



# FoodRx:

Testing Healthy,  
Low-Carbon Menus  
in Hospitals

## The Study

Researchers from the London School of Hygiene & Tropical Medicine and University College London's Centre for Behavioural Change are seeking hospital partners to study the impact of healthy, sustainable menus on patient meal choice, with the goal of improving nutrition and reducing cost and carbon footprint without reducing patient satisfaction.

*This project aims to create an environment that encourages plant-based choices, shifting social norms and consumer demand to improve health, and sustainability, while preserving choice.*



Reduced  
healthcare  
burden



Reduced  
societal  
burden



Sustainable  
food system



Preventative  
healthcare  
system



Cost effective



Reflects  
patient demand



Inclusive  
approach

## The Partnership

We are seeking hospitals to pilot new menus in order to assess the health, environmental, and financial impacts of tailored behaviour change interventions. The study is open to all food service models and patient demographics within hospital sites in England. The only exclusions are certain prescribed diets and paediatric diets.



## What It Involves

The researchers will work with your hospital to co-design pilot menus based on your needs, capabilities, menu style, and ordering system. The core requirements are:

- Share routinely collected data on food procurement and meal ordering
- Host culinary & staff trainings, provided free of charge by partner organisations
- Appoint representative(s) from hospital food service to attend meetings 1-2 hours/week for 3 months
- Implement two out of the three core elements on pilot menus:



### Plant-Based Defaults

Offering a plant-based meal first (other options remain available)

### Climate-Friendly Ratios

Increasing the number of plant-based meals offered

### Menu Redesign

Rewording, positioning, and labelling of menus

**Options containing meat and dairy will remain available**, ensuring patients have a choice. The intervention will increase availability of plant-based meals and reformat menus to prioritise plant-based as the preferred option.

Sites will receive free support in the following areas:



Project management



Supply chain & procurement support



Data collection & analysis (CO<sub>2</sub>, water, £)



Tailored strategy suggestions



Expert menu & culinary guidance



Staff education; verbal menu item communication



Consultation on communication materials



Forum to share insights, success, resources

## Benefits for Your Organisation

1

Opportunity to work with cross-sectoral partners, free of cost

2

Potential for financial savings via reduced food cost

3

Quantifiable impact to evaluate progress towards hospital goals

4

Potential for improved health outcomes and reduce disease burden

5

Leadership role in transitioning to a sustainable food system that supports health

6

Supports Net Zero targets, EDI goals, and positive community/public relations

## Next Steps

Sites must agree to provide a non-binding letter of interest for the research project demonstrating in-principle agreement to participate in the study by **1 March 2025** (template to be provided). Please contact [amy@greenerbydefault.org](mailto:amy@greenerbydefault.org) if you have any questions or would like more information.



# Additional Information

## Rationale

Only 0.1% of the UK population meets all nine national dietary recommendations, eating too much saturated fat, salt, and sugar and too little fibre, fruit and vegetables (1,2). Unhealthy diets account for 13% of all deaths in the UK, predominantly due to obesity, hypertension, type 2 diabetes and cardiovascular disease (3). These effects are most pronounced in lower socio-economic groups who experience greater barriers to accessing healthy food (4).

Plant-based diets are healthy and sustainable. They are associated with lower risk of cardiovascular disease, diabetes and mortality and also have a carbon footprint up to 75% lower than omnivorous diets (5,6). Increasing consumption of plant-based foods therefore offers health and environmental benefits, aligned with the NHS commitments to a preventative healthcare service, workforce health and retention, reducing health inequality and Net Zero targets (7–9). There may be financial benefits as well, since poor diet costs the UK economy £268bn/year including direct health and social care costs equating to 48% of the annual NHS budget (£92bn) and productivity losses of £116bn (10).

