

YOUR PLACE AT THE TABLE

How community dining is having a positive impact on diet, health and the planet

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Executive summary

In the UK, unhealthy diets are estimated to cause more than 75,000 premature deaths each year, including almost 17,000 deaths among individuals aged 15 -70 years¹. People with low socioeconomic status are more likely to live with and die from diet-related disease². Such alarming findings underscore the critical need for effective interventions to promote healthier eating habits and address the impact of diet on public health.

FoodCycle is a national charity which has been serving up community meals across the UK since 2009. Every week its volunteers turn surplus food into nutritious three-course meals, that are enjoyed by members of the local community. This report explores the potential longer-term impact that meals like this can have on both people and the planet.

Are community dining services like FoodCycle contributing to healthier diets?

The literature suggests that community dining increases access to healthy, sustainable meals and promotes positive dietary behaviour changes among guests, but evidence remains limited. The British Nutrition Foundation and FoodCycle therefore aimed to investigate whether attendance at FoodCycle community meals encourages guests to try new, healthier and more sustainable foods and meals, both when dining at FoodCycle and at home. Fostering a greater liking and familiarity of these foods/meals in a supportive environment may potentially lead to lasting impacts beyond the meal setting.

Key issues for the UK

Poor diet accounts for 13% of all deaths (FSA 2022)

Around 1 in 4 adults and 1 in 5 children (ages 10-11) are currently living with obesity and these figures are even higher in more deprived areas (NHS 2023)

£58,000,000,000

Annual cost of obesitv is £58 billion (Frontier Economics 2022)

Less than 1% of the population eat a healthy, balanced diet (defined by the Eatwell Guide) (Scheelbeek et al. 2020)

7,200,000 PEOPLE

7.2 million people are living in 'food insecure' households, which is linked to diet-related diseases such as obesity, type 2 diabetes and poor mental health (UK Parliament 2024)

Food production contributes 15-30% of total greenhouse gas emissions in the UK and therefore contributes significantly to global warming (BDA 2021)

Key findings

A rapid literature review by the British Nutrition Foundation and a survey conducted amongst FoodCycle's guests and volunteers suggests that community dining provides a stable, dependable, inclusive and dignified service that supports both physical and financial access to food, helping to meet dietary needs and empowering communities to play an active role in their wellbeing.

Healthier eating means a healthier planet – following the Eatwell Guide or other healthier plant-rich dietary patterns can significantly reduce environmental impact.

70% of FoodCycle guests reported positively changing their eating habits since attending the community meals and two-thirds are thinking more about eating in a way that is better for the planet.

Community dining can create multiple points of contact, facilitating experiences that include volunteer networks and support for underlying issues related to food insecurity.

Over 50% of FoodCycle guests report eating more plant sources of protein, including pulses like kidney beans, chickpeas and lentils.

Positive social interactions around food can lead to healthier, more sustainable food choices and improved overall wellbeing.

Since coming to FoodCycle around half the guests report eating less sweets/sugary foods (49%).

Some research suggests that when people eat with others they tend to consume more fruit and vegetables. 71% of FoodCycle guests said they have tried or bought fruit or vegetables that they wouldn't normally eat as well as increasing the variety of these choices.

Dietary changes can happen quickly, with changes being reported in less than three months of eating at a FoodCycle community meal.

INTRODUCTION

Community dining – a force for public good

Sustainable, healthy diets are dietary patterns that promote all dimensions of individuals' health and wellbeing; have low environmental pressure and impact; are accessible, affordable, safe and equitable; and are culturally acceptable³.

The House of Lords' Food, Diet and Obesity Committee report² concluded that obesity and diet-related disease are a public health emergency costing society billions each year in healthcare costs and lost productivity. The National Food Strategy⁴ also drew attention to the urgent challenges facing the food system and emphasised the need for collaborative efforts to create a system which is good for the health of both people and the planet. In light of these challenges, how can FoodCycle contribute to fostering healthier and more sustainable diets?

The food we eat plays a crucial role in the health of the population and our planet. Poor diet is a major contributor to

the high prevalence of obesity and is among the leading causes of preventable death and ill health^{5,6}. Yet many in the UK are struggling to eat well for numerous reasons including the cost of living, social isolation, poor physical and/or mental health and limited access to healthy foods⁷. Poor dietary patterns are also detrimental to environmental sustainability⁸.

Ensuring that everyone has access to a secure, sustainable and nutritious supply of food is a critical public health issue, and strong government policy is essential to help achieve a healthy, profitable, equitable and sustainable food system that benefits all. Health and sustainability go beyond individual lifestyle choices, as such choices are significantly shaped by social and environmental systems⁹. Urgent action is needed to transform the food system in the UK into one in which healthy, more sustainable food is affordable, accessible and appealing to everyone. Above all, no one should be excluded from being able to eat healthy food because they cannot pay for it.

