



ASSOCIATE PARLIAMENTARY FOOD & HEALTH FORUM



Minutes of the FHF Meeting on nutrient profiling

5pm, 7 February, 2006

Committee Room 16, House of Commons

Present: Lord Rea, *Chairman*
Earl Baldwin of Bewdley
Patricia Constant, Secretariat
Aina Atkociunaite, Secretariat
15 Associate members, names recorded.

Apologies: 6 members sent their apologies, which have been recorded.

Speakers: **Rosemary Hignett, Head of the Food Standards Agency's Nutrition Division**

Peter Scarborough, Researcher with the British Heart Foundation Health Promotion Research Group, University of Oxford

Please note that powerpoint slides provided by the speakers are being circulated with these minutes and provide additional detailed information on the issues raised.

Introduction

1. Lord Rea welcomed members to the meeting and introduced the speakers, Rosemary Hignett (RH) and Peter Scarborough (PS).
2. Rosemary is the Head of the Food Standards Agency's Nutrition Division. She joined the FSA at its inception on 1 April 2000 from the Ministry of Agriculture, Fisheries and Food. She leads on nutrition policy, including working with industry to reduce salt levels in foods, foods in schools, research and surveys, advertising of food; health related claims and nutrition labelling.
3. Peter Scarborough. Peter is a researcher with the British Heart Foundation Health Promotion Research Group, part of the Department of Public Health at Oxford University. He has worked on the development and testing of nutrient profile models since early 2004 and was involved in the FSA project.

Rosemary Hignett

4. Rosemary's presentation sets out why the FSA decided to develop a nutrient profiling model, how they went about it and how it works.

Background

5. Children in the UK have a bad diet: they eat too much fat, especially saturated fat, too much sugar and salt and not enough fruit and vegetables. This diet, together with a lack of exercise, is leading to an increasing problem of obesity.

Chairman: Lord Rea
Vice-Chairmen: Tony Baldry MP, Dr Ian Gibson MP
& Baroness Miller of Chilthorne Damer
Secretary: The Earl Baldwin of Bewdley
Treasurer: Baroness Gibson of Market Rasen

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6. Rosemary acknowledged that there are many reasons for this poor diet and that it needs to be tackled on many levels, including the environment which children are exposed to and, particularly, the lack of balance in the advertising of food to children. This view is justified by the findings of the Hastings review of evidence funded by the FSA.
7. The FSA Board agreed action needed to be taken to achieve a better balance in the promotion of food to children and this was confirmed in the Public Health White Paper published in 2004. The White Paper committed the FSA to identifying foods that should and should not be promoted to children. The FSA's objective was to achieve a promotional environment which reinforces the healthy diet message of Government and other relevant agencies.

Nutrient profiling

8. Nutrient profiling is a way of targeting controls on particular foods, in this case those high in saturated fat, sugar and salt. Such foods need to be identified in a clear, repeatable and objective way for the sake of the regulator, food manufacturers and consumers.
9. Nutrient profiling is an approach that has many applications and the FSA model is aimed only at one application: broadcasting controls. Other nutrient profiling models can be used for identifying foods for functional development, to prevent misleading health claims or to support consumer communication, for example 'healthy option' products. The FSA model is not a basis for traffic light labelling nor does it provide a means of mapping out the whole diet for all individuals.

The FSA model

10. The FSA contracted work on their nutrient profiling model to the British Heart Foundation Health Promotion Research Group at the University of Oxford. The work was overseen by an expert working group, which included nutrition professional, representatives of industry and consumers, as well as independent experts.
11. The FSA consulted on its preferred model from November 2004-February 2005, it then refined the model and consulted again from July to September 2005, before undertaking a third phase of refinement and agreeing on the final model.
12. The FSA model was developed during a systematic four phase process, during which decisions were made on the choice of nutrients (energy, saturated fat, sugar, salt, fibre, protein, fruit and vegetables); the choice of base (per 100g), of model type (scoring rather than a threshold model) and of numbers (based on expert advice). The number of variables at each stage required testing of a large number of alternative models. The FSA's choices are explicable by their objectives, for example, they were keen to include fibre so that wholegrain cereals would score positively.
13. It was very important to the FSA to obtain expert technical scrutiny of their model, so they asked the independent expert advisory body on nutrition, SACN, to comment on it twice during the consultation processes. The FSA also organised an independently chaired meeting of independent experts to go through the four key issues determining the design of the model. This meeting supported the decisions that were taken in designing the model.
14. The FSA model is a recipe based model so that, for example, wholegrain bread will score more positively than white bread. This provides industry with the opportunity to adjust products by changing their recipes to make them healthier so that they are excluded from any controls on the promotion of food high in fat, saturated fat, salt or sugar to children proposed by Ofcom. The model has been tested on some 300 foods and found to work appropriately.

Summary

15. The FSA model has been designed for a particular purpose and developed after extensive consultation. It is recipe based, practical to apply and it is consistent with the healthy eating advice promoted by the Government. The next step is for Ofcom to use it.

Peter Scarborough

16. Peter Scarborough's presentation describes the process of validation of nutrient profiling models, which is essentially a means of ensuring that the preferred model achieves what it has been designed for.

17. Peter's slides identify the different stages in development of the FSA model as follows: SSCg3D is the initial preferred model; WXY is the refined model and WXYAP11FVN.nut is the final model. The final model is not referred to in the discussed results, but it is very similar to the refined model and the initial preferred model, to which reference is made. The final model has not been tested yet.

