



PLANT-BASED
Health Professionals UK

Why plant-based eating?

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Founder and Director of Plant-Based Health Professionals UK

21st November 2024

About me/disclosures



Lifestyle Medicine
GLOBAL ALLIANCE



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Health Professionals UK

- Haematologist and Certified Lifestyle Medicine Physician
- Founder & director of Plant-Based Health Professionals UK
- Sustainability lead for pathology practice - RCPATH
- Education on plant-based diets and cancer at University of Winchester
- Author/Vegan since 2013

King's College
Hospital
NHS Foundation Trust



UNIVERSITY OF
WINCHESTER

Why are we talking about food?



HEALTH CRISIS



CLIMATE
BREAKDOWN



BIODIVERSITY
LOSS



ANTIBIOTIC
RESISTANCE



PANDEMIC
RISK



AIR
POLLUTION



SOCIAL
JUSTICE

The case for change

Diet

Health policy

Denis Campbell *Health policy editor*

Fri 15 Nov 2024 20.24 CET

 Share

- Dietary risk
- Over-consumption
- Vastly under
- UK has four times as many people eating red and processed meat
 - >38,000
 - 36,000 c
 - =32% of

UK's unhealthy food habits cost £268bn a year, report finds

Exclusive: Food, Farming and Countryside Commission added up cost to NHS and economy of diet-linked disease

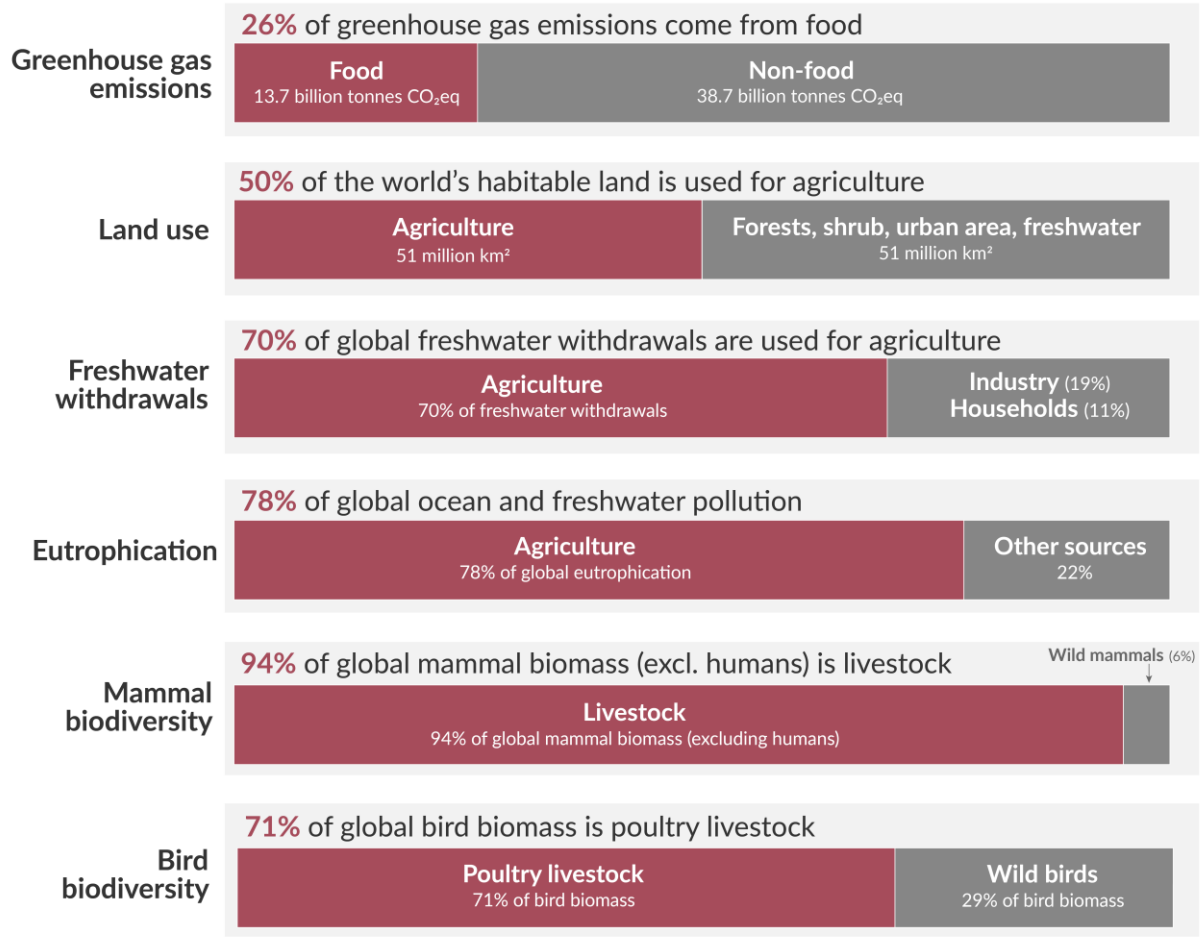


<https://globalnutritionreport.org>

<https://globalnutritionreport.org/resources/nutrition-profiles/europe/northern-europe/united-kingdom-great-britain-and-northern-ireland/>

<https://ukhealthalliance.org/news-item/lancet-countdown-on-health-and-climate-change-2024-uk-policy-brief-identifies-key-health-priorities-for-cop29/>

The environmental impacts of food and agriculture



Data sources: Poore & Nemecek (2018); UN FAO; UN AQUASTAT; Bar-On et al. (2018). OurWorldinData.org - Research and data to make progress against the world's largest problems.

Licensed under CC-BY by the author Hannah Ritchie. Date published: November 2022.