What is community dining?

Social dining is the practice of eating together with a group of people. These types of meals can take place in any private or public space but the focus is on sitting down, dining together and sharing food, conversation and building social connections.

As a social initiative, community dining provides no or low-cost meals within local communities, serving food communally, sometimes using food surplus, to improve social inclusion¹⁰.

FoodCycle is a charity that provides community dining services that are accessible to all. But feeding the community is not

just about providing food, it's about fostering an inclusive and accessible environment for everyone. The British Nutrition Foundation/FoodCycle survey undertaken for this report indicates that communal eating at FoodCycle increases healthier and more sustainable dietary choices. Further to attending, FoodCycle guests are consuming more fruit and vegetables, wholegrains and pulses, enjoying a wider variety of foods and eating more sustainably. At the same time, they are eating less processed meat, fast foods and sugary foods and drinks. This can have a positive impact on both physical and mental health as well as the environment.

Improving health through better nutrition

Diet is among the leading risk factors for preventable death and ill health

Poor diet significantly contributes to the UK disease burden including cardiovascular disease, type 2 diabetes and some cancers, and is estimated to account for 13% of all UK deaths¹¹.

What risk factors drive the most death and ill health combined?

According to the 2021 Global Burden of Disease data¹², four out of the top five risk factors linked to death and ill health worldwide are diet-related:

Unhealthy dietary patterns are linked with an increased risk of obesity, heart disease, type 2 diabetes, some cancers, high blood pressure and stroke¹³. High rates of obesity among children and adults are a particular concern. In England, 1 in 3 children leaving primary school are either overweight or living with obesity, with 1 in 5 living with obesity¹⁴.

Around two-thirds (64%) of adults in the UK are above a healthy weight, with 29% living with obesity¹⁵. Obesity contributes to type 2 diabetes, heart disease, liver and respiratory disease, cancer and depression and is linked to a reduced life expectancy, decreasing it by an average of 3 to 10 years¹⁶. The direct financial burden of obesity on the NHS is huge, estimated at £6.5 billion which includes costs for medication, primary care and hospital treatment¹⁷. However, the impact of obesity extends wider. It affects quality of life, workplace productivity and increases social care expenses due to related long-term conditions. The total annual cost of obesity in the UK is estimated to be a staggering £58 billion¹⁷.

Concern about poor diets extends even further. We face the triple burden of malnutrition: overweight and obesity, undernutrition, and micronutrient deficiencies. Poor dietary choices not only manifest in obesity but can also lead to malnutrition and inadequate micronutrient intakes¹⁸, with implications for health. Recent dietary surveys have shown low intakes of several micronutrients in some population groups in the UK^{19,20}. Those most vulnerable to inadequate intakes of these micronutrients include adolescents, ethnic minorities and lower socio-economic groups. Interestingly, despite an excess of dietary calorie intake, individuals living with obesity can also have relatively high rates of micronutrient inadequacies²¹.

In the UK, our diets fall short of recommendations for a healthy, balanced diet²². We are, on average, eating too many of the nutrients/foods associated with poor health and too few of those associated with good health. This includes low intakes of fruit and vegetables, pulses, wholegrains and fibre and high intakes of sugars, saturated fats and salt. Only around 1 in 3 UK adults achieve 5 A DAY, and less than 1% of the population meet all of the UK recommendations for a healthy, balanced diet²³ (defined by the Eatwell Guide, see Figure 1, page 7). Given the urgent need to shift dietary patterns to achieve net zero emissions, it is noteworthy that healthy dietary patterns are also more environmentally sustainable²⁴.

glucose

High fasting blood

Figure 1. The UK Eatwell Guide Source: Office for Health Improvement and Disparities 2016

Spill the beans: the connection between our health and the planet

The health of the planet is closely linked with our own wellbeing. To improve our health and address the environmental impacts of our current food system, we must change how we produce and consume food. The food system both drives and is impacted by climate change²⁵.

Globally, food production is responsible for around a third of all greenhouse gas emissions, over two-thirds of freshwater use and over a third of available land use. Adopting a healthier dietary pattern, like the one shown in the Eatwell Guide, would significantly reduce the environmental impact compared to the average diet in the UK²⁶. Climate change can adversely impact the accessibility and affordability of a healthy diet by reducing food availability, limiting dietary diversity and diminishing the nutritional content of foods²⁷.

