

# How Sustainable Are UK Hospital Menus?

## Identifying Untapped Potential Based on a Novel Scoring System

Isabelle Sadler & Dr. Alexander Bauer | 03.12.2025

# Who are we?



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# Agenda

1. The NHS and its climate targets
2. How to measure sustainability?
3. Study design
4. Findings
5. Outlook

# The NHS and its climate targets



# NHS climate targets

- Net zero carbon emissions by 2045
- This includes food & catering
- Food & catering makes up ~6% of total NHS emissions

# Green Plans

- NHS trusts develop their own 'Green Plans' with guidance from the NHS
- Create personal commitments to support net zero by 2045
- This can include food and nutrition



# How to measure sustainability?



# Sustainability

## Pledges

- Green Plans

## Measurable commitment

- Evaluating the specific offered foods

Here: Focus on the measurable commitment



# Sustainability

## Option 1: Exact carbon footprint

- Calculation of the footprint of every dish
- Best information
- BUT: only practical for a few menus

## Option 2: Sustainability indicators

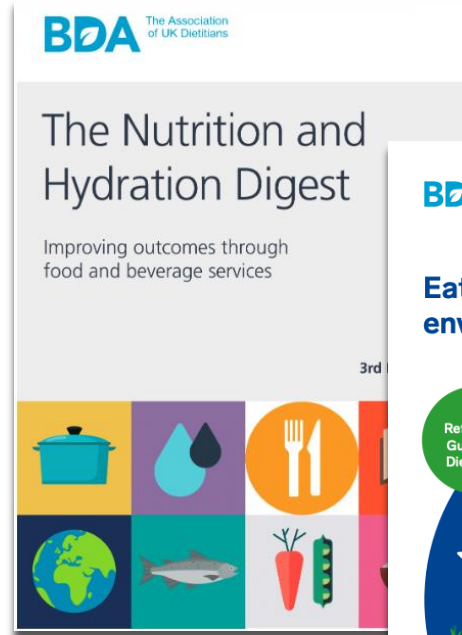
- Focus on indicators reflecting the efforts
- Coarser information
- Also feasible for evaluating many menus

Here: Option 2, in order to evaluate many menus

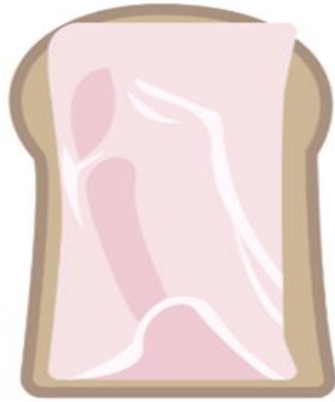
# Sustainability

The low environmental impact and the role of plant-based meals are recognised by key guidelines:

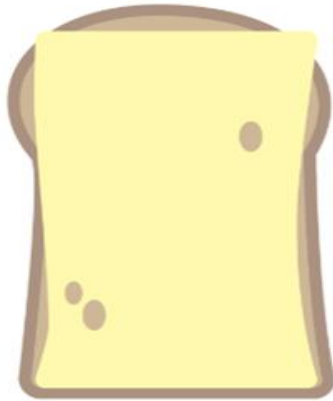
- British Dietetic Association Nutrition and Hydration Digest
- BDA One Blue Dot
- NHS England National Standard for Healthcare Food and Drink



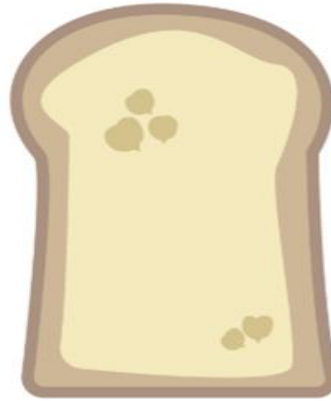
# Sustainability of a slice of bread with ...



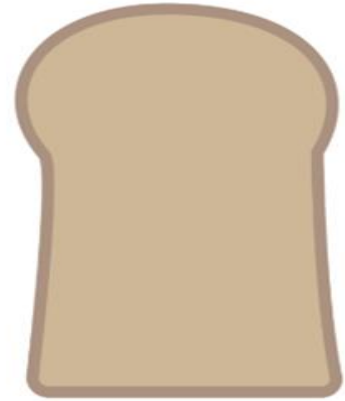
Ham  
170g CO<sub>2</sub>



Cheese  
240g CO<sub>2</sub>



Hummus  
90g CO<sub>2</sub>



Nothing  
60g CO<sub>2</sub>

Visualisation by [Prof. Jan Stoop](#)

# Nudging techniques

Encourage people to choose a more sustainable option, e.g.:

- List plant-based dishes first on the menu
- Use positive language to describe the dishes
- Avoid using 'vegetarian', 'vegan', and 'meat-free' in the dish name (negative language)



# Study design



# Scoring system

## 3 Main meals (lunch & dinner)

1  $\geq 1$  vegan main every day?

