

Accepted: 9 March 2021

DOI: 10.1111/geoj.12388

**THEMED SECTION**

WILEY



# Governing plant-centred eating at the urban scale in the UK: The Sustainable Food Cities network and the reframing of dietary biopower

Carol Morris<sup>1</sup>  | Minna Kaljonen<sup>2</sup>  | Eleanor Hadley Kershaw<sup>3</sup> <sup>1</sup>School of Geography, University of Nottingham, Nottingham, UK<sup>2</sup>Finnish Environment Institute, Helsinki, Finland<sup>3</sup>University of Nottingham, Nottingham, UK**Correspondence**

Carol Morris

Email: Carol.Morris@nottingham.ac.uk

**Funding information**

British Academy small grant scheme (grant number: SG170396). Academy of Finland (grant number 296884). Biotechnology and Biological Sciences Research Council and the Engineering and Physical Sciences Research Council (jointly funding grant number BB/L013940/1). European Union's Horizon 2020 Research and Innovation Programme (Grant Agreement No. 760994).

Recent years have seen an increase in actions to address a key feature of food in the Anthropocene: the over-production and consumption of animal-based foods or “animalisation” of diets. However, it is unclear whether such efforts can be understood as a coherent institutional level response that will challenge hegemonic dietary biopower, a regime of governance that normalises and reproduces animal-based food consumption. Building on scholarship that explores food governance initiatives in urban contexts and dietary biopower across a range of empirical cases, this paper explores whether, how, and with what consequences governance actors within urban food partnerships (UFPs) of the UK Sustainable Food Cities (SFC) network are working to reframe dietary biopower so that humans are disciplined to eat less animal-based food and instead to adopt a more plant-centred diet. Document analysis and semi-structured interviews with SFC representatives suggest the breadth and depth of current UFP actions do not add up to a sustained challenge to hegemonic, animal-based dietary biopower. Rather, they reveal a plant-centred dietary biopolitical project in the making, while specific cases suggest that this project is more accurately conceptualised as arrested due to the pursuit of food system actions that are counter to and in tension with the promotion of plant-centred eating. We suggest that a more coherent reframing of dietary biopower would entail urban food governance actors engaging consistently and robustly with the debates surrounding animal-based foods, as well as identifying and enacting synergies between plant-centred eating, food poverty, and local economic development agendas.

**KEYWORDS**

dietary biopolitics, plant-centred eating, Sustainable Food Cities, UK, urban food governance

## 1 | INTRODUCTION

Recent years have seen an increase in actions across the global North to address a key feature of food in the Anthropocene: the over-production and consumption of animal-based foods, or the “animalisation” of diets (Fourat & Lepiller, 2017). Actors from multiple domains – civil society, the public and private sectors, and academia – are engaging in an

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

The information, practices and views in this article are those of the author(s) and do not necessarily reflect the opinion of the Royal Geographical Society (with IBG).

© 2021 The Authors. *The Geographical Journal* published by John Wiley & Sons Ltd on behalf of Royal Geographical Society (with the Institute of British Geographers)

increasingly lively debate around the environmental, animal protection, and human health consequences of eating too much food from animals (e.g., Laestadius et al., 2014; Morris, 2019; Morris et al., 2014; Singer, 2017; Vinnari & Vinnari, 2014), informed by a growing body of mostly natural scientific evidence (Berners-Lee et al., 2012; Scarborough et al., 2014; Springmann et al., 2018; Stehfest et al., 2009; Swinburn et al., 2019; Willett et al., 2019). This evidence consistently suggests the tendency for plant-centred diets to have lower carbon emissions. Even before the recent intensification of this debate and rising interest in flexitarian, vegetarian, and vegan diets, specific institutions had begun to – and now increasingly – take action to promote plant-based eating and address the de-animalisation of diets. Examples include campaigns such as “Meatless” and “Meat Free” Mondays, initiatives in schools that encourage children to eat more plant-based foods, the commercial development of meat and milk substitutes, and the amendment of national nutrition guidance (Kaljonen et al., 2019, 2020; Lombardini & Lankoski, 2013; Morris, 2019; Morris et al., 2014; Mylan et al., 2019; Sexton, 2018; Singer, 2017). Can these efforts be understood as a coherent institutional level response that will challenge hegemonic “dietary biopower” (Clark, 2012), a regime of governance that normalises and reproduces animal-based food consumption? This question provides the stimulus for this paper. Our aim is to explore whether, how, and with what consequences governance actors are working to reframe dietary biopower so that humans are disciplined to work on themselves to eat less animal-based food and instead to adopt a more plant-centred diet<sup>1</sup> (Taylor, 2010). Application of a biopolitical lens seeks to provide new insights into the governance of plant-centred eating. As biopower is understood to emerge in specific times and spaces, we undertake our task within the context of *urban* food governance in the UK, a scale of analysis that also contributes to the novelty of our approach.

Historically, urban places have not featured prominently in UK food governance with municipal authorities responsible for very few, specific aspects of food regulation and provision, for example, the safety of food catering outlets (Flynn et al., 2000). This has begun to change over the course of the past two decades, during which time towns and cities have been independently developing food governance arrangements. London was one of the first cities to prepare, in 2006, an Urban Food Strategy. The launch, in 2011, of the UK’s Sustainable Food Cities network (SFCN)<sup>2</sup> consolidates much of the earlier activity and positions the UK as an innovator in urban food governance (Coulson & Sonnino, 2019; Moragues-Faus & Sonnino, 2018). SFCN members (cities, towns, local authority areas, and regions) are coordinated by three NGOs – Sustain, the Soil Association, and Food Matters – with the overall aim of “developing a cross-sector partnership of local public agencies, businesses, academics and NGOs committed to working together to make healthy and sustainable food a defining characteristic of where they live. The SFCN helps people and places share challenges, explore practical solutions and develop best practice on key food issues.”<sup>3</sup> Cross-sector food partnership working is promoted alongside the embedding of healthy and sustainable food in local policy and the development and delivery of a food strategy and action plan. Importantly, member cities are encouraged to focus on areas of work that are most relevant to them, including food poverty, food waste, local food, and healthier diets. The emphasis given to one or more of these issues depends on the organisations that are core to the establishment and ongoing operation of the partnership (see footnote 12).