Impact of our food system on planetary health

- >30% of all GHG emissions
- Animal agriculture >50% of these emissions
- Animal ag is the leading cause of biodiversity loss
- In the UK, the food system accounts for a 1/5 of GHG emissions – but that rises to around 30% if we factor in emissions from all the food we import
- Red meat and dairy production >70% of farming emissions

<https://s41874.pcdn.co/wp-content/uploads/UK-Lancet-Countdown-policy-brief-2023-v1-1.pdf>

<https://www.nationalfoodstrategy.org>

Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets

‘Even if fossil fuel emissions were eliminated immediately, emissions from the global food system alone would make it impossible to limit warming to 1.5°C and difficult even to realise the 2°C target’.



Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets. Science. 2020 Nov 6;370(6517):705-708. doi: 10.1126/science.aba7357.

Land use in the UK

- 70% devoted to agriculture
 - >80% to raise
 - Half again us
 - Farm animals consume more than the entire human population
 - Produces only 32% of calories
- Land is our greatest opportunity to restore nature, store carbon

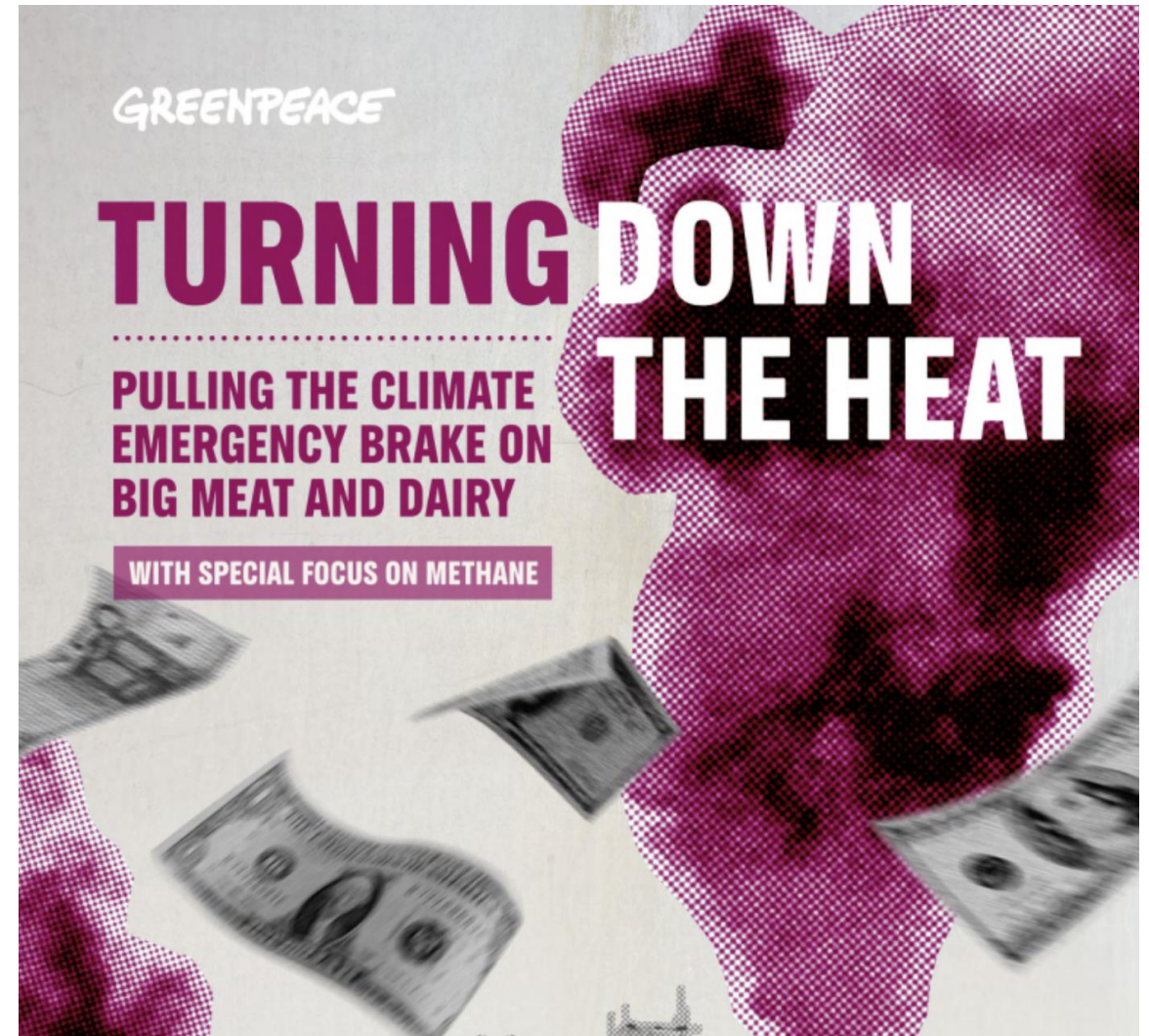
We could release 75% of farmland if we were to all adopt a plant-based diet



UK land area divided up by purpose. About 70% is devoted to agriculture, mainly livestock and livestock feed and pasture. The right-hand side of the chart, using the same scale, shows how much land is used overseas to produce food for the UK. About half of the total land use takes place overseas. The combined land area for rearing beef and lamb for UK consumption is larger than the UK itself. Source: The National Food Strategy, Part II.

