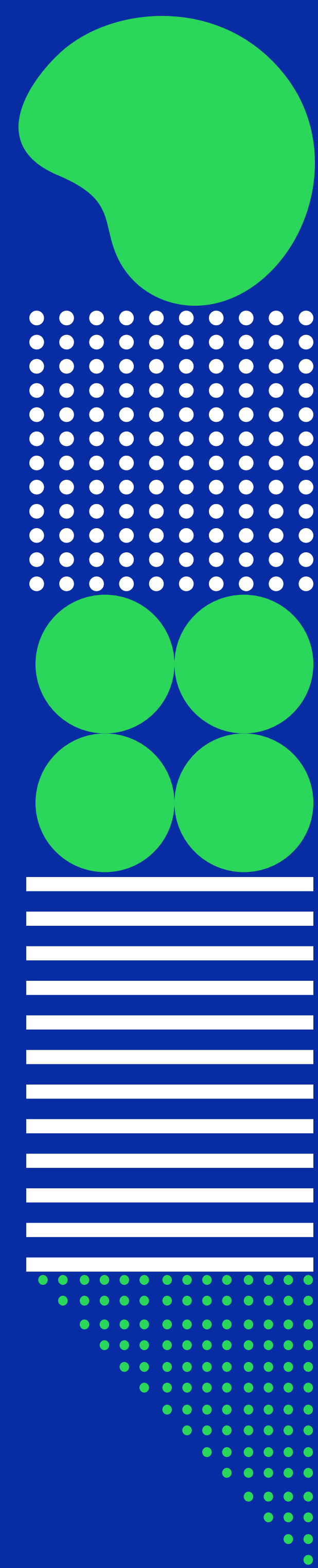


A YEAR FULL OF BEANS

Reflections on Glasgow's Full of Beans campaign and beyond.

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It's been a year Full of Beans in Glasgow

The city-wide campaign focusing on promoting the multiple benefits of beans to an audience of chefs, caterers, school pupils, community organisations and the general public ran from January-September 2024. During this time a small team from Glasgow Food Policy Partnership and Glasgow Community Food Network's Food and Climate Action project partnered up with some global and a number of local organisations to run educational events aimed at various different groups, encouraging them to grow, cook and eat more beans and pulses.

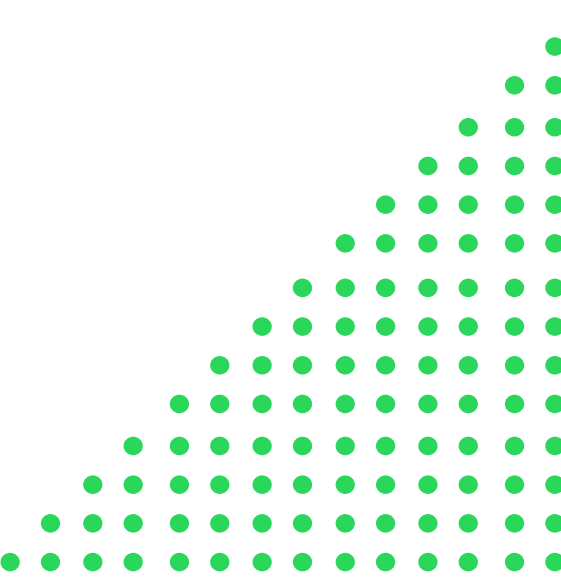
So, why did we decide to run a campaign around beans and why now?

Firstly, the Scottish diet is too high in processed and red meat and too low in

both fibre and vegetables [1]. Furthermore, the cost-of-living crisis has exacerbated inequalities and food poverty, making it even more difficult for many people to consume a nutritious diet [2]. Beans can provide one of five daily portions of vegetables (recommendation by the [NHS Eatwell Guide](#) with a portion being 80 g/3 heaped teaspoons) along with a good amount of fibre and protein, making them a cost-effective way towards consuming a healthy diet.

Beans also have many environmental benefits as they contribute considerably less to global warming than animal products due to their ability to sequester carbon in the soil along with low requirement of water to grow them. Beans also have an ability to fix nitrogen, which enriches the soil and can help other plants flourish [3]. As approximately 30% of carbon emissions are derived from the food system [4], including some beans in the diet is not only healthy, but good for the environment too. Eating pulses can also help reduce food waste as both dried and tinned beans tend to have a long shelf-life, don't need to be refrigerated, and tinned food cans have the added benefit of being easily recycled. You can read more about this in a [blog by Zero Waste Scotland](#).