The developments in urban food governance of which SFCN is a major part can be understood as a response to the absence of national level *food* policy,<sup>4</sup> a governance space that has been dominated by agricultural production rather than transforming the wider food system (Coulson & Sonnino, 2019).<sup>5</sup> Urban places have therefore been attempting to fill a policy void and address a democratic food deficit (op cit.) through more localised, urban-based action to create more sustainable, healthy, and just food systems (see also Blay-Palmer, 2009). Tackling the over-production and consumption of animal-based foods, and promoting plant-centred eating, is increasingly recognised as one important dimension of this wider governance objective. It is acknowledged as such by some actors in urban food partnerships (Santo & Moragues-Faus, 2019). The problematisation of animal-based foods features within five of the actions that SFCN applicants can take to justify their membership in the network, for example, by campaigning to “promote more public consumption of sustainable food including fresh, seasonal, local, organic, *sustainably sourced fish*, *high animal welfare*, *meat free* and/or Fair-trade” (emphasis added). One of the network’s feature campaigns is “Veg Cities” that works cross sectorally to grow, cook, sell, and save more vegetables. The SFCN can therefore be understood as a mode of urban-based food governance with the *potential* to reframe dietary biopower so that it emphasises plant-centred eating. This potential has, however, not been the subject of investigation in existing scholarship on the network (e.g., Coulson & Sonnino, 2019; Moragues-Faus & Sonnino, 2018; Santo & Moragues-Faus, 2019).

In the sections that follow we discuss in more detail the concept of biopower, its key dimensions and its value within studies of diets and eating. An explanation is given of the methods used within empirical research into the SFCN and its contribution to reframing dietary biopower. This material is then presented according to key dimensions of biopower. In a reflection on this evidence, the paper considers the “progress” of this complex and fluid biopolitical project and in doing so draws out the lessons that might be learned for governance actors seeking to make further interventions in this domain.

## 2 | THINKING BIOPOLITICALLY ABOUT PLANT-CENTRED EATING IN AN URBAN CONTEXT

The concept of biopower centres on the regulation and fostering of human life through systems of knowledge and strategies for intervention targeted on the body and its disciplining (Foucault, 1976/1990). Although widely understood to be integral to the fabric of everyday reality in advanced capitalist economies (Marks, 2006), biopower's emergence, operation, and effects require detailed, empirical investigation in particular instances and spaces (Rabinow & Rose, 2006). Rabinow and Rose (2006) further suggest that the concept of biopower must, at a minimum, include three elements: *truth discourses* about the "vital" character of living human beings and an array of authorities considered competent to speak that truth; and *strategies for intervention* upon collective existence in the name of life and health often directed at territorially specified populations as well as emergent biosocial collectivities, not necessarily associated with particular spaces. The third element is "*modes of subjectification*." This refers to the means by which individuals come to regulate themselves in relation to truth discourses and strategies for intervention, and signals the diffuse character of this form of power.

We see these co-constitutive and co-emergent dimensions of biopower as a useful initial guide for analysing attempts to reframe a hegemonic, animal-based dietary biopower towards instead the governance of plant-centred eating. In her studies on medical biopower (Mol, 2002) and nutritional counselling (Mol, 2013), Mol has further underlined how we should never interpret the exercise of biopower as complete, but rather as attempts of ordering that may be interpreted in multiple and unforeseen ways (see also Law, 1994; Lonkila & Kaljonen, 2018). This also means that the coherence of biopower is always a practical matter and the diffuse character of biopower leaves open multiple spaces for *resistance and contestation*. This is particularly important in an analysis of the reframing of hegemonic biopower, both in terms of the multiplicity of efforts involved in this reframing and the tensions that emerge within, between, and against these efforts. Resistance to biopower is often associated with individuals who push back against the truth discourses and strategies of intervention which seek to remould and remake their subjectivities. Through this resistance, or "counter conduct," these individuals may come to be identified as "problematic persons" (Holloway & Morris, 2012). However, resistance may also operate in the form of organisations that promote a distinctive perspective on a particular matter of concern leading to tensions and contestations between the attempts of ordering (Law, 1994). In response we propose that "problematic organisations" may be as relevant as "problematic persons" when considering the activities of the SFCN. This is because its members are constituted by diverse organisations (Moragues-Faus & Sonnino, 2018) and shifting diets away from meat-centric norms is likely to be controversial, including a perceived threat to the livelihoods of animal-based food businesses (Morris et al., 2014), a challenge to consumer sovereignty (Lombardini & Lankoski, 2013), or identities (Peltola et al., 2020) and unjustified state intrusion into matters that are regarded as private (Laestadius et al., 2014).

