



University of
Southampton

Mapping Southampton's food system

Towards a healthier and
more sustainable future



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This project was funded by the Centre for the South (CfTS), a policy institute founded under the University of Southampton.

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About the collaboration

The collaboration (Nov 2023-June 2024) between Southampton City Council's (SCC) Public Health team and Biological Sciences, University of Southampton originated from SCC's Scrutiny Inquiry into "Tackling Childhood Obesity". Our focus has been on the adverse impact that our current food system is having on the environment, food security and public health. Using nationally available datasets, local datasets, reports, and academic literature we quantified the distribution of economic value, the number of enterprises, and levels of employment across Southampton's food system.

The team also identified and engaged with local stakeholders who were invited to a workshop in April 2024 focusing on understanding the food system in Southampton and exploring the accessibility, barriers and inequalities in the food environment in the city.

A full team list can be found on the last page of this document.



Find out more

Visit www.centreforthesouth.co.uk/activities/understanding-the-local-food-system-in-southampton



Executive summary

This policy brief is the result of a collaboration between the University of Southampton School of Biological Sciences and Southampton City Council. This work intends to shine a light on food inequalities at a local level, mapping the food system and listening to the voices of the community to inform policy.

Locally, almost 1 in 3 businesses in Southampton are part of the food system. These provide over 6,700 jobs and contribute up to £487.3 million to Southampton's economy per year. However, over 40% of local people have reported experiencing food insecurityⁱ and **rates of childhood obesity are significantly higher in Southampton than the average for England**ⁱⁱ.

The food system is also linked to a third of all human-caused greenhouse gas emissionsⁱⁱⁱ. Therefore, we must act now to influence and improve the sustainability and health of our food system and deliver numerous economic, environmental and social co-benefits.

The term 'food system' refers to the inter-connections between how we: produce, process, transport, buy, consume, and dispose of the food we eat and the way this affects us as

individuals and communities^{iv}. A food system is considered sustainable when it delivers food security and nutrition for all in such a way that the economic, social, and environmental bases to generate food security and nutrition for future generations are not compromised^v.

“Rates of childhood obesity are significantly higher in Southampton than elsewhere in England”

Thank you

We would like to thank our stakeholder participants for their valuable input to inform the work of this project. We would like to acknowledge the valuable guidance from Louise Delmege and Heloise Balme at the Bristol Food Network and Ped Asgarian at Feeding Bristol and to also thank Sustainable Food Places who funded the Bristol team's time to host a meeting to discuss the work in Bristol and Southampton.

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Recommendations

Based on our findings from local food system mapping and workshoping, we recommend that Southampton:



1 Strengthen local food procurement partnerships, raising the standards expected of suppliers both in terms of healthier products but also wider social value.



2 Systematically up-skill local people of all ages and enable them to have better food and nutritional security through influencing an affordable and accessible food environment.



3 Capitalise on assets and partnerships, such as existing exemplary food insecurity and waste avoidance efforts, to co-develop a vision, strategy, and plan to become a Sustainable Food Place member^{vi}.



Figure 1. Sustainable Development Goals impacted by local food systems

The problem

In the UK, **unprecedented levels of obesity, food insecurity and carbon emissions are significantly impacted by the food system which does not do enough to make healthy diets available, affordable, and convenient for all.**

Evidence also indicates that those who lack access to food are more likely to cut back on healthy food such as fruit, vegetables, and fish, widening pre-existing diet inequalities between the most and the least food secure^{vii}.

The effects of an unsustainable food system are evident as, in Southampton our search of data shows:

- 40.5% of children aged 10-11 are overweight or obese (compared to 36.6% in England^{viii}) and data shows an increasing trend over time for year R and year 6 (Figure 2)^{ix}
- Rates of excess weight are 1.8 times higher in the most deprived areas of the cityⁱⁱ
- 30% of 5-year-old children in Southampton have dental decay (compared to 27.9% in England)^x

- 41% of Southampton residents surveyed reported experiencing food insecurity (22% higher than national average)^{xi}
- A survey of Food Aid Forum members revealed over 18,600 meals were served in a snapshot week, an increase of 7% on the previous year (Food Aid Forum Food Snapshot Survey, 2023)^{xii}
- Aid groups serve an estimated 900,000 meals each year^{xiii}
- 34% of all pupils, in state funded schools in Southampton, are eligible for free school meals, which is significantly higher than the national average (23.8%)^{xiiii}
- Reliance on food imports causes high greenhouse gas emissions impacting local air quality and global climate changeⁱⁱⁱ