Methane

- 60% from human activities
- Short lived gas, but 28 x warming potential of carbon
- 32% from farming animals
 - Manure and enteric fermentation
- Methane emission alone will prevent us from limiting global warming
- Urgent action needed



<https://www.unep.org/news-and-stories/story/methane-emissions-are-driving-climate-change-heres-how-reduce-them>

<https://www.greenpeace.org/aotearoa/publication/report-turning-down-the-heat/>

Meeting our climate and nature targets

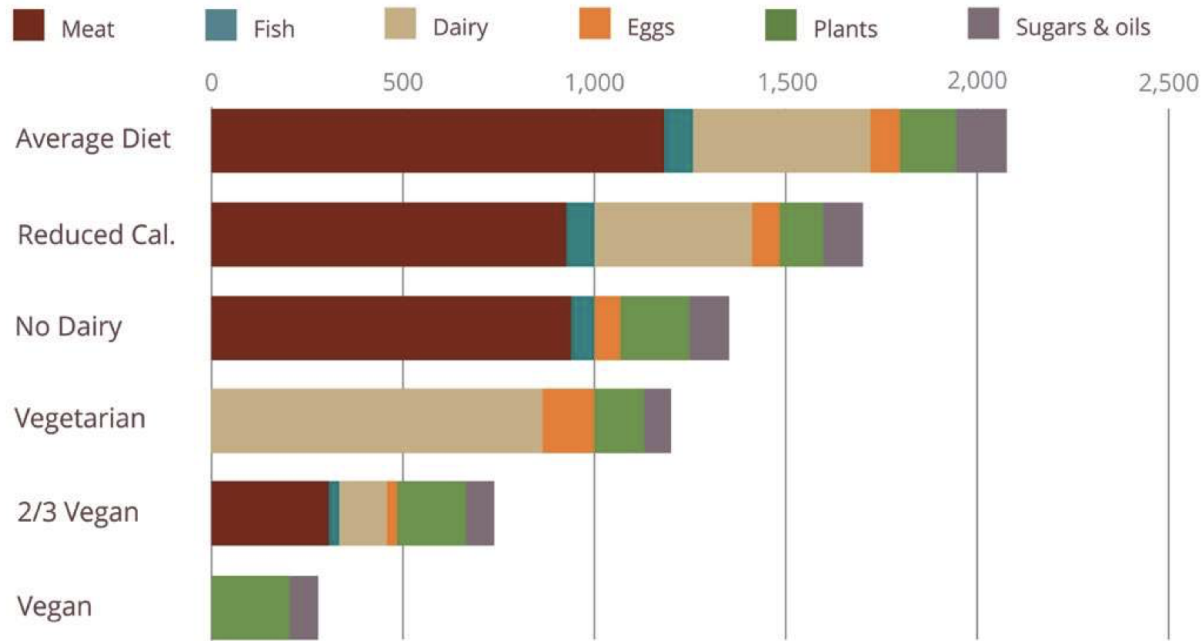


Measured as CO₂e per person per day

<https://www.wwf.org.uk/eating-for-net-zero>

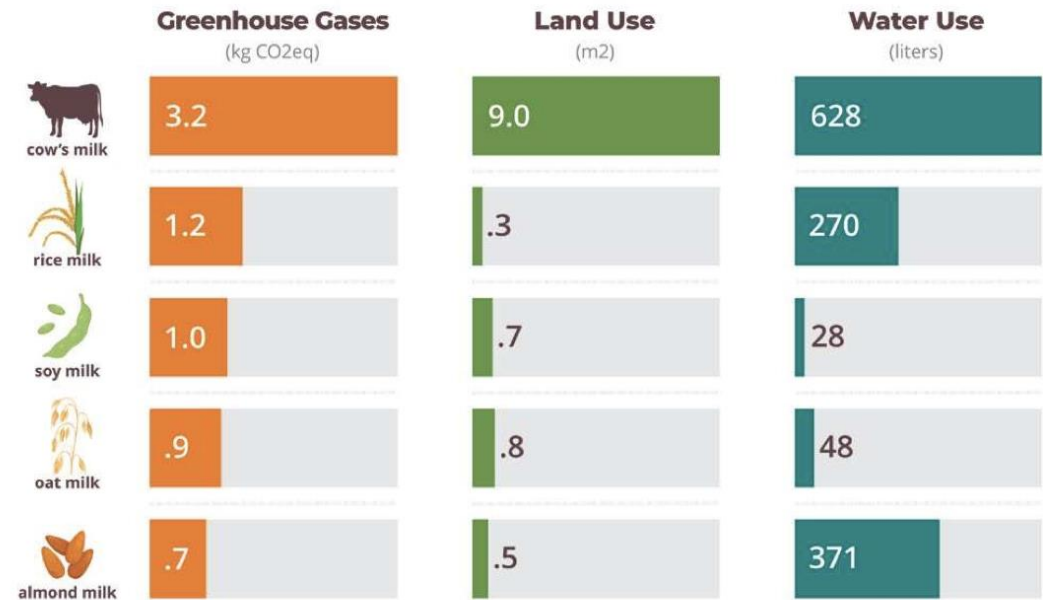
What we eat really matters

GHG emissions of various diets kg of CO₂ equivalents per year



Kim et al (2019) Country-specific dietary shifts to mitigate climate and water crises. *Global Environmental Change*

Which milk is best for the planet?



