

THRIVING Food Futures: Nutrient and Environmental Profiling Model (NEPM) Expert Working Group (EWG) meeting minutes

13th April 2026, 10.00am – 13.00pm, Microsoft Teams

Attendees	
NEPM EWG members	Role
Alison Tedstone (Chair of the Expert Working Group)	Former National Director of Diet, Obesity and Physical Activity at Public Health England
Victor Aguilera	Food Systems Sustainability Lead, Department of Environment, Food and Rural Affairs
Tazeem Bhatia	Deputy Director of Diet, Obesity and Healthy Behaviours and Chief Nutritionist, Department of Health and Social Care
Sandra Bogelein	Lead Analyst, People and Net Zero, Climate Change Committee
Fatima Manji	People and Net Zero, Climate Change Committee
Hannah Brinsden	Head of Policy and Advocacy, The Food Foundation
Andy Cole	Director for Northern Ireland, Food Standards Agency
Melanie Farron-Wilson	Senior Scientific Officer, Nutrition Evidence, Surveys and Translation, Department of Health and Social Care
Peter Faassen de Heer	Senior Policy Manager for Tobacco, Gambling, Diet and Healthy Weight Unit, Directorate of Population Health, Scottish Government
Alana McDonald	Senior Public: Health Nutrition Advisor, Food Standards, Scotland
Ilona Johnson	Consultant in Public Health, Public Health Wales
Susan Jebb	Professor of Diet and Population Health, University of Oxford and Chair, Food Standards Agency
Megan Tresise	Associate Specialist, Greenhouse Gases, WRAP
Project team members	Role
Mike Rayner	Professor of Population Health, University of Oxford
Peter Scarborough	Professor of Population Health, University of Oxford
Asha Kaur	Senior Researcher, University of Oxford
Lexi Earl	Project Manager
Trisha Gordon	Administrator, University of Oxford
Barthelemy Sarda	Researcher, University of Oxford
Ruth Westcott	Campaign Manager, Sustain
Fran Bernhardt	Commercial Determinants Co-ordinator, Sustain
Apologies	
Hannah Forde	Wellcome Trust Research Fellow and Senior Researcher, University of Oxford
Mike Clark	Associate Professor, University of Oxford (invited expert to give information about the environmental metrics in the study dataset)
Ann Humble*	Head of Strategic Analysis, Environment and Rural Affairs Department, Welsh Government. *Due to a change of job Ann Humble has stepped down from the Membership.

Abbreviations / Glossary

NPM = Nutrient Profiling Model

EPM = Environmental Profiling Model

NDNS = National Diet and Nutrition Survey

NEPM = Nutrient and Environmental Profiling Model

EWG = Expert Working Group

COI = Conflict of Interest

GHGE = Greenhouse Gas Emissions

THRIVING = Transdisciplinary Health Research to Identify Viable Interventions for Net zero Goals research hub

HFSS = High in fat, sugars or salt

Indicator foods – List of 207 foods chosen to demonstrate how the NPMs, EPMs and NEPMs classify and rank foods.

1. Welcome and introductions (AT)

- Attendees were asked to disclose any additional conflicts of interest arising since the last meeting. None were declared.

Action point: New members to complete COI declaration. PS will check everyone has filled in the form.

2. Minutes of the Meeting of 12th Nov 2025 (PS)

Amendments: -

- Public Health England was responsible for the draft 2018 UK NPM not the Department of Health
- When it says data was extracted 18th June 2025, should that be July?

Action Point: Update, finalise and publish November Meeting minutes on the website.

3. Objectives of today's meeting and quick overview of circulated papers (PS)

Recap: Meeting 1 (June 25: Why a NEPM is important to have.

Meeting 2 (Nov 25): What data do we have available to build and test a NEPM?

Meeting 3 (Apr 26): First results of applying an NEPM to the indicator foods

Subsequent meetings: Refining prototype NEPM(s)

- It is important to remember that all choices made by the project team can be challenged and discussed.

The aims of today's meeting-

Evaluate draft prototypes of an EPM

Begin to understanding the options for combining an NPM and an EPM to give an NEPM

- Circulated paper gives an overview of model development with more detail than the circulated presentation.
- Circulated spreadsheet with results for all models developed so far, gives lots of detail and is provided mainly for reference.

4. Q&A on circulated papers

- PS clarified that the list of Indicator foods aims to cover the most commonly consumed foods but also the variety of health and environmental impacts within food groups. This is to help the project team and the EWG understand how different profiling models rank and classify food. The indicator foods are not intended to be representative of, for example, food purchases in the UK. It is open to the EWG to make suggestions for further indicator foods always bearing in mind the aim of having a list of around 200 foods.