Food waste is also a critical issue for making our diets more sustainable. It has been estimated that food losses and waste contribute as much as 10% of greenhouse gas emissions²⁸. Preventing the waste of nutritious and valuable foods, such as fruit and vegetables, through redistribution strategies is particularly important, especially during a time when the country is experiencing a cost of living crisis.

The food system must be transformed to achieve a nature-positive net zero, ensuring that everyone can access and afford the nutritious food they need to live healthy lives. Currently, however, dietary and health inequalities remain stark.

Key statistics

In the UK

- Around **7.6 million people** are living with **heart and circulatory** diseases (BHF 2024).
- **4.4 million people** live with **diabetes** (Diabetes UK 2022-23).
- are living with **obesity** (NHS 2023).

Our global food system is responsible for about a **third of all** greenhouse gas emissions, over two-thirds of global freshwater use and over a **third of available land** (British Nutrition Foundation 2021).

Food production contributes 15-30% of total greenhouse gas emissions in the UK and therefore contributes significantly to global warming (BDA 2021).

Food losses and waste contribute as much as 10% of greenhouse gas emissions (WWF 2021).

Food waste costs the average UK household around **£80 a month** (WRAP 2023).

If food waste were a country, it would be the **third largest emitter of** greenhouse gases (behind China and the US) (FAO 2015).

• Around 1 in 4 adults and around 1 in 5 children aged 10 to 11 years

It's not fair - diet-related health inequalities

The health of the population is marked by significant inequalities. People living in more deprived areas often experience illnesses, such as diabetes, heart disease and depression earlier in life and have shorter life expectancies²⁹. For example, women in the most deprived tenth of the population can expect to live 19 fewer years of life in good health than the least deprived tenth³⁰.

Figure 2: People on low incomes are more likely to suffer and die from diet related condition Source: National Food Strategy (4)

Preventable cancer mortality

Most to least deprived decile

80

70

60

50

40

30

20

10

0

This preventable ill health represents a massive lost opportunity, hampering economic recovery and growth. Additionally, poverty can lead to high levels of stress, and cognitive overload, which further inhibit the adoption of healthy behaviours³¹.

Preventable mortality

Most to least deprived decile

220

200

180

160

140

120

100

80

60

40

20

0

Dietary inequalities contribute to overall health disparities. Price is frequently cited as a barrier to healthy eating for those on a low income³². Less healthy foods typically cost less per unit of food energy than healthier options, making it challenging for individuals to make nutritious choices. A larger proportion of income is spent on essentials like food^{32,33}, which are often compromised first when circumstances change. Financial uncertainty can influence dietary behaviours and dietary practices, including shopping habits, meal planning and food preparation³³, making healthy choices even more difficult. Household income is a strong predictor of the risk of food insecurity, defined as the inability to access a reliable source of healthy, nutritious and affordable food. Government estimates indicate that the number of people in 'food insecure' households rose to 7.2 million (11%) in 2022/2023, an increase of 2.5 million people since 2021/2022³⁴.

Those living in poverty experience particularly high rates of food insecurity, including lone-parent households, individuals living with disabilities, those relying on benefits and vulnerable groups such as the homeless^{34,35}. Individuals living in food-insecure households typically have poorer dietary and

nutritional intakes. Data from the National Diet and Nutrition Survey shows adults on low incomes to be more likely to have diets which are low in fibre, fruits and vegetables and higher in sugar³⁶. Household income is also linked with lower intakes of important micronutrients including vitamins A and D and folate.

Food insecurity is linked to diet-related diseases such as obesity and type 2 diabetes, and poor mental health³⁷. This evidence suggests that addressing food insecurity could be a crucial strategy for improving health outcomes, particularly amongst vulnerable populations. Interestingly, low-income households that experience strong community cohesion may face a lower risk of food insecurity^{38,39}.

Key statistics

The gap between life expectancy between Blackpool and Westminster is 7.7 years for women and 10.5 years for men (ONS 2020).

In July 2024, the Trussell Trust reported that almost half (48%) of people claiming Universal Credit ran out of food in the past month and did not have enough money to buy more (Trussell Trust 2024).

Analysis carried out by the Food Foundation shows that the poorest fifth of UK households would need to spend 50% of their disposable income (after housing costs) on food to eat in line with the Eatwell Guide. This is compared with only 11% in the most affluent fifth of households (Food Foundation 2023).

Adults living with overweight or obesity are more common in the most deprived areas (72% vs. 60%) (OHID 2024).

Children living in deprived areas are more likely to be obese than those in less deprived areas (13.6% vs. 6.2% in 4-5 year olds; 31.3% vs. 13.5% in 10-11 year olds). (UK Parliament 2023).