In addition to the benefits, getting people



Furthering the aims of the Glasgow City Food Plan:



- Improved access to healthy affordable food and reduced food insecurity.
- Increased understanding of the food system with regards to nutrition and sustainability.
- More opportunities for communities to enjoy cooking and growing together.
- A thriving local food economy which promotes principles of sustainability.
- Increased availability and use of seasonal, locally grown and produced food in Glasgow.
- Improved health and wellbeing.
- More food produced in ways that are good for the environment.
- Reduced greenhouse gas emissions arising from our food system.

in Glasgow to grow and consume more beans could also help the city reach some of the City Council's climate targets eg. [Glasgow's Climate Plan](#) mapping the city's journey towards net zero carbon emissions, healthy biodiversity and climate resilience in Glasgow by 2030. The campaign was endorsed by the Population Health Directorate of the Scottish Government and our work can also be linked to some Scottish Government policy developments including the [Good Food Nation Act](#). Locally the campaign supported all the aims of the city's 10-year [Glasgow City Food Plan](#), which are shown in the image at the top of this page.

Promotion of beans to the masses.

Of course Glasgow is not the only place

talking about beans. Examples from the UK include our campaign partner [BeansMeals](#) working to get UK-grown beans into healthy school meals in Leicester and ['Anything is Pulse-able'](#) by [Eating Better](#), an alliance working to stimulate a 50% reduction of meat and dairy consumption in the UK by 2030. The aim of another campaign partner, ['Beans is How'](#) campaign by [SDG2 Advocacy Hub](#), is to double the current intake of beans globally by 2028. As a result of partnering with them for our Glasgow campaign, our campaign team is now part of both the UK and Global Bean Coalition, allowing us to keep up-to-date with work from other partners and to hear about the best practice and new interventions to increase bean consumption around the world. The Glasgow team is also connected to the

work of the Slow Bean Network, and have been fortunate to attend some of their funded events providing much inspiration for our work in Glasgow.

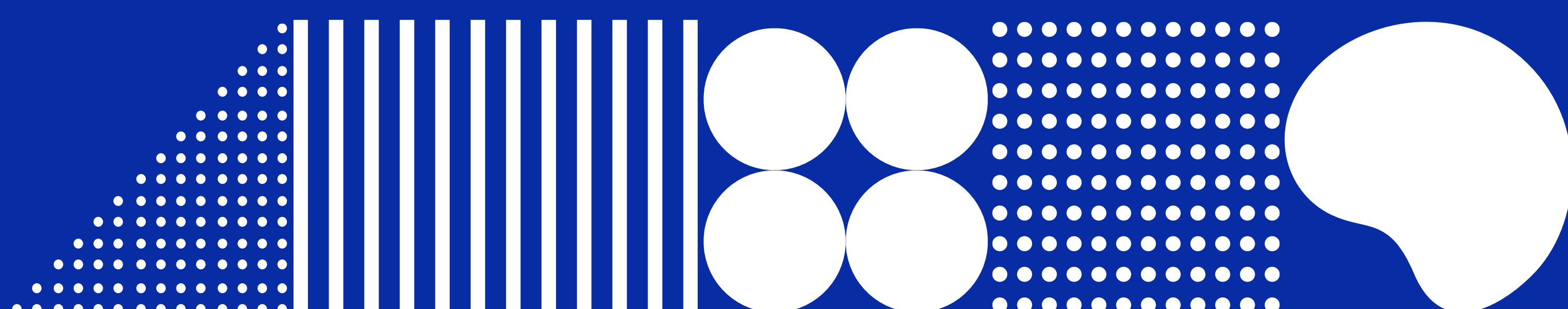
Latest evidence on the benefits of beans

Over the last year, even more evidence has emerged about the winning qualities of beans, so it's become increasingly clear that eating beans is one of the best things you can do for your health and for the environment. The Food Foundation report [5] comparing the health and environmental benefits of meat-based alternatives found that beans and grains offered the greatest number of co-benefits and performed strongly on a number of different nutrition indicators, including significantly lower amounts of saturated fat, calories and salt, and the highest amount of fibre compared to both meat and other plant-based meat alternatives, whilst being the most affordable by weight.

Recent research by University of Oxford and UCL (University College London) [6] also ranked unprocessed pulses such as beans and peas as the best meat and milk replacement from nutritional, health, environmental, and cost perspectives. Processed plant-based foods (such as 'fake meat' and veggie burgers) did not rank as

highly as they tend to be full of additives, are less environmentally friendly and cost more. The study findings also encourage the public to cut down on meat and dairy for health and environmental reasons.