Following these foundational points about the nature of biopower, particular diets or recommended ways of eating can be understood as biopolitical in character. This is because eating is a matter of life itself and efforts to change what a population eats are designed to produce "improvements" in that population, notably its health. That "diet is a biopolitical project" (Clark, 2012, p. 118) has been recognised and elaborated in critical scholarship of the industrialisation of bread (Bobrow-Strain, 2008), the governance of obesity (Guthman, 2009; Mol, 2013; Powell, 2014), food safety guidance (Mansfield, 2012), mediated foodscapes (Goodman et al., 2017), ethical vegetarianism (Taylor, 2010), and alternative proteins (Sexton, 2018; Sexton et al., 2019). Sexton's work has some alignment empirically to this paper, although its biopolitical analysis focuses on the making edible of a very specific group of high-tech meat substitutes rather than on policy level efforts to govern a shift towards plant-centred eating, a gap that this paper seeks to address. We make two further points about our interpretation and application of dietary biopower. First, we observe a tendency in the existing scholarship on dietary biopower to explore well established regimes or instances of biopower either historically (e.g., Bobrow-Strain, 2008) or where a contemporary phenomenon such as obesity and food insecurity has policy visibility and traction (Nally, 2011).<sup>6</sup> We widen this perspective to think biopolitically about ways of eating that are *in the process of* being challenged and reframed. By doing so it may be possible to avoid the pitfalls and exclusions identified in giving undue attention to behavioural approaches in dietary governance in contrast to structural changes in food system and its regulation (Greenhalgh, 2012; Huan-Niemi et al., 2020). Second, we acknowledge that our reading of biopower has a normative dimension. Although critical of the existing hegemonic, animal-based dietary biopower for the reasons outlined in the introduction, the social "control" associated with the emergence of a new, plant-centred dietary biopower is likely to be necessary to realise positive socio-ecological change within the food system (Clark, 2012). Simultaneously this reframing of dietary biopower

can be understood as potentially empowering and also pleasurable (Taylor, 2010) for its emergent plant-centred eating subjects and the “self-work” in which they are engaged.

Applying these ideas of biopower, we explore whether, how, and with what consequences the urban food partnerships (UFPs) of the SFCN are working to reframe dietary biopower in ways that problematise food from animals and encourage plant-centred eating. This approach is justified because the UFPs of the SFCN are significant loci of power, being collectives of food governance actors at the urban scale. The following set of questions guides our analysis: How do UFPs produce, circulate, and contest truth discourses about plant-centred eating and are they – becoming – authorities to speak these truths? What are the strategies for intervention in plant-centred eating that are made by UFPs, which ones are avoided, and how do these interventions contribute to the making of plant-centred eating subjects?<sup>7</sup> What are the tensions and resistances encountered in relation to the existing, hegemonic dietary biopower, and are there any exclusions created?

### 3 | METHODOLOGY

In our investigation we focused on award-winning cities of the SFCN. The award system is designed to further stimulate actions that produce sustainable, healthy, and just outcomes in food provisioning at the urban scale. SFC members can apply for a bronze, silver, or gold award, the different levels of which reflect an increasing level of achievement in terms of actions and outcomes. The SFCN has more than 50 members, of which 17 were award winners at the time of the research in 2018 (Aberdeen, Bath, Belfast, Brighton, Bristol, Cambridge, Cardiff, Carlisle, County Durham, Greater London Authority, Greater Manchester, Greenwich, Lambeth, Middlesbrough, Oldham, Oxford, Plymouth). A focus on award-winning SFC members was one way in which the scope of the research could be reasonably contained given the budget available. Also, we were interested to explore empirically an assumption that this group of cities would be relatively more experienced and possibly more ambitious in their activities and therefore more likely to engage with the challenges and tensions surrounding the promotion of plant-centred eating.

We generated qualitative data from secondary and primary sources. “For each award-winning city we analysed at least two publicly available documents: a draft or published food action plan or strategy and the SFC award application. These documents were subjected to a keyword search – including meat, dairy, livestock, animal, plant, veg, diet, flexitarian – selected for their relevance to debates around plant-centred eating” (Morris & Kaljonen, 2019, p. 171). Sections of text containing these keywords were cut and pasted into a Word document, generating a large volume of text coded manually, using both descriptive and analytic codes (Cope & Kurtz, 2016), to identify commonly occurring themes.

Primary data were produced through semi-structured interviews conducted by telephone with 11 representatives from 10 award-winning cities of different sizes and locations across the UK. These interviews lasted, on average, 50 minutes. Most interviewees were the coordinators or managers of their city’s food partnership. One interviewee was a food policy officer and another worked within their city’s public health department, which had been a lead actor in the partnership. A further two interviews were conducted with key personnel in two of the three NGOs that coordinate the SFC network, both of which had detailed knowledge of the development and operation of the network. The interview questions focused on each city’s – and the wider SFCN’s – engagement with food from animals, covering current and future activities, agendas, rationales, enabling or constraining factors conditions, and potential for addressing what can be achieved in relation to food from animals at the city scale. The phrase “food from animals” was selected after careful consideration in an effort to leave the discussion as open as possible for interviewees and specifically to enable them to highlight initiatives within their UFP that promote these foods (e.g., sourcing meat with animal welfare certification) as well as activities that problematise and seek to reduce them, for example, meat free events, while also promoting plant-based alternatives. Interviews were recorded and transcribed, generating a large amount of text that, like the document material, was subject to a process of manual coding to identify commonly occurring themes informed by the theoretical framework.

To preserve interviewee anonymity, we use a numbering system when referring to SFC representatives (SFC1, 2 etc.) in the sections that follow. While we acknowledge that a larger number of interviews may be instructive, we are confident that they encompass a cross section of cities of different sizes from regions across the UK, including those that are relatively more affluent and deprived, and relatively more and less rural (with the latter important for its implications for the strength of linkages into local farming areas). Further, the combination of interview and document analysis produced a volume of material that is more than sufficient to justify the conclusions drawn.