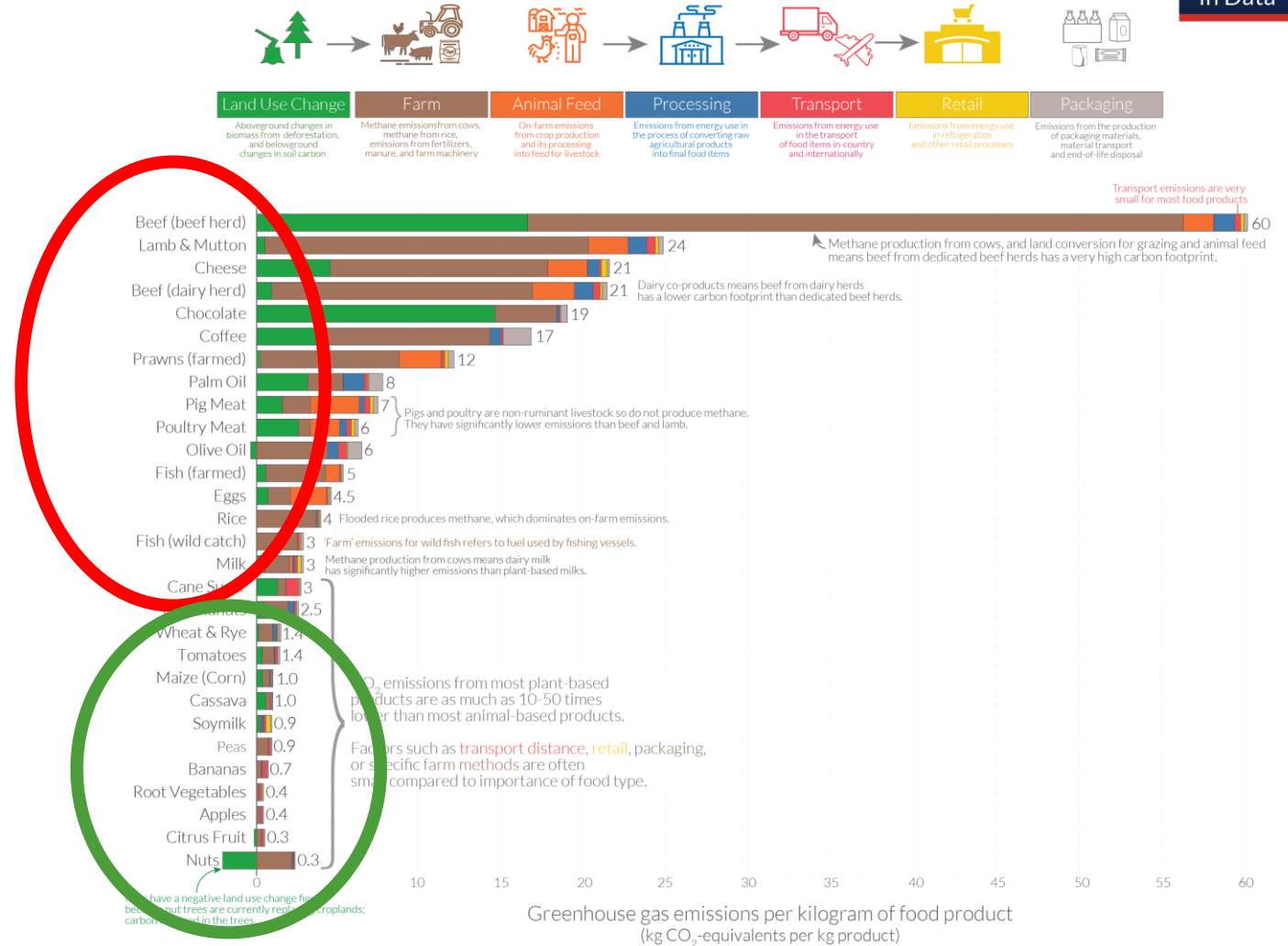
Poore & Nemecek (2018) Reducing Food's Environmental Impacts Through Producers and Consumers, *Science*

Local is not the answer

- <10% of emissions are from transportation
 - For beef, it is 1%
- 80% from land use change and farm stage emissions
- Most plant-based foods are shipped
- The UK only grows 17% of fruit and 55% of vegetables
 - We don't have sufficient supply for 5 a day

Food: greenhouse gas emissions across the supply chain

Our World in Data



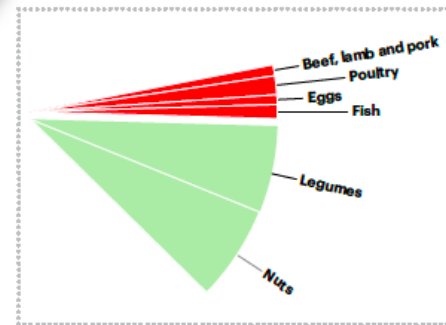
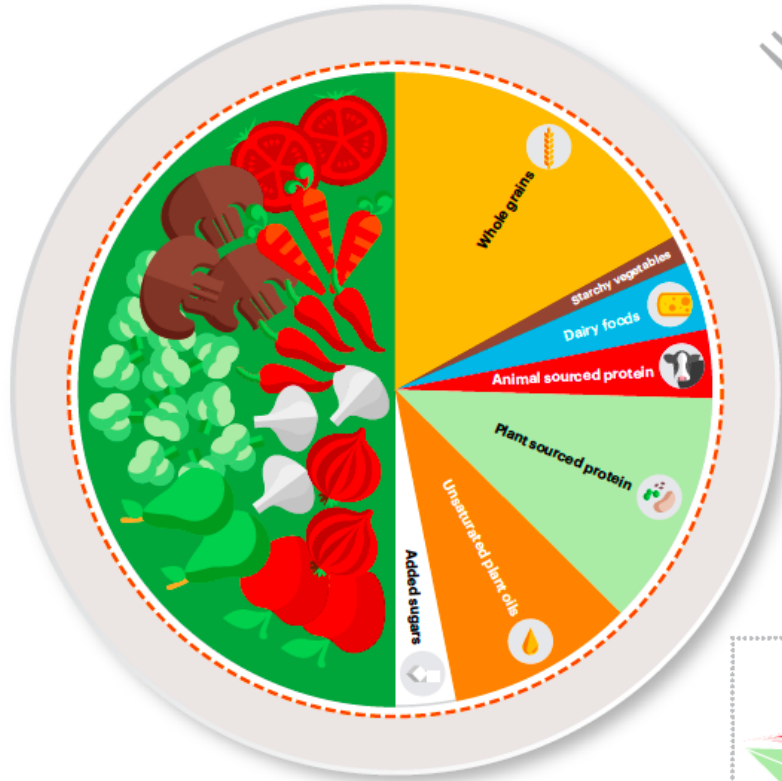
Note: Greenhouse gas emissions are given as global average values based on data across 38,700 commercially viable farms in 119 countries. Data source: Poore and Nemecek (2018). Reducing food's environmental impacts through producers and consumers. Science. Images sourced from the Noun Project. OurWorldinData.org – Research and data to make progress against the world's largest problems. Licensed under CC-BY by the author Hannah Ritchie.

