External reference group – eatwell plate

Paper for information: includes an update on the modelling exercise

This paper provides an update on the modelling exercise to support considerations around any update of the eatwell plate.

The reference group is invited to:

- note the update from PHE regarding the modelling and analytical work
- discuss any implications to the modelling work in light of the feedback received so far
Updating the eatwell plate

Background

1. The Scientific Advisory Committee on Nutrition has recently published a draft ‘Carbohydrates and Health’ report,¹ which draws conclusions that indicate a need to revise dietary reference values for sugars and fibre. Although the responses to the draft consultation are being reviewed and the outcome is not concluded, it is appropriate to assess potential implications for the eatwell plate and associated healthy eating messaging in order to be able to respond in a timely manner.

Update on modelling work to inform the proportion of the food categories depicted within the eatwell plate

2. PHE has begun modelling using the NDNS based on movement from current dietary intakes to potentially revised DRVs to inform the proportion of the food groups in the eatwell plate. Although exact timelines are not confirmed, it is anticipated that this will be complete in May 2015.

3. PHE has begun the process to externally commission data modelling of the NDNS using linear programming techniques. It is currently anticipated that the results of this modelling will be available in April 2015.

4. Data modelling based on the PHE healthier and more sustainable catering example menus, is underway and is expected to be available by early April.

5. PHE and FSA Scotland have completed some data re-modelling of the FSA Scotland eatwell week (a week’s worth of recipes based on commonly eaten foods to help consumers understand a healthy balanced diet). This involved manipulating the existing data (menu meeting current 10% energy from Non Milk Extrinsic Sugars recommendation) to design a menu to meet potential DRV’s if SACN’s draft recommendations in its carbohydrate and health report are finalised. Calculations are based on 5% NMES, which was considered to be sufficiently equivalent to free sugars for this preliminary analysis of the 5% eatwell week model. For this preliminary analysis, the fibre content of 26.3g NSP fibre was assumed to be equivalent to 34.9g AOAC fibre. The revised foods and dishes were then disaggregated into the constituent ingredients and subsequently allocated into eatwell food groups (see figure 1²). Based on this modelling, the chart indicates that the proportions of the starchy foods, milk & dairy and fruit & vegetable food groups increase marginally and the meat, fish, eggs, beans group and foods high in fat & sugar group decrease marginally.

6. Whilst this method has limitations owing to the single week menu approach and the limited opportunity to consider a wider range of foods within each food group,

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¹ Scientific Advisory Committee on Nutrition (2014) Draft SACN Carbohydrates and Health Report

² Note that the FSAS 10% NMES eatwell week had a greater proportion of fruit and vegetables and therefore less starchy foods than the eatwell plate. It is important therefore to directly compare the two eatwell week models rather than comparing to the current eatwell plate.
it is useful to visualise the segment sizes of the food groups and the types of foods and dishes in the re-modelled eatwell week.

**Portion sizes**

7. To deliver the various modelling approaches described in this paper, portion sizes will have been assigned. It is envisaged that PHE will utilise these example portion sizes, including the development of the updated menus, to consider options for provision of further advice in this area.
**Figure 1.** Illustration of eatwell plate models at 10% energy from Non Milk Extrinsic Sugars (NMES) and 5% energy from NMES, calculations based on FSAS eatwell week example menu.