## 4 | THE DIETARY BIOPOLITICS OF SUSTAINABLE FOOD CITY PARTNERSHIPS

### 4.1 | Speaking “truths” about plant-centred eating

From the analysis, two truth discourses relevant to a reframing of dietary biopower towards plant-centred eating emerge as particularly prominent.

#### **Truth 1: “Meat isn’t a sustainable food source in its current form”<sup>8</sup>**

The quotation in this subtitle encapsulates succinctly the first truth discourse: that the production and consumption of food from animals (particularly meat but also dairy) is problematic both in terms of human health and the environment. This discourse was articulated by some but by no means all UFPs. Although acknowledging that meat can be a beneficial dimension of a “balanced diet,” the Lambeth Food Partnership (2014, p. 23) argues that “the amount of meat we are eating has become excessive and is impacting on the environment as well as our health.” Dominant amongst the identified adverse environmental impacts of producing and consuming food from animals are greenhouse gas (GHG) emissions, with half of the award-winning cities referring to the relationship between livestock and climate change in their documentation. Much less prominent was reference to environmental impacts other than those relating to the climate, including the water, energy, and land-use demands of intensive livestock production. Only in a small number of cases did the truth discourse encompass a more nuanced understanding of the variable environmental impacts of production systems for meat and processed vegetarian foods. Likewise, relatively little reference was made within this truth discourse to animal food production and consumption being problematic for animals themselves, suggesting that, environmental dimensions notwithstanding, this truth discourse is strongly anthropocentric.

The sources of knowledge underpinning the truth discourse about the problems surrounding current levels of meat and dairy production and consumption are not always made explicit, both in the documents and the interviews, although reference is made to other reports produced by the cities themselves, for example, on city scale GHG emissions. The city food strategies and plans are designed to be as accessible and user friendly as possible, which may explain the limited number of references therein. In making their claims about the problematic dimensions of animal-based food, UFPs *implicitly* reference increasingly widely circulated reports from international organisations such as the FAO and in doing so acknowledge their legitimacy and become an authority who speaks this (same) truth. Other sources of knowledge and authority, specifically Public Health England’s nutrition guidelines about eating animal and plant foods, were also acknowledged but by no means consistently referenced by interviewees (e.g., SFC2, SFC4).

A truth discourse that raises questions about the production and consumption of animal-based food in no sense entails a complete rejection of this food; rather, it represents a critique of current meat and dairy provisioning arrangements. Indeed, UFPs are more likely than not to frame animal-based foods as an unquestionable feature of local food systems that deserve support from municipal food actors. The Mayor’s Food Strategy for London (see London Development Agency, 2006), for example, bemoans the decline of farming within the city limits, including in particular dairy farming, a position which implies that something meaningful and important is lost when animal farming diminishes or disappears from urban environments.

#### **Truth 2: It is good to eat more fruit and vegetables**

In distinction to the first truth discourse with its focus on food from animals, a second truth discourse makes a positive case for eating more food from plants. Almost without exception, cities articulate an aspiration that residents should eat more fresh fruit and vegetables. One example is Oxford’s Good Food Charter (n.d.), which contains the following advice: “five simple things you can do today to make the food you eat better for you better for the planet, better for your pocket and better for other people: 1. *Eat more plants*; 2. Waste less food; 3. Quality not quantity; 4. Cook; 5. Know your food” (p. 2, emphasis added). The recommendation to “eat more plants” by this and other UFPs reflects and reinforces national level action in a number of countries, including the UK, that encourages citizens to consume at least five portions of fruit and vegetables each day<sup>9</sup> for better health and disease prevention. This, of course, is not in any way equivalent to a recommendation to eat a plant-based diet, which does not appear to be a truth discourse “in waiting.”

The reproduction of this truth discourse by UFPs is motivated, primarily, by a desire to improve the diets and therefore the health (physical but also mental) of city residents, particularly those on low incomes and/or residing in areas with poor provision of fresh produce. This connects to the increasing responsibility of local authorities in public health and nutrition

(Santo & Moragues-Faus, 2019). As one interviewee explained, the residents of the region in which her UFP is located “... are notoriously bad at eating vegetables ... particularly green things, a lot of ... [them] ... don’t like to eat anything that is green you know we have got an open market in terms of promoting ...” (SFC7) more fruit and vegetable consumption. Other benefits arising from this change in eating patterns are recognised by UFPs and comprise a less pronounced dimension of this truth discourse. These include sourcing locally produced fresh fruit and vegetables to reduce food miles, typically framed by UFPs as environmentally beneficial as well as providing economic opportunities for local or regional producers. Importantly, this truth discourse should not be interpreted as the corollary of the first truth discourse in the terms articulated by the UFPs. In other words, it was not the case that a UFP, having asserted the problems of food from animals, then went on to argue that what is needed instead is more plant food consumption. Rather, and surprisingly perhaps, these two positions were not connected in an explicit way.

## 4.2 | Intervening in and making plant-centred eating subjects

Two strategies can be distinguished in how UFPs promote plant-centred eating at the city scale. The first one aims to foster new relationships with food from animals, primarily through changes in various consumption domains; whilst the other promotes more directly the growing and eating of food from plants. Both of these interventions have the potential to contribute to the making of plant-centred eating subjects, but in a different manner.

### Fostering new relationships with food from animals

The first strategy for intervention accepts animal source food production and consumption, but recognises it should be undertaken differently to address the problematic features identified in the first truth discourse. This strategy has interrelated components, with the first of these focused on “*doing meat (and other animal-based foods) better.*” This objective is realised primarily through UFPs promoting the procurement of higher welfare and/or local meat and dairy products for use in school and local authority catering accredited by, for example, the RSPCA and organic certification organisations that are designed to guarantee better quality meat and dairy products. The majority (all except three) of the award-winning cities made some reference to animal welfare in their documentation.