<https://ourworldindata.org/food-choice-vs-eating-local>

<https://www.bbc.co.uk/news/science-environment-69009207>

What is a healthy and sustainable diet?

>85% plant-based



Per week

- 1 portion of red meat (98g)
 - 2 portions poultry (200g)
 - 2 portions of fish (196g)
 - 3 eggs
-
- Estimated to save 11 million premature deaths per year

Achieving the Eat Lancet recommendations



Consumption changes (%) to reach balanced flexitarian diets

Food groups	World	HIC	UMC	LMC	LIC
red meat	-82	-90	-88	-78	-57
sugar	-45	-56	-68	-39	-15
white meat	-33	-59	-52	-6	-7
milk&eggs	-32	-55	-31	-17	-8
staples	-28	8	-16	-36	-33
fish	50	20	98	46	106
vegetables	55	50	92	35	247
fruits	55	24	24	72	117
legumes	249	485	193	240	187
nuts	280	336	294	248	335

Plant-based diets as a solution

Benefits of a plant-based diet

- Low in energy yet high in nutrients
 - Supports a healthy body weight
- Low in saturated fat
 - improves blood lipids
- High in fibre
 - Helps satiety
 - improves gut health
 - improves insulin sensitivity
- High in phytonutrients
 - Lowers inflammation
- Low in sugar
- Can support health across all ages and stages of life



Health impacts of adopting a plant-based diet

Disease	Risk reduction
Coronary heart disease ¹	25%↓
Type 2 diabetes ²	34%↓
Cancer risk ³	15%↓
Stroke ⁴	10%↓
Renal failure ⁵	14%↓
Fatty liver ⁶	24%↓
Parkinson's Disease ⁷	22%↓
Sleep apnoea ⁸	17%↓
COVID-19 incidence/severity ⁹	10%↓/40%↓
All-cause mortality ^{10,11}	10-16%↓

¹Journal of the American College of Cardiology. 2017;70(4):411-422.

doi:10.1016/j.jacc.2017.05.047

²PLOS Medicine (2016) 13(6):

e1002039. <https://doi.org/10.1371/journal.pmed.1002039>

³International Journal of Cancer, 2018, Volume 143, Issue 9 pages 2168–2176. <https://doi.org/10.1002/ijc.31593>

⁴Neurology Publish Ahead of Print DOI: 10.1212/WNL.0000000000011713

⁵Clinical Journal of the American Society of Nephrology. May 2019, 14 (5) 682–691; DOI: <https://doi.org/10.2215/CJN.12391018>

⁶Clinical nutrition VOLUME 38, ISSUE 4, P1672-1677, AUGUST 01, 2019 <https://doi.org/10.1016/j.clnu.2018.08.010>

⁷Mov Disord. <https://doi.org/10.1002/mds.29580>

⁸ERJ Open Res <https://doi.org/10.1183/23120541.00739-2023>

⁹Gut. 2021 Nov;70(11):2096-2104. doi: 10.1136/gutjnl-2021-325353

¹⁰Circulation. 2019;140:979–991

<https://doi.org/10.1161/CIRCULATIONAHA.119.041014>

¹¹JAMA Netw Open.2023;6(3):e234714.