## Timeline

Pilot sites will work with the research team over a 12-month period. The project will involve the following phases:

- Assessment of food service & baseline data collection, needfinding interviews (1 month)
- Pre-intervention development and refinement (3 months)
- Intervention phase (3 months)
- Data collection & follow up with patients / staff (1 month)

## Intervention

In addition to the menu changes and culinary and staff training, the pilot will also include stakeholder consultation, support with procurement/supply chain challenges, input on marketing and communication materials, and a discharge recipe bundle to support patients who want to continue to eat more plant-based meals at home.



## Data Collection

Financial support will be provided for any necessary primary data collection beyond existing data.

- **Menus:** All sites must agree to provide access to current, planned and previous staff and patient menus and recipes, including staff food prices. Avoid changes to food service menus and model in the 3 months preceding the intervention
- **Procurement data:** Sites will share routine data on procurement and as appropriate, contractual information (ingredients, costs, and quantities)
- **Serving data:** Number of menu items ordered/served
- **Diner satisfaction data:** Patient and staff satisfaction with overall food provision
- **Optional:** where available, sites will share data on additional metrics:
  - Per meal and per menu nutritional analysis
  - Individual tray waste
  - Meal-specific patient/staff satisfaction scores & surveys
- **Researchers will collect:**
  - Observational data to assess intervention fidelity and inform a process evaluation
  - Follow-up data including qualitative measures such as interviews with patients and staff to establish if persistent behaviour change occurred. This data will also be used to inform impact on equality, diversity and inclusion.

## Collaborating Partners

- **MyNutriWeb:** Award-winning learning hub in food nutrition & health for all professionals helping the nation to eat well.
- **Greener By Default:** US-based not-for-profit that consults with institutions to apply behavioural science to food policy, nudging diners towards sustainable plant-based food while preserving freedom of choice
- **Real Zero:** Solutions-focused not-for-profit leveraging the global healthcare system to catalyse mass action for urgent action to reduce greenhouse gas emissions and avert a climate crisis.
- **Small World Consulting:** World-leading experts in measuring the carbon and climate impact of full supply chains and operations.



# References

1. Office for Health Improvement and Disparities. National Diet and Nutrition Survey [Internet]. [cited 2024 Nov 29]. Available from: <https://www.gov.uk/government/collections/national-diet-and-nutrition-survey>
2. Scheelbeek P, Green R, Papier K, Knuppel A, Alae-Carew C, Balkwill A, et al. Health impacts and environmental footprints of diets that meet the Eatwell Guide recommendations: analyses of multiple UK studies. *BMJ Open*. 2020 Aug 26;10(8):e037554.
3. Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2021. 2024.
4. Office for National Statistics. The impact of winter pressures on different population groups in Great Britain: impacts of the cost of living on behaviours and health [Internet]. 2024 [cited 2024 Dec 5]. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/datasets/theimpactofwinterpressuresondifferentpopulationgroupsingreatbritainimpactsofthecostoflivingonbehavioursandhealth>
5. Scarborough P, Clark M, Cobiac L, Papier K, Knuppel A, Lynch J, et al. Vegans, vegetarians, fish-eaters and meat-eaters in the UK show discrepant environmental impacts. *Nat Food*. 2023 Jul 1;4(7):565–74.
6. Neuenschwander M, Stadelmaier J, Eble J, Grummich K, Szczerba E, Kiesswetter E, et al. Substitution of animal-based with plant-based foods on cardiometabolic health and all-cause mortality: a systematic review and meta-analysis of prospective studies. *BMC Med*. 2023 Nov 16;21(1):404.
7. NHS England. NHS Long Term Plan.
8. NHS England. NHS Long Term Workforce Plan [Internet]. 2023 [cited 2024 Nov 29]. Available from: <https://www.england.nhs.uk/publication/nhs-long-term-workforce-plan>
9. NHS England. Delivering a Net Zero National Health Service. NHS England; 2022.
10. Tim Jackson. The False Economy of Big Food and the case for a new food economy [Internet]. UK: Food, Farming & Countryside Commission; 2024. Available from: <https://ffcc.co.uk/publications/the-false-economy-of-big-food>