The British Nutrition Foundation [7] also recognises the importance of transitioning towards more sustainable diets and exploring alternative protein sources to improve human health at the same time helping mitigate the adverse effects of food production on the environment. This can mean moving towards a more plant-based diet, but not necessarily excluding meat. This mirrors findings from a study published in Spring 2024 by the University of Edinburgh and Food Standards Scotland [8] on the impact of reducing meat and dairy consumption in the Scottish Population. The study found that most Scots consume meat and dairy products every day and that these foods provide important sources of a number of nutrients (iron, calcium, zinc, selenium, iodine and vitamin B12). Cutting down on meat and dairy could worsen some micronutrient intakes, unless replaced by suitable alternatives including vegetables, oily and white fish, eggs, pulses and legumes. As a result, adding beans and pulses to meals could help people towards meeting the recommendations of the EatWell Guide, which a majority of people in Scotland do

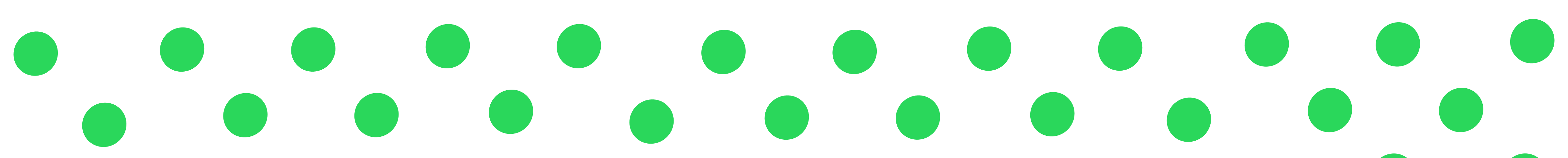


not currently follow. Consuming more beans and pulses is also a recommendation of the Eat-Lancet Commission's Planetary Health Diet guidelines [9] for sustainable and health-promoting diets.

What did we learn from the Glasgow campaign?

Glasgow's Full of Beans campaign has recently been evaluated by an external researcher with the help of funding from the [Scottish Alliance of Food](#). The team behind the campaign was keen to find out how effective the campaign was in reaching and educating people. The research also explored some barriers into eating beans, as their consumption in Scotland is much lower than the world average, even though they used to be a staple food in the UK [10]. As a result of the campaign, participants were keen to add more beans to their diet, but highlighted the importance of convenience, preferring tinned to dried beans due to time, cost of energy, and sometimes lack of skill in cooking them. One of the successes of the campaign was the Glasgow City Council school catering team embracing the campaign by developing new menu items with Soil Association's [Food for Life](#) team. Secondary school pupils in Glasgow can already enjoy three new bean-filled dishes,

which will be available for primary school pupils in 2025. The importance of hands-on learning experiences (for both cooking and growing) and cultural knowledge exchange was emphasised by the findings, which is important to keep in mind when encouraging people to consume more beans. As a legacy of the campaign, the team hopes to see more bean-based dishes permanently on menus in schools, restaurants and other catering venues. [The campaign web-page](#) also has links to various resources including a 'Full of Beans' campaign booklet with stories and recipes about the campaign, along with the link to a campaign video. If you want to get in contact with the campaign team, you can email shw-gfpp@glasgow.ac.uk. You can read more about the initial findings of the research in the [summary report](#).



How can we take learning from all the research forward?

1/

Making beans and pulses low-cost and convenient by involving caterers (in schools/other public sector settings, cafes and restaurants), retailers and manufacturers (moving away from over-processed plant-based options)

2/

Promoting beans and pulses as an affordable, healthy and sustainable alternative to meat

3/

Increasing engagement with different communities to improve uptake.

It is clear from all the recent research that a transition to a more plant-based diet requires a change in dietary behaviour and that increasing the intake of beans and pulses can play a role in this.

A dietary shift to include more beans would also provide an opportunity to grow more beans and pulses in Scotland to shorten the supply chains and to support the Good Food Nation ambition. As beans offer benefits for environmental, health and equity outcomes, they could have an important role to play in our future diets.

FOOTNOTES

[1] [Food Standards Scotland Situation Report](#)

[2] [Food Foundation Cost-of-Living briefing](#)

[3] [The Global Bean Project: Legumes and the climate crisis](#)

[4] [Our World in Data, Greenhouse Gas Emissions from food](#)

[5] [The Food Foundation Report: Rethinking Plant-Based Meat Alternatives](#)

[6] [A multicriteria analysis of meat and milk alternatives from nutritional, health, environmental, and cost perspectives, Proceedings of the National Academy of Sciences](#)

[7] [Benefits and challenges associated with 'raising our daily pulses' - Lovegrove - 2024 - Nutrition Bulletin - Wiley Online Library](#)

[8] [Modelling the impact of reductions in meat and dairy consumption on nutrient intakes and disease risk | Food Standards Scotland](#)

[9] [The EAT-Lancet Commission on Food, Planet, Health - EAT Knowledge](#)

[10] [Sustainable Food Trust – Rediscovering British Pulses](#)