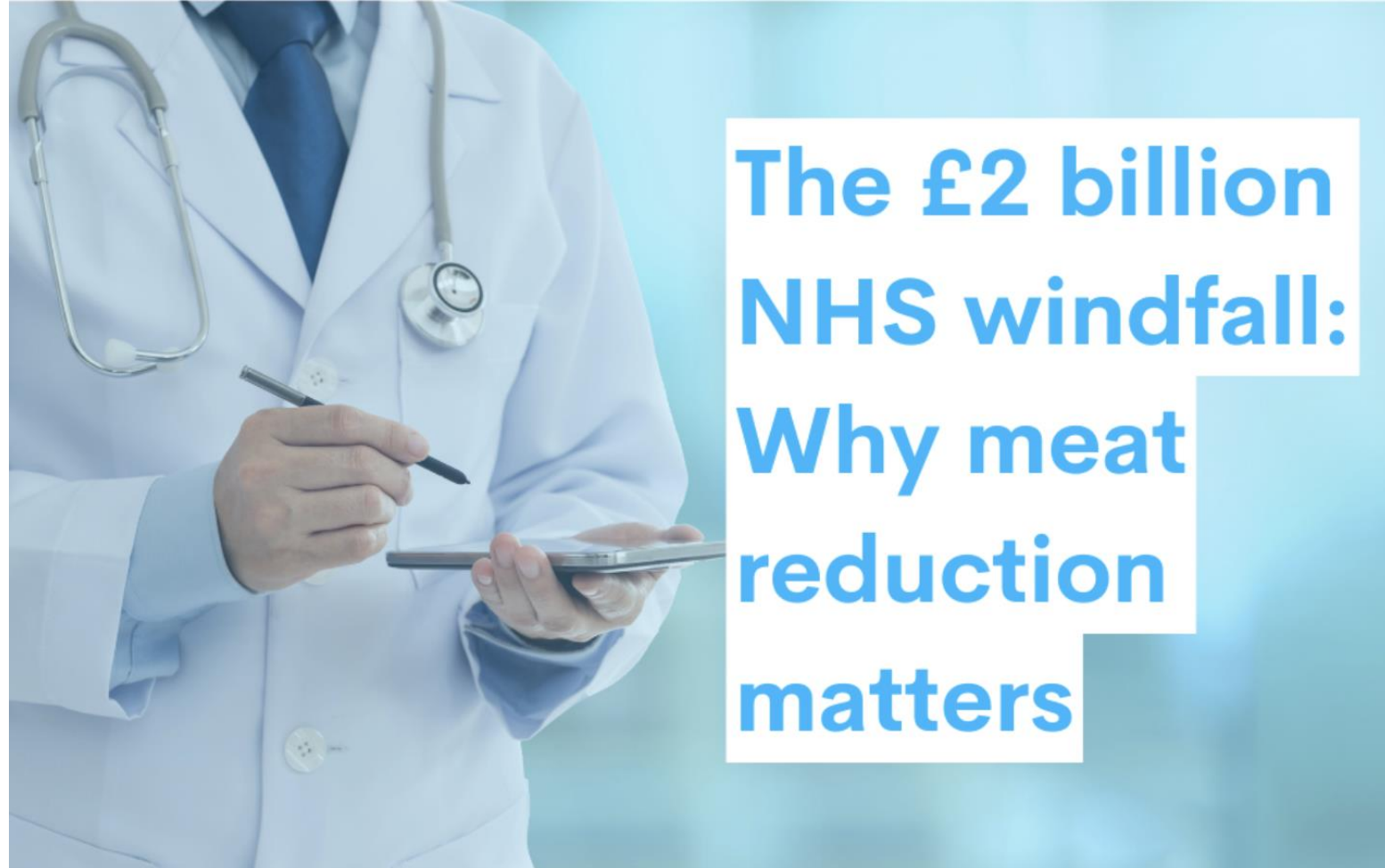
doi:10.1001/jamanetworkopen.2023.4714



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Cost savings

- Improved health
- Less diabetes and CVD
- Environmental benefits
- Lower household costs
- **Implementing meat-free defaults in public catering could save the NHS £74M a year**



The global and regional costs of healthy and sustainable dietary patterns: a modelling study, The Lancet Planetary Health, Volume 5, Issue 11, 2021

<https://www.conservativeanimalwelfarefoundation.org/plant-based-diet/the-2-2-billion-windfall-for-the-nhs-new-research-reveals-how-the-uk-could-unlock-savings/>

<https://www.ohe.org/insight/could-plant-based-diets-transform-health-care-spending/>

**What's happening
in the NHS now**

NHS weight loss app



Lunch

Sat, 29 Jun 2024

Name

100 characters

e.g. Sandwich



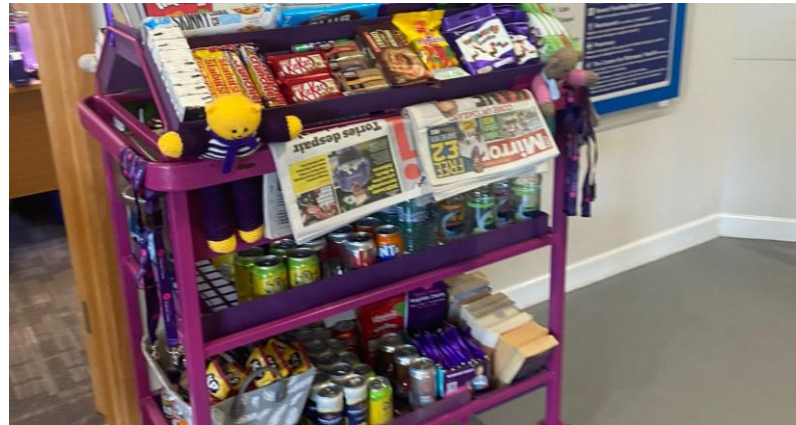
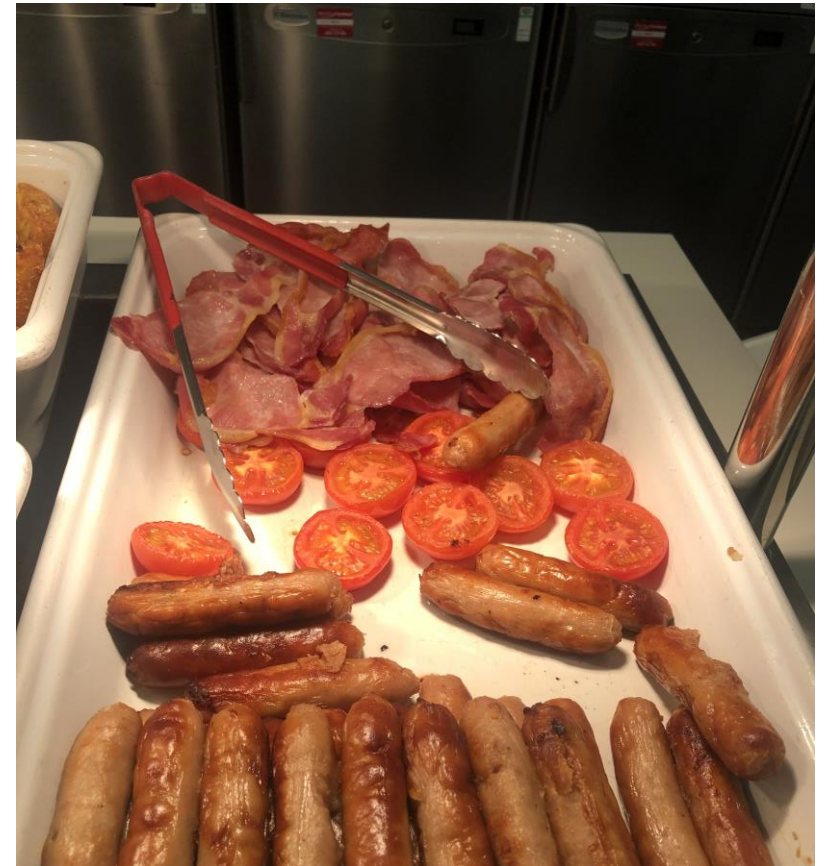
Dinner