The most deprived fifth of adults consume 37% less fruit and vegetables and 17% less dietary fibre compared to the least deprived fifth of adults (Food Foundation 2023).

Household income is positively associated with intake of healthy foods and micronutrient intake (such as vitamins A and D, and folate) (NDNS 2008/2009 -2016/2017).

The most deprived areas can have up to five times more fast-food restaurants compared to more affluent areas (PHE 2018).

The impact of local food environments on food choices

The local food environment shapes the context in which people make food decisions and this can vary based on levels of deprivation. There is a clear correlation between poverty and the density of fast-food outlets; people who live in more deprived areas are more likely to live in neighbourhoods with a higher concentration of fast-food outlets⁴⁰. The Priority Places for Food Index, set up to identify the risk of food insecurity at a neighbourhood level, highlights that contributors to food insecurity are context-specific and geographically dispersed, requiring localised solutions⁴¹. The composite index uses seven different domains, demonstrating the interplay between local food environments and economic circumstances:

Proximity to supermarket retail facilities

Proximity to non-supermarket food options

Fuel poverty

Family food support

Accessibility of supermarket retail **facilities**

Access to online deliveries

Socio-demographic barriers

Barriers and opportunities for healthier eating

One of the key questions is how we can address unhealthy dietary patterns. For too long unhealthy diets have been viewed as a problem caused by individuals. People have not simply become greedier or lazier; rather, dietary choices are embedded in broader societal and economic issues within a complex food environment⁴². It is essential for health and social care professionals, as well as policymakers, to understand the barriers and facilitators of healthier food choices to address inequalities. Some of these factors, reported in the literature from both quantitative and qualitative research⁴³, are outlined in Box 1.

In looking for effective or equitable solutions, it's important to recognise external factors such as time and resources, as well as opportunities that individuals feel they can utilise to encourage healthier dietary behaviours. The COM-B model of behaviour change highlights that a key component is opportunity, specifically the social and physical opportunities for behaviour change⁴⁴. This aspect is often missing from initiatives that rely solely on individual factors.

Factor	Barrier	Facilitator
Affordability	 Financial issues Cost of food high cost of healthier food lower cost of less healthy foods (e.g. takeaways) 	Charitable meals
Accessibility	Food deserts Poor access to healthier foods High access to less healthy foods (e.g. energy-dense, nutrient-poor fast foods) Lack of facilities to store, cook or warm food	Good local services and amenities Increasing availability of healthier options and decreasing availability of less healthy options Community engagement programmes
Social Culture	Eating alone Eating on lap	Eating at the dinner table Familiarity with a variety of healthier foods

Adapted from Briazu et. al 2024⁴³, Houses of Parliament 2016⁴⁵

Providing 'more than food'

Inclusive community dining at FoodCycle creates opportunities for everyone to come together, whatever their reason for needing a meal, and share a meal in local spaces, using surplus food cooked and provided by volunteers. These initiatives not only offer affordable and environmentally friendly meals, but also highlight the important social role of community eating. By transforming surplus food into nutritious public meals and shared mealtimes, FoodCycle can help foster a sense of community whilst addressing food waste and food insecurity. It can provide a stable, dependable, inclusive and dignified service that supports both physical and financial access to food, helping to meet dietary needs and empowering communities to play an active role in their wellbeing.

Social eating initiatives that utilise surplus food have emerged in response to rising food insecurity and planetary concerns⁴⁶. Rather than being passive recipients of surplus food aid or facing the stigma often associated with food banks, participants in social dining - whether as guests or volunteers - engage in meaningful community experiences⁴⁷. These initiatives not only enhance equitable access to healthier foods, but also address food waste, reduce loneliness, increase social interaction, and combat food insecurity, all which contribute to overall health and wellbeing¹⁰. There is a notable association between social isolation, loneliness and detrimental food and eating behaviours⁴⁸. Strong community ties have been found to have a protective effect against the negative impacts of poverty and other social disadvantages on health^{49,50}. The alleviation of social isolation is particularly important, given the high prevalence of chronic loneliness in the UK, affecting approximately 3.8 million people, or 7% of the population⁵¹.

How could community dining help?

FoodCycle

FoodCycle has been championing community dining and its benefits since they hosted their first community meal in 2009. Their meals now run in more than 100 towns and cities across England and Wales, serving over 3,500 people every week.

FoodCycle is passionate about the social change model that is community dining and the tangible benefits. They believe that their community dining model of turning surplus food into nutritious meals can tackle health inequality, improve community cohesion and wellbeing as well as provide sustainable solutions to the way we eat.

What does the science say?