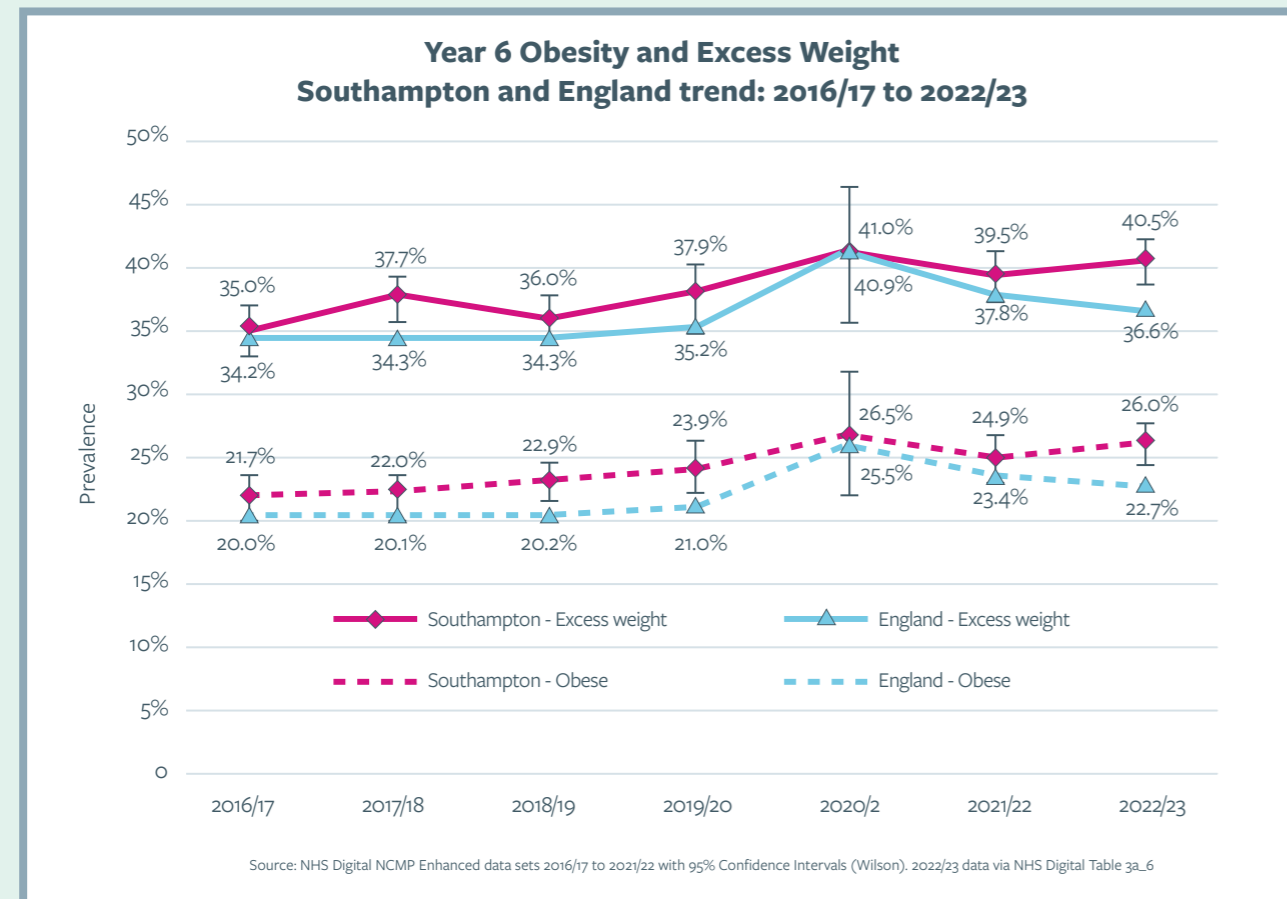


Figure 2. Figure 2 Year 6 Obesity and Excess Weight Southampton and England trend: 2016/17 to 2022/23ⁱⁱ

Existing evidence

In 2023, Southampton City Council officers sampled food availability and affordability in 27 branded grocery stores and extrapolated the findings to the other branded stores across the city. This revealed that over 9,000 people live in neighbourhoods that are not, at least partly within, a simple 400m buffer from food stores categorised as 'adequate' or better. Other research

undertaken by the City Council considered the travel distance to the nearest healthy food outlet in Southampton (Figure 3). This mapping revealed that more than 1 in 4 homes in Southampton are further than a 16 minute walk (one way) from a healthy food outlet. Areas in the city with limited access to affordable, healthy food tend to correspond to areas of high deprivation^{xiv}.