Sat, 29 Jun 2024

Name

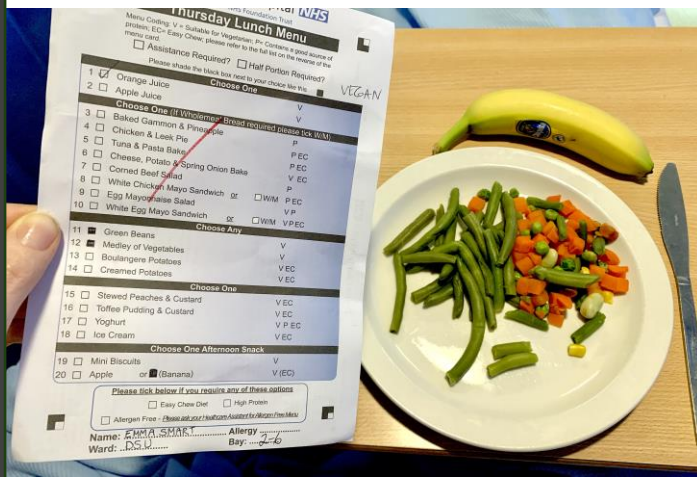
100 characters

e.g. Salmon



Food in hospitals

Current reality



NHS Trust Green Plan Assessment



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Sample: We assessed Green Plans from 40 NHS Trusts, covering 40 of the 42 Integrated Care Systems across all regions of England.

50%

Include a section focused on food and catering.

48%

Aim to increase the availability of plant-based options.

20%

Propose reducing meat consumption through menu changes or initiatives like Meat-Free Mondays.

5%

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

15%

Outline methods to track the increase in plant-based food offerings.

83%

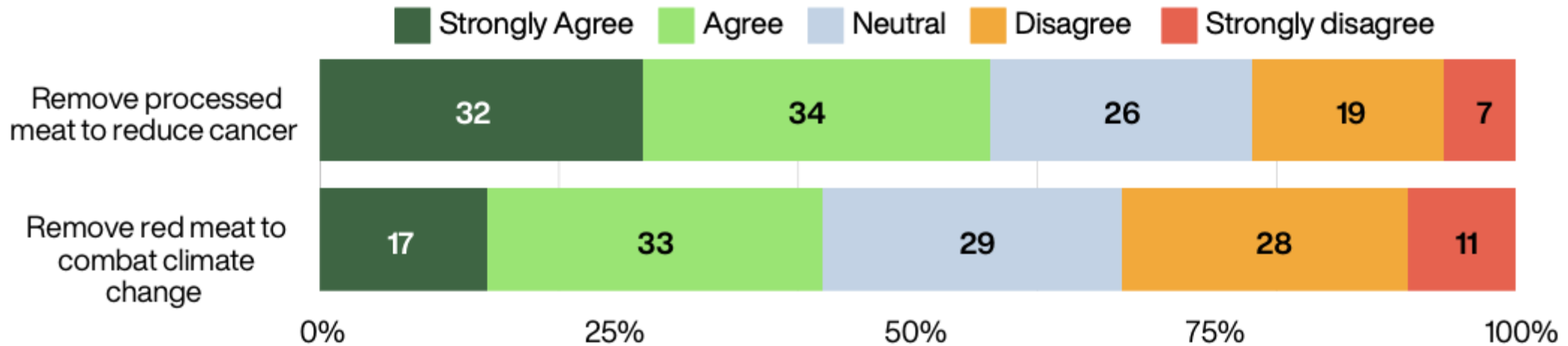
Refer to local produce



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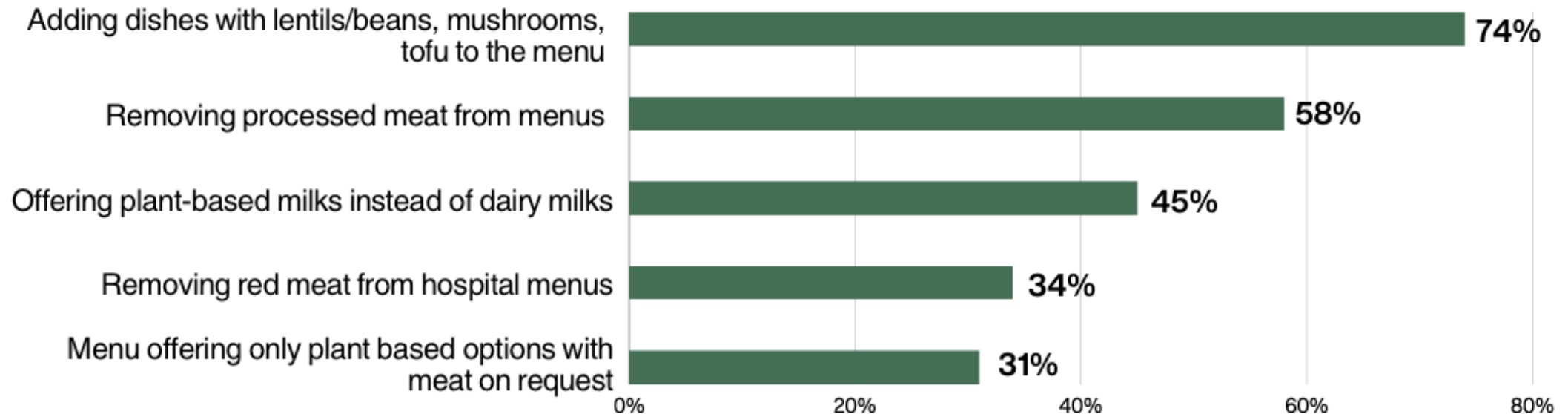
What our patients tell up: Survey of 118 people

- Patients at King's College Hospital would be supportive of removing red and process meat from menus