While there is limited robust research on the impact of community dining on nutritional intake and health⁵², existing studies have identified several key benefits of participation. These include increased intake of nutritious food, positive dietary changes, enhanced food security, improved cooking skills and opportunities for socialisation^{53,54}. Studies have reported that participants in community dining initiatives have:

Additionally, whilst community dining provides access to nutritious and more sustainable foods, the influence of community on better health outcomes can often be underappreciated. Eating behaviour is shaped by the social context in which it occurs^{55,56}. Individuals are influenced by the eating habits of others in social settings when making their own food choices. We eat differently when sharing a meal with other people compared to eating alone. Positive social interactions around food can lead to healthier, more sustainable food choices and improved overall wellbeing.

People who are surrounded by others who prioritise health and wellness and adopt healthy and more sustainable behaviours are more likely to adopt similar behaviours themselves. For example, when people eat with others, they tend to consume more fruit and vegetables⁵⁷. This phenomenon, known as social facilitation of eating, occurs because eating together establishes norms for behaviour⁵⁶. Conforming to these group norms can be a rewarding experience, as positive feedback from peers enhances enjoyment and attitudes toward food.

However, while there is promise in using social norms to promote healthy eating behaviours, the impact of these norms on individuals with unhealthy diets remains unclear⁵⁸.

The pleasure derived from convivial meals can positively influence food behaviours, and, in turn, health outcomes⁵⁷. Food conviviality has been suggested to encourage people to try new and healthy foods, often exposing them to diverse cultural cuisines, which promotes a varied and balanced diet. Researchers have looked at the Mediterranean diet as an example of social eating⁵⁷. The health benefits of the Mediterranean diet characterised by their plant-rich dietary pattern including fruit, vegetables, wholegrains, nuts, seeds and olive oil as well as oily fish are well recognised. However, social dimensions (i.e. preparation and sharing of food, the sense of conviviality) of Mediterranean diets may be undervalued⁵⁷. The key point is that conviviality and the pleasure of eating together may contribute to the dietary health benefits that this eating pattern offers. Volunteers and staff communicating healthy eating information to guests can empower them to make informed decisions about their meals. Engaging in conversations about the importance of healthy nutrition and more sustainable diets can support guests in their efforts to eat and drink well for themselves and for the planet. Moreover, community dining can create multiple points of contact, facilitating experiences that include volunteer networks and support for underlying issues related to food insecurity¹⁰. Community dining initiatives can help individuals connect with community networks, solutions and initiatives that can contribute to longer-term support for food security. Although the benefits community dining may bring to the communities they serve and the broader food system are increasingly recognised, there is still limited evidence of such impacts⁴⁶.

Some studies have also reported flow-on effects to other family members, such as participants feeding their families healthier foods⁵⁴

The British Nutrition Foundation and FoodCycle survey 2024

Survey development

A literature review was carried out to identify existing research investigating whether community dining provision may help to empower communities to healthier diets. This supported the development of a questionnaire that aimed to identify the impact of attending FoodCycle community meals on healthier eating habits. The specific foods and food groups reflecting constructs of diet quality for this purpose focussed on the government's key dietary recommendations, the Eatwell Guide⁵⁹ as well as the World Health Organisation⁶⁰ and those where research suggests health benefits associated with regular consumption. These include fruit, vegetables, pulses (e.g. lentils and beans), nuts and wholegrains as part of a healthy diet. Studies indicate that increasing daily servings of these foods is linked to a reduced risk of all-cause mortality: for example each additional daily serving of wholegrains lowers risk by 8%, vegetables by 4%, fruits by 6% and nuts by 24%⁶¹, while a 50g/day increase in legume intake is associated with a 6% reduction in mortality risk⁶².

The questionnaire domains were developed by the British Nutrition Foundation's nutrition scientists and refined to ensure clarity and understandability following feedback from FoodCycle. In total, 16 questions were included to explore shifts in healthy eating awareness and dietary behaviour since attending FoodCycle. Key areas probed included eating more sustainably, dietary variety, intakes of fruit and vegetables, wholegrains and plant-based proteins, and changes in the familiarity of these foods, and intakes of foods high in fats, sugars and salt including sugar-sweetened beverages, processed meat and fast food.

A separate online survey was also distributed to FoodCycle volunteers to explore the impact of their involvement in FoodCycle on their skills and confidence in cooking healthier meals. The survey also looked at volunteers' perceptions of how attending FoodCycle affects guests' food choices.

Characteristics of guest survey participents

A total of 1219 FoodCycle guests from across the UK participated in the survey.