2 % of vegan mains

1 % of vegetarian mains

1 % of non-ruminant-meat mains

## 1 Smaller meals

2 % of vegan meals

1 % of vegetarian meals

## 2 Menu presentation

1 Use of positive descriptors

1 Positioning of vegan options

% of veg\*n dishes with pos. labels

1

% of veg\*n dishes without neg. labels

Calculation of a score for each menu between 0 (bad) and 100 (good)

1. Every item scores between 0 and 100
2. Category scores = weighted average of item scores
3. Final score = weighted average of category scores

# Study design

## Sampling hospital menus

- Random selection of one hospital trust from each Integrated Care System (ICS)
- Freedom of Information (FOI) Act Requests
- Standard menus for spring/summer 2024
- FOI request sent to 52 hospitals, 34 replies (65%) with sufficient information
- Collate menu data

## Green plans

- Collect plans from NHS trust websites
- Analyse commitment to reducing food and nutrition emissions
- Is plant-based food mentioned?
- Strategies, initiatives or campaigns
- Compare to local/seasonal food and food waste reduction targets

# Findings





# Green Plans

- 40 Green Plans analysed



**50%**

of Green Plans include a section on food and catering.



**47.5%**

of the plans aim to increase the availability of plant-based options.



**20%**

propose reducing meat consumption through menu changes or initiatives such as Meat-Free Mondays.



**15%**

outline methods to track changes in plant-based food offerings.



**5%**

aim to encourage staff, visitors, and patients to choose plant-based options.



**82.5%**

aim to increase the inclusion of local and seasonal foods on their menus.

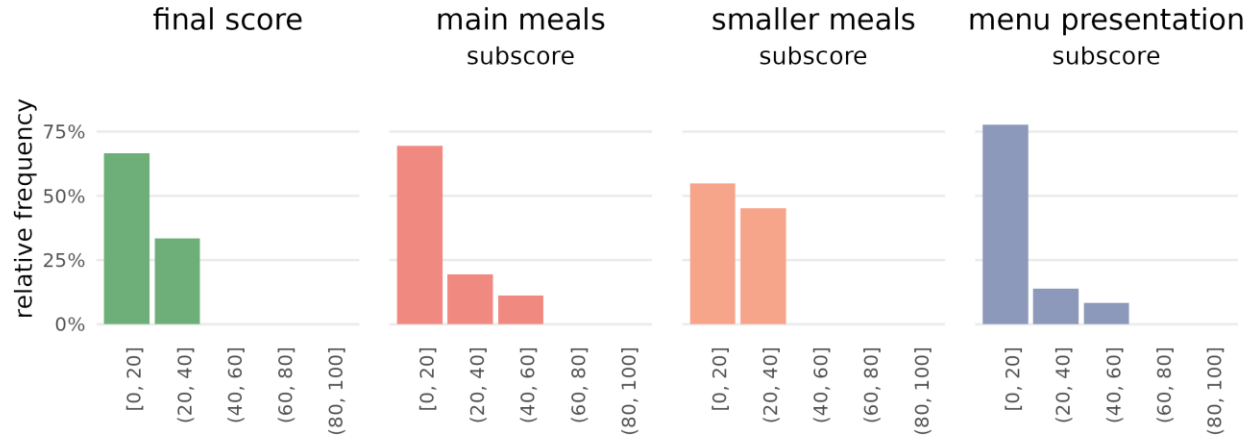


**92.5%**

of Trusts address food waste in their green plans.

From [Plants First Healthcare Report](#)

# Overall scores



-> Overall scores are between 9 and 38. Also big easy-to-improve potential on the menu presentation front

# Limited plant-based meals

- 42% offered no fully plant-based dinner options
- Half offered no fully plant-based lunches
- Every hospital menu included ruminant meat on their lunch options
- Only 8% listed the plant-based options first on the menu.
- 69% used negative labelling on at least one main dish such as describing the meal as 'vegetarian', 'vegan' or 'meat-free'.