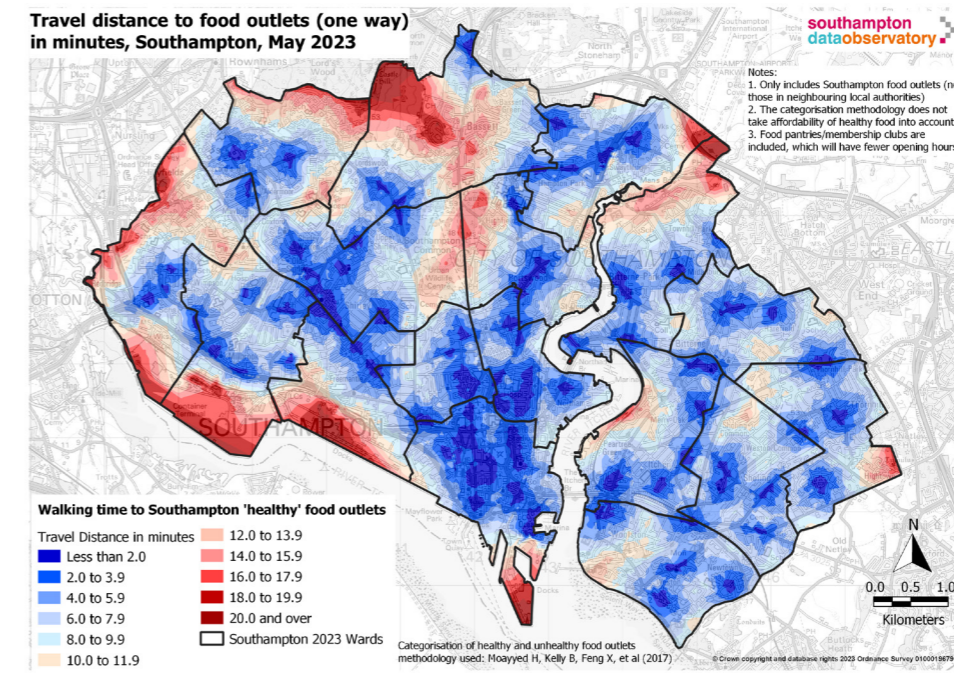


Figure 3. Travel distance to food outlets in minutes (Southampton Data Observatory 2024)^{xv}. More than 1 in 4 homes in Southampton are further than a 16 minute walk (one way) from a healthy food outlet.



FURTHER MAPPING REVEALED THAT:

- 29% of Southampton's businesses are associated with the food system^{xv} which contributes up to £487.3 million to Southampton's economy per year^{xvi}
- The food system employs 6,709 people (over 88% in food and beverage service industry) directly within the city limits, which equates to 5.3% of the city's workforce. This is less than the 11.8% UK average as Southampton's food system is predominantly takeaway and small retail outlets, with few businesses focused on production and manufacture
- Management of over 86,000 tonnes of food waste in 2014/15 cost Hampshire, Southampton, and Portsmouth collectively around £2.5 million^{xvii}

Locally, there was no data available on the environmental impacts of Southampton's food system; and, given food production accounts for over a quarter (26%) of global greenhouse gas emissions^{xviii}, this is an important gap in the local evidence base.

“29% of Southampton’s businesses are associated with the food system which contributes up to £487.3 million to Southampton’s economy per year”

Food system workshop

To further understand Southampton's local food system, we held a workshop to obtain insights from key local food system stakeholders (N=9). Participants were invited from a range of public, private, and charitable organisations across Southampton.

Participants were distributed into two groups. A member of the research team then facilitated a semi-structured interview. An audio recording of the discussions was used to aid transcription and thematic analysis. Ethical approval was provided by the University of Southampton (ERGO 90425).

WHAT WE FOUND

Workshop discussions with 9 key local food system members revealed three key themes:

POWER OF PROCUREMENT PARTNERSHIPS

Participants felt that “further reaching and stronger ethical procurement policies” is important, since public procurement accounts for a substantial proportion of food system expenditure.

“Most cities’ public procurement is massive and if public procurement work together, you know, schools, prisons, hospitals, it’s often more than 50% of the food environment in the city and it’s quite a powerful driving force.”
- Workshop Attendee

Participants spoke about the opportunity to ‘really gather momentum’ through explicitly telling businesses that we ‘expect these standards’.

Participants also agreed higher standards should be demanded in multiple areas. For example, higher standards of food quality, for example fresh, healthy, and locally sourced (including more flexibility to purchase locally in Hampshire instead of centralised systems), but also higher standards of the social value business providers commit to, for example by paying their employees a living wage.

Desktop based research suggested that individuals and groups separate from the Council may be required to spearhead and take forward work. Work also needs to be done to link up partners within the food system as well as signposting groups and information. In addition, regional awards, such as the Bristol Good Food Award, have been instrumental in engaging with all sectors of the food system and may offer a way forward for engagement across the food system in Southampton.