The second component of this strategy for intervention is focused on *reducing* the amount of animal source food consumption, particularly meat to improve human health and realise environmental gains. This includes a number of different actions and activities on the part of UFPs, the most common of which are: awareness-raising activities that less meat needs to be eaten to improve health; limiting the number of times that meat items are served in school and university catering; incentivising local cafes and restaurants to reduce the amount of meat and dairy dishes served; promoting meat free days, meat free menu options, or entirely meat free events such as festivals. Less common are calls by UFPs for less meat production and more protein crop production nationally to improve the environmental aspects of food production.

Efforts to try to reduce meat consumption are likely to be challenging both for UFPs and other governance actors. That such challenges exist may help to explain why five of the award-winning cities did not mention less meat or a meat reduction strategy in their documentation.<sup>10</sup> The terms “reduction” and “less” reflect the language used within the UFP documents. The term “meat free” is employed but only in a minority (four) of documents. An example is Manchester City Council’s in-house catering provider for schools and resource centres that has enrolled all 100 of its schools into the national initiative “Meat Free Mondays” (Manchester Sustainable Food Cities Bronze Award, (n.d.), p. 9). “Meat free” can be interpreted as a potentially more challenging framing than “less meat” or “reducing meat.” However, the promotion of, for example, meat free menu options or meat free days is not in any way equivalent to promoting veganism. It is concerned instead with reducing the total quantity of meat consumed while simultaneously promoting the consumption of more plant-based meals.

### Promoting the production and consumption of food from plants

Both the UFP documents and the interviews reveal that there is interest in and commitment to the promotion of producing and consuming food from plants across the SFC network. As already discussed, it is almost without exception that UFPs mobilise the truth discourse that it is good to eat more fruit and vegetables. This established discourse of health promotion is materialised in diverse, and now often fun, ways through, for example, community growing projects, vegetable box schemes (sometimes organised through community supported agriculture), establishing or supporting “pop up” fresh fruit and vegetable stalls often in neighbourhoods with otherwise poor provision, public procurement of seasonal vegetables from

local suppliers, supporting consumer-led food cooperatives that distribute fresh vegetables, encouraging the development of menus in both public and private sector catering to include more plant-based options, and running cookery classes that include and sometimes emphasise plant-based dishes. This diverse range of activities has been given further impetus through the “Veg Cities” campaign.

A distinct but less pronounced dimension of UFP efforts to encourage plant-based eating are interventions that explicitly promote vegetarianism or veganism. First, cities report that they host vegetarian/vegan events or those that include a vegetarian/vegan offer. Second, a range of local organisations and institutions, many of which are partner organisations of the UFP (notably schools and universities, local businesses and social enterprises), are identified as offering an increasing range of vegetarian/vegan products and menu options. Interviews revealed that some UFPs are keen to promote more of this type of activity, reinforcing the rise of vegetarianism and veganism that is taking place despite the actions of UFPs. As one interviewee explained, the expansion of veganism that she observes and endorses in her city is not linked directly to the work of the food partnership but is instead occurring “(t)otally independently ... and reacting to consumer demand. You know?” (SFC8).

Other UFPs are much more cautious, reporting that vegetarian or vegan food is deliberately not presented as such or that the aim is to encourage “healthy eating” rather than becoming a vegetarian or vegan. For example, some UFPs have, within the context of the Veg Cities campaign, set up cooking classes that teach students how to make plant-based dishes. However, interviewees were keen to emphasise that this did not mean that the UFP is trying to promote vegetarianism/veganism (e.g., SFC1). A further example is provided by the coordinator of a city food partnership who described “an innovative ‘social eating’ project in one of the city’s most disadvantaged districts which is run on a ‘pay as you feel (or can afford)’ basis by a vegan cook. Therefore, all of the food (mainly hearty soups) is vegan *but it is not presented as such – it is ‘just’ healthy, nutritious food*” (SFC9, our emphasis). In their reticence to promote a more politicised form of plant-centred eating, that is, labelled explicitly as vegan or vegetarian, UFPs appear to engage in a process of “subjectification by stealth.”<sup>11</sup> Plant-centred eating subjects are here being produced through “softly, softly” means as they are exposed to the culinary possibilities and eating pleasures of plant-based foods (Taylor, 2010) rather than being told, dogmatically, to eat in a different and unfamiliar way for their own and others benefit.

### 4.3 | Tensions surrounding and resistance to plant-centred eating within the SFCN

The previous sections have begun to reveal how hegemonic dietary biopower is being subject to challenge. However, efforts to change a population, in this case to eat differently, may not always be successful (Foucault, 2007). Our analysis highlights the organisational nature of “counter conduct” rather than an individualistic interpretation (e.g., Barcelos, 2014) by drawing attention to the diversity of actors and organisations with sometimes competing agendas that comprise the UFPs of the SFCN. This, together with the limited resources to which most UFPs have access, has led to some notable tensions within partnerships and resistance from some partner organisations against efforts within a UFP to pursue plant-centred eating.