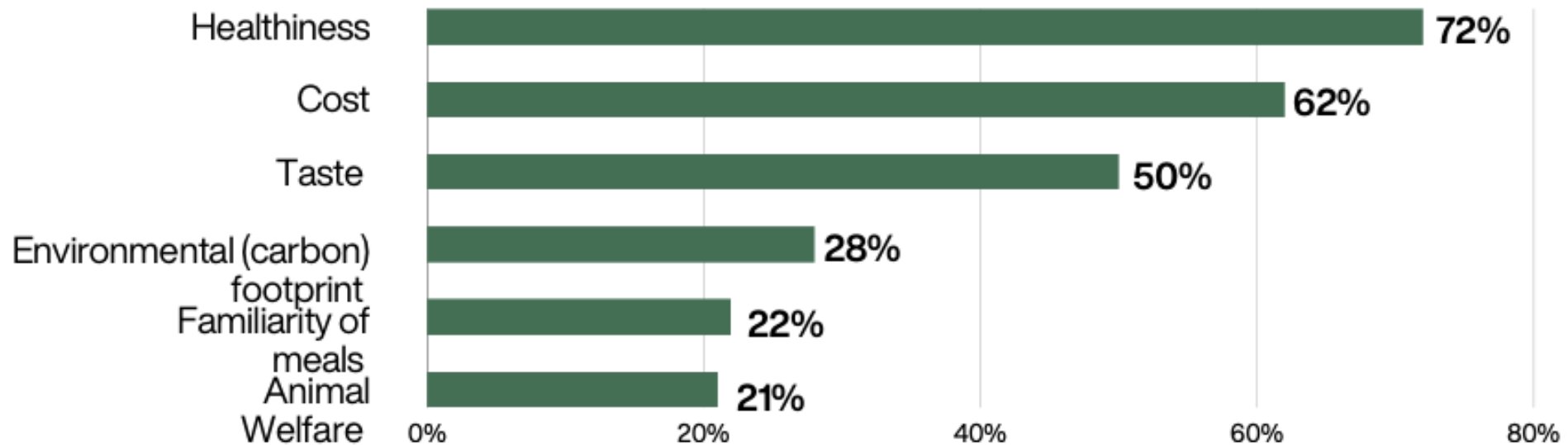
What our staff tell us: Survey of 109 people

What changes would staff support on hospital menus?



What our staff tell us: Survey of 109 people

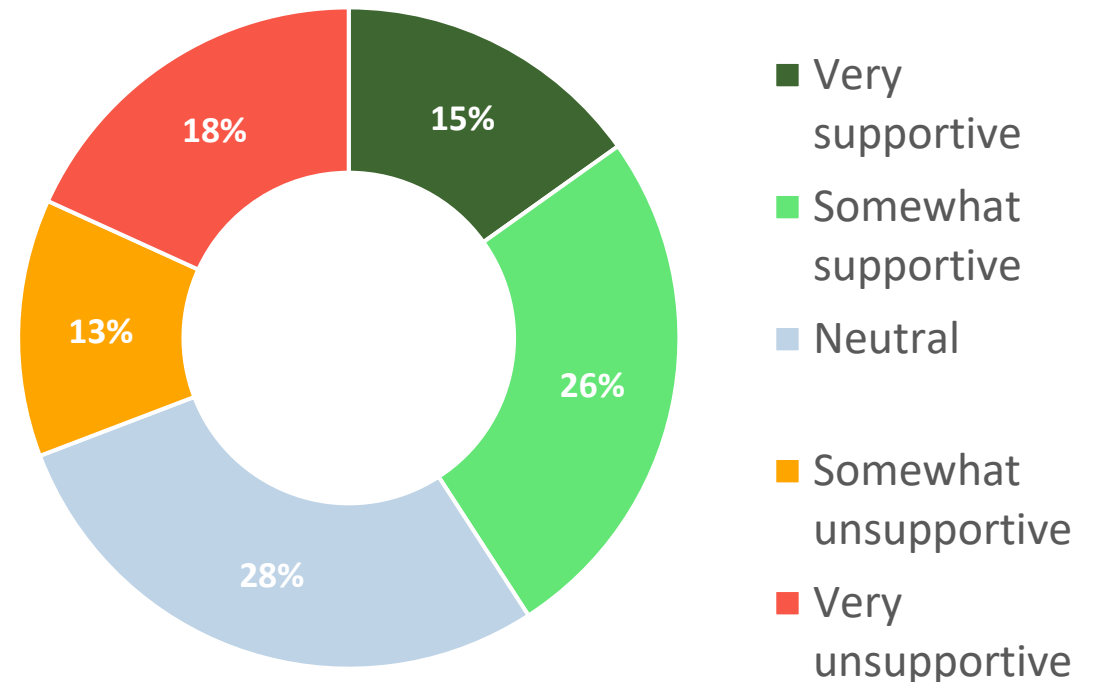
What is the most important factor in deciding what you eat in hospital?



Attitudes towards change in NHS hospital menus

- Only 11% of participants consider hospital meals to be healthy.
- However, 94% believe it's important for hospitals to promote healthy lifestyles and 64% believe that hospitals should prioritise offering healthy meals.
- **35% support the switch to an entirely plant-based menu in NHS hospitals.**

How supportive or unsupportive would you be of plant-based milks and yoghurts being served in hospitals instead of dairy milks and yoghurts?



Attitudes towards change in NHS hospital menus

What benefits do the public perceive for meat-free meals?



30%

It's more environmentally friendly



30%

It's healthier



25%

It might encourage healthy eating outside of hospitals



25%

It's more inclusive of different cultures and beliefs



24%

It could save the NHS money

Our proposal for action

- Normalise plant-based meals in healthcare by making it the default option



Further resources



Plant-powered Planet
Building a healthy & sustainable food system

An illustration of a globe surrounded by fresh vegetables like carrots, tomatoes, and leafy greens, with a bowl of salad in the center.

UK Health Alliance on Climate Change

October 2024

Plants First Healthcare

We are calling on NHS trusts, Integrated Care Boards (ICBs) and all other healthcare organisations across the United Kingdom to adopt a 'Plant-Based by Default' food menu.

[Sign the letter](#)

FOOD IN HEALTHCARE REPORT
Making Plant-Based Meals the Default: For A Healthier, More Sustainable NHS
Isabelle Sadler and Dr Shireen Kassam

The Plants First Healthcare logo is repeated in the bottom left corner of this section.