UP-SKILL AND ENABLE

Workshop attendees spoke about a perceived need for more food education at all ages, in reference to exposure to different types of food, ways to prepare food, and how to budget for food expenditure.

“It’s also a financial issue, it’s not necessarily a food issue... it’s about what’s in the persons pocket, how they can budget” - Workshop Attendee

Whilst education may play a partial role in improving the food system, there is strong evidence that education alone has a limited impact on diet and weight because food behaviours are influenced by a wide variety of factors many of which are outside an individual’s control^[xix,xx]. Workshop attendees valued school education programmes: local educational approaches will need to be evaluated to understand the approaches that have the most impact.

“The choices we make are shaped by the choices we have.”
(Rogow et al., 2008)^[xxi]

“Participants also agreed higher standards should be demanded in multiple areas. For example, higher standards of food quality, for example fresh, healthy, and locally sourced...”

People need to be enabled to make better food choices through the provision of healthier food environments and access to affordable healthy options (see case study).

Workshop participants also spoke about the need for advocacy and a collective voice – with up-skilling, local people can be empowered to engage with and influence their food environments, through local partnership working and engaging with industry.

CASE STUDY: BURGESS ROAD

Burgess Road is a commercial centre several minutes’ walk from Southampton’s largest university campus and next to a residential area of high deprivation. Of the 31 commercial units, 42% are hot food takeaways or drive-thrus (Figure 4) which disproportionately influences the food options of thousands of residents and students. Local people need to be enabled to make healthier, more sustainable, food choices and so we must collaborate to influence local food environments such as Burgess Road.



Figure 4. Burgess Road Local Centre highlighting food-related commercial units (©Crown copyright and database rights 2024 Ordnance Survey 0100019679)

CAPITALISE ON EXISTING EFFORTS

Participants were excited and enthusiastic for existing programmes run by local people. They also commented that communities themselves often held solutions.

“Listen to the small people like us... a lot of us have the answers.” - Workshop Attendee

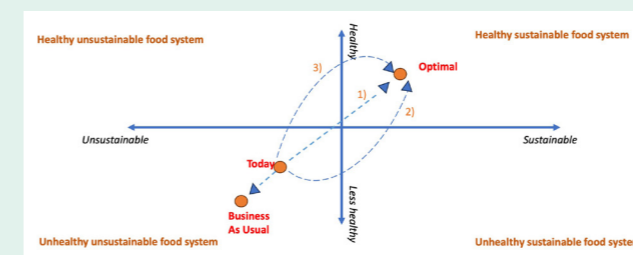
Some attendees were already leading or supporting large scale efforts to tackle food insecurity or to reduce food waste in the local area. Attendees praised these exemplary projects and suggested the successes should be shared to inspire and build upon existing local collaboration and efforts.

“Wrap round awareness building, telling the stories of those areas... I think [The Big Difference is] one of our best kept secrets in the city and it needs to become more understood... So what can we do? Encourage more people to participate in it”
- Workshop Attendee

Scenario analysis

Southampton’s Food System - more healthy, more sustainable or both?

Figure 5. Four future scenarios for Southampton’s food system from today: Business as usual (rejected as an option); 1) Health and sustainability measures working together equally; 2) Initial focus on sustainability measures; 3) Initial focus on health measures.



As part of the project we looked at scenario modelling for Southampton’s food system. We asked stakeholders to look at the pathway to an optimal position for Southampton (business as usual was rejected) where the city has a healthy and sustainable food system using future scenarios as used nationally and internationally^[xxii,xxiii]. Stakeholders had a mixture of opinions regarding the pathway to achieve an optimal situation.

One group felt that focussing on health first would be beneficial and sustainability would follow. This was based on optimising spending more on human health and identifying ways to have a

healthy lifestyle with education for young people and their carers on healthy diets and a corporate responsibility to provide cheap and healthy food. The group noted the stigma in society about obesity and free school meals.

A second group felt the initial emphasis should be on sustainability as this could be a lever to engage business through corporate social responsibility. Community food growing was felt to be important along with city-wide initiatives such as community fridges and making use of spaces such as libraries. This group discussed an overall vision to be a ‘zero food waste city’ with all food waste going to a central facility to be re-distributed.

Interestingly a third group felt that health and sustainability could work in equal measures: a healthy workforce to support industry; succession planning crucial for small organisations; a vision that stakeholders can buy into, for example, a Southampton pound, Marmot cities, 15-minute cities with aspirations towards of local food, local jobs and local contributions. Whilst there was no consensus on whether prioritising health or sustainability would help achieve this outcome more efficiently, the attendees did agree that creating a vision, capitalising on existing efforts and examining a partnership approach would help identify possible pathways forward.

All these options are possible levers for change in Southampton and for consideration with partners going forward.

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