The first source of “conduct that runs counter” to plant-centred eating can be traced to the origins of particular UFPs and their relation to a city’s other activities and the UFP’s organisational structure. Partnerships that focus on food poverty and improving the diets and health of impoverished communities were less likely to be pursuing and promoting plant-centred eating than those that emerge out of actions and organisations with an environmental sustainability agenda.<sup>12</sup> UFPs with a food poverty and health focused agenda appeared to demonstrate a type of path dependency that locked them in to a set of actions that made it less likely that the partnership would consider including activities relating to plant-centred eating. Necessarily, funding constraints mean that partnerships must concentrate on particular (priority) activities even when there was awareness of and interest in other activities, including the promotion of plant-centred eating. However, even considering funding constraints, partnership efforts to tackle food poverty can be in tension with or running counter to actions concerned with addressing the problems of animal-based foods. One interviewee, for example, characterised plant-centred eating as a luxury of little relevance to the hungry (SFC7). Another illustration emerged in discussion of UFP involvement in redistributing surplus food to communities in need as some of the surplus food is animal based (SFC8). Tackling food poverty then may represent a form of conduct that runs counter to efforts by UFPs to promote plant-centred eating. Although this does not *have* to be the case, in only one city context (SFC11) was a synergy identified between the otherwise apparently distinct (even opposing) agendas of providing cooking skills to low income communities, eating less meat and more vegetables, and local food sourcing.

A second source of “counter conduct” emerges out of the relative importance given to local food promotion within a partnership, identified in some cases as potentially or actually in tension with promoting plant-centred eating. This tension

was illustrated by the inclusion of meat, dairy, and egg producers within local food initiatives promoted by the partnership, for example, in Farmers' and other types of market (SFC9), the publication of directories of local food producers (SFC10, 11), and local food procurement by public institutions (e.g., SFC7). In part, the desire to promote local food relates to the size of the city, which appears to influence the strengths of its links to the wider region. The interviewees from smaller cities report stronger, more immediate linkages to the wider county or region, and hence place more emphasis on local sourcing and developing relationships with local food producers than in some, but not all, of the larger cities.<sup>13</sup> This was sometimes reflected in partner organisations being farming and food businesses with an animal-based food interest (SFC10, 11). These strong relationships were reported, in one case, in terms of "community good will" and "sticking together and helping each other" while also delivering positive outcomes for the local, livestock-based rural economy (SFC10). However, it was intimated that this situation may well have shaped the lack of attention given to initiatives for reducing food from animals. The prominence of local farming and food businesses with a strong interest in animal-based foods within a UFP may constrain the opportunities for discussing plant-centred eating within that partnership. In this way, supporting the development of the local food economy represents a form of conduct that counters actual or potential conduct oriented to the promotion of plant-centred eating.

## **5 | TOWARDS A MORE EMBEDDED PLANT-CENTRED EATING BIOPOLITICAL PROJECT IN AN URBAN CONTEXT**

This paper has sought to investigate the reframing of dietary biopower by urban food policy actors as this concerns a move away from animal-based foods and towards plant-centred eating. We have undertaken our task in the context of the SFCN in the UK, as its food partnerships represent an innovative new form and scale of governance with the potential to intervene in diets.

Our analysis reveals that many, but by no means all UFPs are reproducing a truth discourse about the problems of animal-based food production and consumption, particularly regarding the health consequences of consuming too much animal-based food and some environmental consequences associated with climate change. A notable absence or exclusion within this truth discourse are the animals from which animal-based food is derived. Although not entirely anthropocentric (since it encompasses some concern for aspects of the non-human environment), this truth discourse largely side-steps the animal origins of meat (see also Singer's (2017) critique of the Meatless Monday's campaign in the USA). It is a discourse that is inspired and informed by other truth-making authorities, both national and international organisations, and in the process UFPs are becoming, albeit tentatively and by no means universally, legitimate authorities to speak this truth in the UK context. At best, this truth discourse is emergent rather than embedded across all UFPs. Also evident is a truth discourse that makes the case for more fruit and vegetable consumption to enhance human health, and to a lesser extent to benefit the environment and the local economy. This is a truth discourse that is a well established feature of public health. As such, it pre-dates the emergence of the discourse that problematises animal-based food consumption and may partially explain why the two discourses are not linked consistently. In sum, the truth discourses relating to plant-centred eating are by no means coherent, consistent, and universally embedded across UFPs.

Addressing the challenges of food from animals is within the scope of SFCN's activities, including membership application. In biopolitical terms, some UFPs are currently pursuing a number of strategies for making dietary interventions that are more plant centred. Nevertheless, these strategies are not adopted universally and when they are pursued, they lack prominence amongst the range of actions by award-winning UFPs. There is clear evidence of a wariness to "go too far" when intervening in this domain. In short, and the key finding here is, that plant-centred eating is not a priority action, including for those cities that appear to be relatively more engaged with the issue. Rather, UFPs intervene in less political ways, for example, by promoting vegetable growing rather than vegetarianism or veganism, and by promoting "less – but better – meat" rather than "no meat" or other animal-based food.

The reticence to promote a more politicised form of plant-centred eating signals an acute awareness amongst UFPs of the actual and potential sensitivities surrounding food from animals. Associated with this are deliberately imposed limits on current UFP strategies for intervening in and making plant-centred eating subjects. The process of subjectification, the third dimension of biopower as specified by Rabinow and Rose (2006), has been approached indirectly in our analysis through insights from UFP representatives and documents. This perspective suggests that subjectification is largely happening in spite of rather than because of the actions of UFPs, as integral to wider socio-cultural and economic shifts that include the expansion of veganism and the production and retail of an increasing array of processed plant-based foods (Mylan et al., 2019; Tziva et al., 2020). Where UFPs are more directly involved in the creation of plant-centred eating subjects this takes place in ways that are deliberately subtle, even "stealthy," reflecting the tendency towards less political strategies for



intervention and within these the desire to promote good human health rather than animal protection or ecological health. Also observed are a set of resistances within the UFPs themselves in the form of organisational conduct that runs counter to efforts to promote plant-centred eating. Such counter conduct reflects in part the complexity of UFPs in terms of their organisational origins, structures, and operational emphases. Two forms of conduct – actions on food poverty and local food sourcing, themselves regimes or fields of biopower (Kurtz, 2015) – are currently in tension with interventions designed to foster plant-centred eating.