Action Point: Project team to recirculate the list of indicator foods and Expert Working Group to recommend any additional indicator foods that will be useful for the project.

5. Presentation by BS

Part 1 Data

- The food composition data used for this project are from Acuity Pricing (with data from Tesco, Sainsbury, Asda, M&S & Ocado).
- Individual foods are linked to seven environmental impact indicators (GHGE, Land use, Eutrophication potential, Water use, Acidification, Biodiversity loss, Water scarcity).
- Today's presentation shows the results of testing different NPMs, EPMs and NEPMs using data for the 207 indicator foods with complete health and environmental impact data.
- Similar analyses to those presented here have used all the foods in our broader dataset for which there was complete health and environmental data (26,602 foods). But it is important to remember that dataset - like the indicator food list - is also not representative of the UK diet (for that we would need linked consumption or sales data).

Part 2 NPM

- Two NPMs had been selected by the EWG for use in this project at the previous meeting: the UK NPM 2004 and UK NPM 2018.
- UK NPM scores for foods were scaled between 0-100 using the broader dataset for which there was complete health and environmental data (26,602 foods). 0 and 100 represent the 5th and 95th percentiles respectively, with separate scaling for foods and beverages. The original scale was also reversed (i.e. 0 is now least healthy and 100 most healthy).

- BS presented results of applying the two UK NPMs to the indicator foods showing results consistent with current knowledge regarding both NPMs. Overall, the UK NPM 2018 was especially stricter (i.e. fewer product passed) for sweet products and sweetened beverages, in line with the modified sugar component. For most other categories, the differences between the NPMs were minimal
- **Questions**
 - It was questioned whether the pie charts represented different food categories adequately. PS, and BS said they would take another look at the pie chart. It was suggested that the pie charts would work better with the complete dataset of 26,602 foods. If these looked similar to the pie charts for the indicator foods, that would be reassuring. PS said this has already been done and confirmed that the pie charts for the complete dataset looked similar to those for the indicator foods.
 - ⊖ There was a question about ready to use and ready to eat meals. BS he could supply EWG members with further details about this distinction if needed.
 - ⊖ Regarding dairy products: BS reassured the EWG that dairy alternatives are included in the indicator foods.

Action Point For future EWG meetings, category-level results (e.g. the pie charts) will be based on the full dataset instead of the set of indicator foods.

Action Point Project team to provide description of difference between ready-to-eat and ready-to-use meals.

Part 3 EPM

- It had been reported at the previous EWG meeting that a review of the literature on EPMs, showed that most use standardised, weighted averages of several indicators and that GHGE, Land use, Eutrophication potential and Water use are common indicators used. These are four of the indicators used for the EU's Product Environmental Foot Printing (PEF).
- Two prototype EPMs have been developed for this project so far. They use standardised, weighted averages of GHGE, Land use, Eutrophication potential and Water use (4 indicator EPM) or just GHGE and Water use (2 indicator EPM)
- The standardisation factors used were Per Capita Daily Allowances which function in a way that is similar to the way Guideline Daily Amounts (or Dietary Reference Values) function in the UK NPMs.
- PEF weights were used for weighting indicators.
- Finally, EPMs were scaled from 0-100 in the same way as the NPMs.
- BS presented results of applying the 4 indicator EPM to the indicator foods. Overall, the model was gave a high proportion of foods that received a favourable sustainability score (i.e. a score greater than 75). Food products with a less favourable sustainability score were mostly found in specific categories: meat, fish, dairy, nuts.
- **Questions**
 - BS confirmed that the functional unit/basis for the EPMs was 100g.
 - There was discussion about what elements of environmental impact we would ideally like to capture in an EPM, and whether the measures used in the current project could be considered

reasonable proxies of other measures. For example, whether land use could be considered a reasonable proxy of biodiversity loss. Despite the correlation between different environmental measures, there was concern in the EWG that any EPM we design with our limited set of environmental measures could not capture the full complexity of the environmental impact of food. It was stated that a similar case can be made for nutrition, and what we are trying to produce is a useful tool not a perfect tool.

