing scheme

Supporting text:

- For the purpose of the 5 A Day logo and licensing scheme, there appears to be no justification for including fruit and vegetable powders, extracts and/or flavourings that have little resemblance to fruit and vegetables. This would be consistent with the ethos of 5 A Day in relation to consumer perception that any product labelled with the 5 A Day logo should be recognisable as a fruit or vegetable. It is

acknowledged that this recommendation is based on a lack of nutrient information for fruit or vegetable powders, extracts or flavourings

- Composite products with these ingredients would not be excluded from the scheme, as long as the product contained the minimum portion of fruit and vegetables per serving and met the specified nutrient criteria
- The Department should revisit this decision should any technical information become available.

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1 June 2011