Our analysis finds *some* evidence for the circulation of truth discourses, intervention strategies and processes of subjectification with respect to the promotion of plant-centred eating. However, the breadth and depth of current actions do not suggest that urban-based governance actors are taking significant and meaningful steps to address the animal-based dietary privileges (Clark, 2012) of consumers. A sustained challenge to the hegemonic, animal-based dietary biopower is not presented. At best, the activities of UFPs reveal a plant-centred dietary biopolitical project *in the making*, while specific cases suggest that this project is more accurately conceptualised as *arrested* due to the pursuit of food system actions – or conduct – by UFPs that are counter to and in tension with the promotion of plant-centred eating. This may not be a particularly surprising conclusion given the apparent aversion amongst governance actors at a variety of scales to intervene unduly in the lifestyles of citizens (e.g., Laestadius et al., 2014) and the original aims of UFPs to promote local food. Nevertheless, it is apparent that in other food and eating contexts, for example obesity policy, and health and safety issues such as smoking and driving, policy makers clearly *are* willing to intervene and be “nanny-statist” (Wheeler, 2018).

We suggest that a more coherent and embedded reframing of dietary biopower would entail urban food governance actors engaging more consistently and robustly with the debates surrounding animal-based foods. This engagement needs to address the relative neglect of animal lives within the truth discourses of dietary biopower reframing while simultaneously politicising already existing plant-centred eating interventions. Subjectification by stealth alone is not sufficient. Rather the apparent tensions between plant-centred eating, food poverty and local economic development agendas need to be recognised and explicitly addressed in order to move forward both by the UFPs and within associated research (Morris et al., 2021). These tensions, we suggest, are potentially productive rather than prohibitive, and so by addressing them directly UFPs may avoid their social justice and local economic development agendas being compromised by the promotion of plant-centred eating. Instead, identifying and enacting synergies between these agendas should be the goal.

## ACKNOWLEDGEMENTS


We are grateful for the support for this work that was provided by the British Academy small grant scheme (grant number: SG170396), Academy of Finland (grant number 296884), the Biotechnology and Biological Sciences Research Council and the Engineering and Physical Sciences Research Council (jointly funding grant number BB/L013940/1) and the European Union’s Horizon 2020 Research and Innovation Programme (grant agreement number 760994). We also acknowledge the unpaid contribution of Roger Welham and the thoughtful consideration given by two reviewers to the manuscript as initially submitted and their many helpful suggestions for its development.

## DATA AVAILABILITY STATEMENT

Data availability statement: the documents analysed are all publicly available. Interview data, with all interviewee identifiers removed to protect confidentiality, can be requested from the corresponding author.

## ORCID

Carol Morris  <https://orcid.org/0000-0001-7723-5658>

Minna Kaljonen  <https://orcid.org/0000-0001-8067-2402>

Eleanor Hadley Kershaw  <https://orcid.org/0000-0001-5911-5505>

## ENDNOTES

<sup>1</sup> We work with the term “plant-centred” as this framing recognises that the current dietary excess of food from animals is a problem that needs to be addressed while leaving open the possibility that future food systems and ways of eating could either involve less food from animals or none at all, but in both cases more plant-based foods will be produced and consumed.

- <sup>2</sup> The name of the initiative has recently been changed to Sustainable Food Places. We use SFC in this article as this was the name of the network at the time of the research.
- <sup>3</sup> <http://sustainablefoodcities.org/about> (accessed 11 February 2019).
- <sup>4</sup> Only recently has the UK government initiated the development of an independent national food strategy led by food entrepreneur Sir Henry Dimbleby. Following a consultative process, its initial report was published in 2020 (<https://www.nationalfoodstrategy.org/> accessed 11 February 2021).
- <sup>5</sup> The decentralisation of health services to local authorities has also been identified as significant in driving a public health agenda in food action at the urban scale (Santo & Moragues-Faus, 2019).
- <sup>6</sup> This is not to suggest that either of these issues has “settled” policy status; rather, when compared with the animalisation of diets they have attracted much more policy attention at the national scale.
- <sup>7</sup> We deliberately frame our interest in “subjectification” in this way to reflect the character of our data collection strategies that did not involve direct engagement with these subjects. We recognise that this is an important dimension of further research that builds on scholarship examining the processes and practices of becoming vegan (e.g. McDonald 2000; Twine 2017, 2018).
- <sup>8</sup> Interview with UFP representative (SFC8).
- <sup>9</sup> This follows the World Health Organization and FAO’s (2003) recommendation of a minimum daily consumption of 400 g of fruit and vegetables (excluding potatoes and other starchy tubers) <https://www.who.int/dietphysicalactivity/fruit/en/>, carried forward as ‘five portions’ in the UK Government’s (Public Health England’s) Healthy Eating Recommendations <https://www.nhs.uk/live-well/eat-well/the-eatwell-guide>
- <sup>10</sup> We note, however, that when interviewed the representatives of two of these cities recognised the importance of meat reduction and claimed that the UFP was supportive of this strategy.
- <sup>11</sup> We take inspiration here from de-Bakker and Dagevos’s (2012) transition pathways to reducing meat production and consumption, including a pathway with the potential to realise food system “sustainability by stealth.” The pathway emphasises the consumption of meat substitutes, which implies that changes in eating practices do not need to be particularly radical to make a positive contribution to sustainability.
- <sup>12</sup> UFPs with these origins are more likely to demonstrate awareness of the problems of animal-based foods and to report how particular partners are acting to address the problem. For example, one partnership (SFC3) emerged out of two third sector organisations, both with an environmental emphasis, interested in developing “sustainable food.” Funding is currently provided by the city’s sustainability fund which has a CO<sub>2</sub> reduction agenda. The interviewee made an explicit link between this funding and the partnership’s engagement with promoting plant-centred eating, one example of which is an award scheme for local food businesses that commit to reduce CO<sub>2</sub> through promoting less meat and dairy, for example, in their menus. In this (and other) case then conduct is aligned or in sympathy with, rather than running counter to, efforts to promote plant-centred eating.
- <sup>13</sup> At least two larger cities in Southern England demonstrated a commitment to developing local food infrastructures (SFC1, SFC4), but these UFPs also exhibited a well developed sense of the challenges posed by food from animals and supported actions to reduce animal food consumption. In other words, in some cases local food and reducing food from animals could co-exist reasonably comfortably in the partnership.