18. The research group sought to establish two things: firstly that healthy and unhealthy foods, particularly the latter, were correctly identified by the model and secondly that the results produced by the model met with agreement on the part of nutrition professionals. The research group also looked at whether the model could be used to promote healthy diets.

19. The research group developed an online questionnaire with data on 120 foods and asked members of the British Dietetic Association and the Nutrition Society to categorise 40 foods from this master list of 120. The research group received 850 responses.

20. The results of the questionnaire led to the development of an average score for the 120 foods ranked least to most healthy (1-6). The standard deviation was only 0.95, that is, there was a good level of agreement among the nutritionists as to healthy and unhealthy foods. There were some outliers, but in general the nutrient profile model reached good agreement with the nutrition professionals (see slide 9).

21. The research group compared the model scores with the average nutritionist score and both the preferred model and the refined model achieved a high correlation. A different statistical test, which PS did not describe in detail, shows that there was a stronger correlation between the FSA model and the average nutritionist score than for other established models, such as the Swedish Green Keyhole scheme and the Australian Heart Foundation's tick scheme.

22. The research group looked at how nutritionists came to their views and it revealed that energy, fruit and vegetables, NSP fibre, total sugars and (to a lesser extent) sodium levels have a large impact on how nutrition professionals categorise foods (accounting for over 55% of nutrition professional variance)

23. The research group also looked at the proportion of healthy and unhealthy foods (as defined by the initial preferred model) in healthy and unhealthy diets. They used data from the 2000/01 National Diet and Nutrition Survey of adults aged 19-64 and split respondents at the median intake of three key nutrients: saturated fat: <12.5% of total energy; NMES: <11.2% of total energy and salt: <8.3g/day. This gave them four broad groups ranging from most healthy to healthy, less healthy and unhealthy diets.

24. The research group found that as you move from the most to least healthy diets the number of healthy foods included in the diet steadily decreases and the number of unhealthy foods increases. This held true for both male and female respondents. Their conclusion was that if people eating a less healthy diet moderated their intake of unhealthy foods it would have a beneficial effect. They noted that unhealthy foods do not have to be eliminated from the diet: unhealthy foods make up 25% of the intake even in the most healthy diet.

Summary

25. The FSA nutrient profiling model has been validated: it corresponds to the views of nutrition professionals and it can be used to improve diet if the level of unhealthy foods is reduced and the level of healthy foods is increased.

Lord Rea

26. **Lord Rea** thanked both speakers for their excellent presentations, which presented a complex subject with great clarity. Earl Baldwin of Bewdley then replaced Lord Rea, who had to depart for another engagement, as Chairman for the questions session.

Questions

27. **Andrew Opie of the British Retail Consortium** asked how the FSA balanced positive and negative components in food to identify healthy and unhealthy food. **RH** agreed that the FSA model needed to find an appropriate balance between healthy and unhealthy elements in food and that is why it had explored a whole series of options when it systematically developed the model in order to identify the model which worked best. **PS** said that the final FSA model had not been through the particular tests he described, but the research group was confident the model is robust because all the methods of testing used in previous versions had been successful and the final model was only a slightly more refined version of the previous model.
28. **Linda Griffin of Hill and Knowlton** asked why the FSA had decided to use the per 100g base for the model rather than a per portion base. **RH** said this was because the model had been developed to identify healthy and unhealthy foods for professional regulators to control the promotion of unhealthy foods to children; not as a guide for consumers. A per portion model would also present problems: it does not address issues of frequency of intake and portions vary considerably, for example, the amount of milk used in tea or with cereal. Moreover portions increase in size as children grow. Furthermore the per 100g base is established as the basis for nutrition claims.
29. **Alan Long of VEGA research** asked whether the model measured food as bought in shops or as eaten and how it would enable consumers to choose between more and less healthy versions of any category of food. **RH** explained that the model measured food as bought and emphasised that it was not developed as a consumer tool.
30. **David Godfrey of the Food Additives and Ingredients Association** asked how the model would help consumers distinguish between foods within food categories, for example more and less healthy types of margarine. **RH** said that model was not designed for that purpose.
31. **Iffat Memon of the British Retail Consortium** asked when Ofcom would consult on the FSA model. **RH** said she could not speak for Ofcom, but hoped they might consult in March or April.
32. **Clare Macevilly of the Medical Research Council** asked if, when the research group looked at the data from the National Diet and Nutrition Survey they were concerned about under-reporting of certain foods. **PS** said there was evidence of 25% under-reporting of food intake, but that this was broadly similar across all food groups so did not affect the analysis of the FSA model.
33. **Michelle Smythe of Which?** expressed the organisation's support for food labelling based on a nutrient profiling model and asked whether the FSA model could be used in other areas, for example, to control the marketing of unhealthy food. **RH** said that the approach taken by the FSA – systematically looking at the choices for the model – could be transferred, but the decisions which were taken on the base of the model might vary for different applications. **PS** said that when a model is being developed it is important to have the final aim in sight. The FSA model gives a score for all foods across a spectrum, so it appears it could be used to

define a healthy or unhealthy diet, but it is only at a very early stage and a decision to use it for that purpose would be a decision for policy makers not the researchers.

Conclusion

34. **Earl Baldwin** thanked members for their questions and the speakers for their comments. He expressed the hope, given the amount of work that had gone into developing the FSA nutrient profiling model that in addition to guiding Ofcom, it would find additional uses.

CLC, February 2006