- One EWG member felt that as GHGE is a 'whole economy' issue, it doesn't need a 50% reduction in food (as per the Courtauld Commitment used for calculating the standardisation factor for GHGE for the EPMs so far developed). PS said that different Per Capita Daily Allowances could be tested.
- The EWG asked whether the EPMs could account for the environmental impact of processing, packaging, cooking, etc. PS noted that the NEPM project uses environmental impact data from the Hestia database which provides data for commodities up to the farm gate and doesn't include the environmental impacts of processing, packaging, etc. In a separate project the project team are using the French Agribalyse database instead of the Hestia database. The Agribalyse database has data for the whole of the food chain including processing and packaging. However, the Agribalyse database has its limitations. It is for French food rather than British food; it only uses one Lifecycle Assessment for each food, rather than multiple estimates as for Hestia, etc.
- It was noted that the distribution of EPM scores for the indicator foods was skewed (towards low environmental impact). PS said that that, as yet, the project team had not log-transformed the EPM scores or used some other method of smoothing the distribution. There were pros and cons of doing this.

Action Point: The project team to test for the sensitivity of the standardisation and weighting factors they have used for prototype EPMs.

Part 4 - NEPM (combining the NPM with the EPM)

- BS showed a scatter graph of UK NPM 2018 scores and 4 indicator EPM scores for the indicator foods. This graph shows that there were foods which are: healthier and more sustainable, less healthy and less sustainable, but also foods which are healthier but less sustainable and foods which are less healthy but more sustainable.
- There are various methods of aggregating NPM scores and EPM scores to generate NEPM scores and this was the subject of the rest of BS's presentation
- The project team (following advice from the EWG at previous meetings) has, until now, only developed NEPMs which give scores rather than classifications such as 'can be advertised' v 'should not be advertised' as scoring systems give more possibilities for the future applications.
- Two simple aggregation methods have been tested so far.
 - Averaging NPM and EPM scores
 - Using the NPM or EPM score whichever is the lowest (i.e. least healthy or least sustainable)
- BS showed the results of applying two NEPMs to the indicator foods: one using the averaging method of aggregation and the other using the NPM or EPM score whichever is the lowest. The results were similar but there were major differences at product level. There was a smaller range of scores for the NEPM using the averaging method.

Questions

- There were questions about the threshold for the EPM (less sustainable v more sustainable) that had been used, so far, by the project team. It was agreed that there needed to be more discussion about this threshold. There is an agreed threshold for the NPM (less healthy v more healthy) which BS had used in his presentation but there is, as yet, no agreed threshold for an EPM.
- PS said that the project team had not yet looked at the classifications that the NEPM might generate, such as A to E grades, where A is the most healthy and most sustainable and E is the least healthy and least sustainable. It was agreed that this should be discussed at the next meeting. It was agreed that the project team would propose some policy scenarios and investigate how the current proto-type NEPMs could be used in these scenarios. This will involve identifying potential threshold scores.
- One suggestion was that a 'green' classification could be given for passing a threshold for health and environmental impacts, 'amber' for passing one, and 'red' for failing both
- MR said that in developing the UK NPM 2004 the expert working group came to a consensus that the threshold score (healthier v less healthy) should be the average score for all foods on the market.
- There is a question about whether planetary health and human health have the same value to consumers and therefore policy makers. For the moment the project team have assumed they have equal value but this assumption is open to debate
- The EWG suggested that it would be useful to focus on how the NEPM categorises (or ranks) foods in the meat and dairy sector.

Action Point: The project team to explore thresholds for policy purposes with the current developed NEPMs. Results will be presented for both binary outcomes (e.g. 'to be regulated by marketing restrictions' or not), and multiple thresholds (e.g. for A-E labelling schemes).

6. Next Steps

- PS said there were plenty of action points, from this meeting, for the project team to move forward with, in particular
 - Finalising the list of indicator foods
 - Testing the sensitivity of the EPM to the choice of standardisation and weighting factors used
 - Testing NEPM thresholds for policy purposes

7. AOB

- PS thanked the EWG for attending and BS for all his hard work on the project.

Action points	Person
New members of EWG to complete COI declaration, send to PS and TG.	ALL
Finalise and publish minutes of the November meeting on the website	PS
Project team to recirculate the list of indicator foods and Expert Working Group to recommend any additional indicator foods that will be useful for the project.	Project team & EWG
For future EWG meetings, category-level results will be based on the full dataset instead of the set of indicator foods..	Project team
Project team to provide description of difference between ready-to-eat and ready-to-use meals	Project team
Project team to test for the sensitivity of the standardisation and weighting factors they have used for prototype EPMs.	Project team
Project team will explore NEPM thresholds for policy purposes	Project team
Circulate Doodle poll for a meeting date in end of June	PS/TG