# Scores per hospital

trust / health board	catering type	final score	subscores			main meals								smaller meals		menu presentation			
			main meals	smaller meals	menu presentation	BO (l)	BO (d)	pVG (l)	pVG (d)	pVeg (l)	pVeg (d)	pRum (l)	pRum (d)	pVG	pVeg	posD	posit	posL	nonNegL
minimum scores		9	7	11	0	0	0	0	0	6	6	0	0	0	27	0	0	0	0
average scores		20	22	20	16	19	22	8	10	29	31	36	46	7	46	10	8	1	60
maximum scores		38	50	33	58	100	100	25	43	52	53	75	100	27	64	100	100	50	100
KCHFT	Contracted out	38	41	25	42	100	100	17	17	21	21	50	50	16	42	0	100	0	50
MSEFT	Contracted out	35	40	23	33	100	100	16	16	16	16	53	53	12	44	0	100	0	0
UHDBFT_A	Contracted out	34	40	33	25	100	100	25	25	6	6	44	44	27	47	50	0	0	50

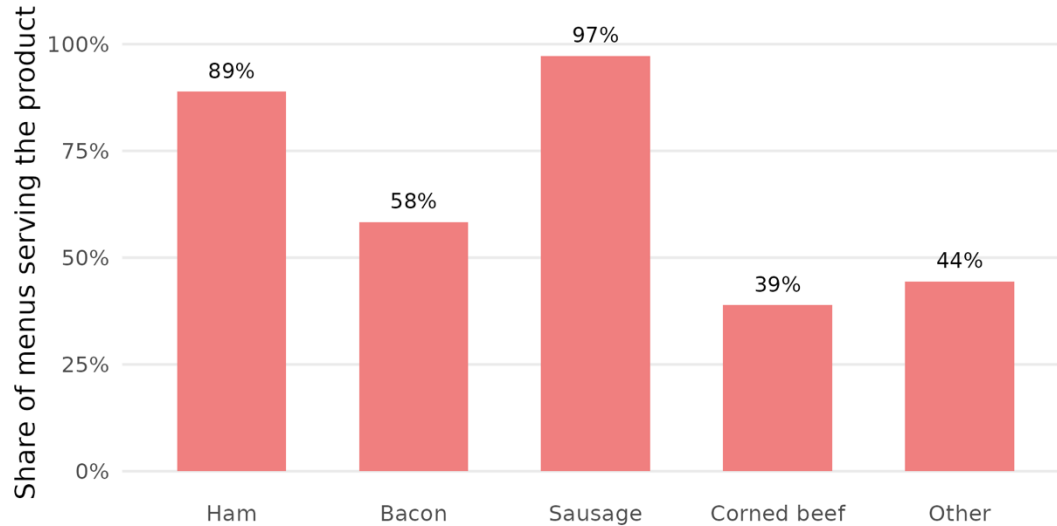
→ Individual rankings of the hospitals offer deeper insights and guidance on how to improve

# Scores per catering type

catering type	n hospitals	final score	subscores			main meals								smaller meals		menu presentation			
			main meals	smaller meals	menu presentation	BO (l)	BO (d)	pVG (l)	pVG (d)	pVeg (l)	pVeg (d)	pRum (l)	pRum (d)	pVG	pVeg	posD	posit	posL	nonNegL
Contracted out	14	25	27	24	24	36	36	13	11	23	24	45	54	14	44	21	21	4	54
Mixed	3	22	34	19	6	67	67	20	30	24	19	37	28	8	43	0	0	0	33
In-house	17	16	17	17	12	0	6	4	7	34	38	29	47	1	49	3	0	0	68

→ “Contracted-out” better than in-house catering

# Serving of processed meat



-> Despite negative health effects, **all menus served processed meat**

# Outlook



# Outlook

- Menus overall are still very unsustainable (average score: 20)
- Low-effort menu presentation techniques are simple to implement!
- Repeating the study:  
Green plans updated in 2025, potential to reassess commitments to sustainable menus
- New scoring system is easily applicable to other countries or settings



# Next steps

1. Contributing plant-based recipes that meet nutrition and calorie requirements for the NHS recipe bank.
2. Working with coalition partners, which include ProVeg and Greener By Default, to implement plant-based defaults in staff and patient menus.
3. Supporting hospital chef training

# Reference

Sadler, I., Bauer, A., & Kassam, S. (2025). How Sustainable Are Hospital Menus in the United Kingdom? Identifying Untapped Potential Based on a Novel Scoring System for Plant-Based Provisions. *Journal of Human Nutrition and Dietetics*, 38(1), e70019.

**<https://doi.org/10.1111/jhn.70019>**