Survey Format
Online Survey
Paper Survey
TOTAL

Guests ranged from 18 years to over 75 years. Around 60% were aged between 45 and 64 years. Of those who identified to a gender, 44% were male and 56% female. Approximately 70% of respondents were white. Around a third of respondents reported being unemployed, with 1 in 5 unable to work due to disability or illness. All guests were asked how long they had been attending FoodCycle's community meals.

253 FoodCycle volunteers also participated in a separate online survey.

Main findings and relevance for diet and health

Impact on healthy eating

Since coming to FoodCycle around three-quarters of guests reported a greater awareness of the importance of eating a healthier diet, with over 50% reporting a much greater understanding.

I'm happy FoodCycle has taught me the importance of food and how healthy vegetables are.

Male Guest 25-34 years old at FoodCycle less than 3 months

I have changed my whole outlook on healthy eating...

Female Guest 55-64 years old at FoodCycle over 1 year

Whilst important, knowledge does not necessarily result in changes to healthy eating. It was therefore encouraging to find over 70% of guests report changing their eating habits since coming to FoodCycle. The most common changes guests made included trying new meal ideas, cooking more, and buying and eating more fruit and vegetables, pulses, nuts and seeds. Guests also reported eating more plant-based foods and eating less red and processed meat like burgers and nuggets. These changes reflect a positive shift towards healthier food choices and eating habits. This was reflected in the volunteer survey, where 86% of respondents believed that the food served at FoodCycle is influencing guests' food choices.

Less saturated fat, sugar and salt

A considerable public health concern has been the overconsumption of sugary drinks and foods high in fats, sugars and salt (like chocolate, cakes, biscuits, sugary soft drinks, fried savoury snacks, pies and pastries) because of their contribution to obesity and poor diet-related disease⁶³. Yet these foods are readily available, convenient and heavily promoted over healthier options, such as fruit and vegetables². Since coming to FoodCycle around half the guests report eating less sweets/sugary foods (49%), drinking fewer sugary drinks (61%) and drinking water more (63%), all behaviours which are in line with dietary recommendations to reduce overall sugar consumption.

I'm eating less sugary biscuits and less salt and less red meat.

Male Guest 65-74 years old at FoodCycle 9-12 months

At least I try to eat more healthy foods like vegetables and fruit, eat less red meat and I have stopped using salt.

Female Guest 45-54 years old at FoodCycle 3-6 months

Cooking at home

The calorie contribution from the out-of-home sector (e.g. fast foods, takeaways and food delivery services) has increased, with portion sizes often bigger than foods eaten at home, and many foods served being high in fat, sugar and salt⁶⁴. Fast food and takeaway usage were reported to have decreased by 60% of guests. This is positive as research suggests cooking at home is associated with better diet quality overall⁶⁵.

I'm cooking nicer dinners and always have it with salad or vegetables, with a glass of water with each meal.

Male guest 45-54 years old at FoodCycle 9-12 months

Volunteers have also benefitted from their experiences at FoodCycle. Almost 60% reported improved skills in cooking healthier meals, which they have applied at home. Almost half of the volunteers also expressed increased confidence and greater enjoyment of their home-cooked meals. Indeed, a common change highlighted in the survey is that many volunteers have embraced cooking new recipes or meal ideas, including more plant-rich options.

More sustainable diets

At a time when there is an urgent need to improve the sustainability of our food systems, it was also encouraging to find that two-thirds of FoodCycle guests reported thinking more (with 40% thinking a lot more) about eating in a way that is better for the planet. Reported changes included eating less meat, choosing seasonal fruit and veg, eating more pulses and wasting less food.

I stop and think about what food I'm buying, is it good for me and the planet?

Female Guest >75 years old at FoodCycle 3-6 months

At FoodCycle l have enjoyed the variety of vegetables that I don't normally cook myself. I also have found pulses and vegetables very tasty.

Female Guest 65-74 years old at FoodCycle 6-9 months

Pulses, nuts and seeds - plant-based proteins

A key aspect of moving toward more sustainable diets is the diversification of protein sources, particularly by incorporating more non-animal-derived sources such as pulses, nuts and seeds⁸. Pulses are naturally high in protein, micronutrients and fibre, as well as having a low environmental impact because they can 'fix' nitrogen from the atmosphere with no need for polluting nitrate fertilisers. There is also some evidence to suggest an association between higher pulses intake and lower risk of all-cause mortality, obesity, cardiovascular disease and some cancers, with studies indicating that consumption of pulses may increase satiety (appetite control), help weight management, reduce blood pressure and improve blood lipids (including blood cholesterol levels)^{61,66,67,68}. Nuts are also nutritious; they are high in fibre and a source of vitamins and minerals and healthy fats⁶⁹. Diets low in nuts and seeds (less than 21g a day) have been highlighted by researchers as a dietary risk factor for ill health (6). Studies have also shown associations between higher nut consumption and lower all-cause and cardiovascular disease mortality⁷⁰.

I have tried a lot of vegetables and pulses that I hadn't eaten before and liked them so have now added to my diet.

Female Guest 65-74 years old at FoodCycle 9-12 months

I eat more lentils, pulses and greens.

Male Guest 55-64 years old at FoodCycle 6-9 months

Despite all of their nutritional benefits, consumption of pulses, nuts and seeds remains low in the UK. For example, on average, we are eating only 6g of nuts, nut butters and seeds per day⁶⁹. A common barrier to eating more is a lack of familiarity with these foods^{71,72}, as they may not be part of people's usual diet. Improving accessibility of and familiarity with such foods in meals served at FoodCycle can help to increase intake. It is a welcome finding that over 50% of guests report eating more plant sources of protein, including pulses like kidney beans, chickpeas and lentils, and have tried beans and pulses that they wouldn't normally have eaten. In addition, almost half of guests are eating more nuts and seeds or nut/seed butters like peanut butter or tahini.

I will try foods that I have never tried before and am not afraid to try them.

Female Guest 55-64 years old at FoodCycle over a 1 year

We are trying our best to eat healthy and try new foods that we like eating here.

Female Guest 25-34 years old at FoodCycle less than 3 months

A focus on fruit and vegetables

A diet rich in fruit and vegetables is promoted globally for better health. Consuming at least 400g of fruit and vegetables, or at least five servings of 80g each day is linked with better health⁷³. This has led to the widely promoted 5 A DAY message.

Although few people manage to achieve this, it's important to remember that even small increases are beneficial. For example, studies have reported a 5% lower risk of dying with each extra serving of fruit and vegetables per day. Greater fruit and vegetable consumption has also been reported to decrease the risk of death from cardiovascular diseases (such as heart disease and stroke) by 4% for each additional daily serving of fruit and vegetable⁷⁴.

The health benefits of fruit and vegetables may be due to the complex network of nutrients and other components they contain. They provide dietary fibre which may have a beneficial effect on the bacteria in our gut and are key sources of plant bioactives which are believed to confer health benefits⁷⁵. Different types and colours of fruit and vegetables contain different combinations of nutrients and plant bioactives, which is why it is recommended to have a variety of fruit and vegetables.

Most guests (67%) reported eating more fruit and vegetables since coming to FoodCycle, with around 40% eating a lot more.

This included increasing intake of a variety of fruit and vegetables: more green vegetables and fruits like broccoli, kale, spinach, apples, grapes; red and orange vegetables and fruit like carrots, peppers, sweet potatoes, tomatoes, berries, peaches, citrus fruits, as well as other fruits and vegetables.

71% have tried or bought fruit or vegetables that they wouldn't normally eat.

I am amazed at what can be made using fruit and vegetables.

Female Guest >75 years old at FoodCycle 9-12 months

The fibre providers

Although many of us may recognise the importance of dietary fibre in digestive health, it does so much more than simply promote healthy bowel function. A high fibre intake is associated with a healthy gut microbiome and a reduced risk of a number of significant chronic diseases in the UK. It can also help make us feel fuller for longer so may support appetite control^{76,77}. In the UK, most adults do not consume enough fibre. In fact, currently only 9% of adults achieve the recommended amount of fibre⁷⁸ so it's important to understand how we can get more fibre into our diets.

As well as fruit and vegetables, pulses, nuts and seeds, wholegrains are a major contributor to fibre intake, as well as being a good source of B vitamins, magnesium and zinc^{79,80}. Scientific reviews suggest increased wholegrain intakes are associated with a reduced risk of heart disease, type 2 diabetes, obesity and some cancers⁸¹. It is perhaps then unsurprising that dietary recommendations include choosing wholegrains and swapping refined versions for wholegrain versions of starchy carbohydrates.

In the survey, 56% of guests reported to have swapped foods like white bread and sugary breakfast cereals to wholemeal bread, oats or wholegrain breakfast cereals, with around a third swapping a lot more.

Fibre-rich foods like wholegrains, fruit, vegetables, pulses, nuts and seeds are the mainstay of healthy diets and, as this report shows, are foods being encouraged in FoodCycle settings. Increasing intake could have many public health benefits.

A benefit for all

The survey suggests a range of positive changes associated with attending a FoodCycle community meal.

No significant differences were identified in nutritional benefits by income, age, physical and/or mental health disability. This suggests that community dining at FoodCycle has advantages for everyone including nutritionally vulnerable groups. Guests reported increased awareness of the importance of healthy eating and the need for more sustainable eating habits. Additionally, there were no significant differences in dietary changes between guests who had participated for three months or less and those who have been attending longer (over one year), indicating that positive dietary changes can occur in a relatively short time frame.

Attending FoodCycle has helped me to discover new recipes. Also eating in a group and interacting with staff has helped my mental health.

Male Guest 55-64 years old at FoodCycle 6-9 months

Conclusion

"It is clear that FoodCycle is having a valuable effect, tackling social isolation and encouraging healthier, more sustainable choices. By bringing people together, it fosters inclusivity, allowing everyone to participate and benefit. Importantly, it empowers communities to join together to make a real impact for those who may need help most."

Ayela Spiro, British Nutrition Foundation

This research shows that communal dining can enhance access to healthy, sustainable meals and promote positive dietary changes. In a food environment that poses particular challenges for nutritionally vulnerable groups, such as those experiencing food poverty, FoodCycle's weekly community dining model offers a valuable opportunity to support healthier and more sustainable eating habits. The survey results reveal that guests report having more varied diets and eating more fruit and vegetables, wholegrains, and pulses, while reducing their intake of sugary foods and drinks. Additionally, communal dining encourages guests to try new foods and think more about sustainability. Volunteers also benefit by applying their learning and skills to prepare more diverse meals at home. The current food system is often described as broken, with our diets contributing to both poor health and climate change. While there is no single solution, social innovations like community dining – providing a supportive space for shared meals – can foster lasting positive impacts on individuals and communities. This model helps address broader societal health challenges linked to poor diets. For these reasons, we advocate for community dining as a powerful tool for social good and are working to expand such projects across the UK.

FOODCYCLE RECOMMENDATIONS

How can you help?

How you can help people and communities achieve improved health outcomes by supporting community dining initiatives.

Local Authorities

- Visit your local community dining project and promote its benefits to local people and businesses.
- Invite FoodCycle to participate and speak at events, forums or meetings related to food security, public health and community cohesion.
- Use FoodCycle research to shape policies and interventions.

Funders

- Provide core funding for community dining initiatives.
- Invest in local infrastructure and facilities so services such as community dining projects have safe, warm and functional facilities out of which to operate.
- Fund research in social innovation for health such as community dining programmes.unrestricted funding.

Schools, charities and community groups

- Contact FoodCycle about bringing community dining to your community centre, school or academy.
- Signpost people to services such as FoodCycle through your website and communications channels.
- Reference findings from this report to support your own research or awareness campaigns.

For more information or to get involved visit foodcycle.org.uk or email hello@foodcycle.org.uk

Government & Public Health

- prescribing.
- meetings.

Businesses

- and wider society.

Individuals

- project.
- colleagues).

• Define community dining as a key pillar of social

• Use FoodCycle research to inform development of programmes and interventions.

• Invite FoodCycle to speak about the positive impact of community dining at your APPGs, events and

• Support community dining projects with funding, employee volunteering, food donations or vouchers.

• Partner with FoodCycle and develop longer term initiatives to support community dining.

• Use your influence and communications to raise awareness of community dining within your networks

• <u>Sign up to volunteer</u> at your local community dining

Donate or support FoodCycle through fundraising. Tell people about our work (friends, neighbours,

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About the British Nutrition Foundation

As a nutrition charity, we want a future where everyone has a healthy, sustainable diet. That means navigating complex issues – the affordability of food, the availability of more sustainable options, and awareness of the importance of healthy eating. Our strategic ambition is supported by 3 priorities:

- Educating people focusing on those that are most vulnerable to poor nutrition, we aim to increase our reach to provide information that supports people's knowledge, skills and motivation to eat healthily.
- **Changing the food environment** we work with partners from across the food system including the food industry, advocating for change to make it easier to have a healthy diet and lifestyle.
- Advocating science and building consensus we translate nutrition science for a range of audiences and work collaboratively to advance the study of, and research into, nutrition for the public benefit.

Visit: www.nutrition.org.uk

About Danone UK & Ireland

Danone UK & Ireland is a top 10 branded food and beverage manufacturer whose family of market-leading food and drink products supports the health of millions of consumers and patients throughout all stages of their lives. As one of the largest B Corps in the UK & Ireland, Danone is committed to using its business as a force for good, bringing health through food to as many people as possible.

In 2023 Danone UK & Ireland began its partnership with FoodCycle, working to support FoodCycle in their aim to nourish the hungry, connect communities and promote healthy attitudes towards food. This ongoing support includes employee volunteering, product donations and nutrition expertise to support volunteers and guests.

Visit https://www.danone.co.uk/

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