## REFERENCES

- Barcelos, C. (2014). Producing (potentially) pregnant teen bodies: biopower and adolescent pregnancy in the USA. *Critical Public Health*, 24, 476–488. <https://doi.org/10.1080/09581596.2013.853869>
- Berners-Lee, M., Hoolohan, C., Cammack, H., & Hewitt, C. (2012). The relative greenhouse gas impacts of realistic dietary choices. *Energy Policy*, 43, 184–190. <https://doi.org/10.1016/j.enpol.2011.12.054>
- Blay-Palmer, A. (2009). The Canadian pioneer: The genesis of urban food policy in Toronto. *International Planning Studies*, 14, 401–416. <https://doi.org/10.1080/13563471003642837>
- Bobrow-Strain, A. (2008). White bread bio-politics: Purity, health, and the triumph of industrial baking. *Cultural Geographies*, 15, 19–40. <https://doi.org/10.1177/14744474007085783>
- Clark, J. (2012). Ecological Biopower, environmental violence against animals, and the “greening” of the factory farm. *Journal for Critical Animal Studies*, 10, 109–129.
- Cope, M., & Kurtz, H. (2016). Organising, coding and analysing qualitative data. In N. Clifford, M. Cope, T. Gillespie, & S. French (Eds.), *Key methods in geography* (3rd ed., pp. 647–664). London, UK: Sage.
- Coulson, H., & Sonnino, R. (2019). Re-scaling the politics of food: Place-based urban food governance in the UK. *Geoforum*, 98, 170–179. <https://doi.org/10.1016/j.geoforum.2018.11.010>
- de Bakker, E., Dagevos, H. (2012). Reducing Meat Consumption in Today’s Consumer Society: Questioning the Citizen-Consumer Gap. *Journal of Agricultural and Environmental Ethics*, 25, (6), 877–894. <http://dx.doi.org/10.1007/s10806-011-9345-z>.
- Food Futures Manchester and Manchester City Council (n.d.). Sustainable Food Cities: Manchester. Bronze Award Application. [https://www.sustainablefoodplaces.org/Portals/4/Documents/SFC\\_Manchester\\_Application\\_FINAL\\_PDF.pdf](https://www.sustainablefoodplaces.org/Portals/4/Documents/SFC_Manchester_Application_FINAL_PDF.pdf). Accessed July 4, 2021.
- Foucault, M. (1990). *The history of sexuality, volume 1: An introduction*. Harmondsworth, UK: Penguin. Originally published in 1976.
- Foucault, M. (2007). *Security, territory, population. Lectures at the Collège de France 1977–1978*. Basingstoke, UK: Palgrave Macmillan.
- Fourat, E., & Lepiller, O. (2017). Forms of food transition: Sociocultural factors limiting the diets’ animalisation in France and India. *Sociologia Ruralis*, 57, 41–63. <https://doi.org/10.1111/soru.12114>
- Goodman, M., Johnston, J., & Cairns, K. (2017). Food, media and space: The mediated biopolitics of eating. *Geoforum*, 84, 161–168. <https://doi.org/10.1016/j.geoforum.2017.06.017>
- Good Food Oxford (n.d.). The Oxford Good Food Charter. <https://www.goodfoodoxford.org>. Accessed January 12, 2017.

- Greenhalgh, S. (2012). Weighty subjects: The biopolitics of the U.S. war on fat. *American Ethnologist*, 39(3), 471–487. <https://doi.org/10.1111/j.1548-1425.2012.01375.x>
- Guthman, J. (2009). Teaching the politics of obesity: Insights into neoliberal embodiment and contemporary biopolitics. *Antipode*, 41, 1110–1133. <https://doi.org/10.1111/j.1467-8330.2009.00707.x>
- Holloway, L., & Morris, C. (2012). Contesting genetic knowledge-practices in livestock breeding: Biopower, biosocial collectivities, and heterogeneous resistances. *Environment and Planning D: Society and Space*, 30, 60–77. <https://doi.org/10.1068/d2911>
- Huan-Niemi, E., Kaljonen, M., Knuutila, M., Niemi, J., & Saarinen, M. (2020). The impacts of dietary change in Finland: Food systems approach. *Agriculture and Food Science*, 29, 372–382. <https://doi.org/10.23986/afsci.95282>
- Kaljonen, M., Peltola, T., Salo, M., & Furman, E. (2019). Attentive, speculative experimental research for sustainability transitions: An exploration in sustainable eating. *Journal of Cleaner Production*, 206, 365–373. <https://doi.org/10.1016/j.jclepro.2018.09.206>
- Kaljonen, M., Salo, M., Lyytimäki, J., & Furman, E. (2020). From isolated labels and nudges to sustained tinkering: Assessing long-term changes in sustainable eating at a lunch restaurant. *British Food Journal*, 122, 3313–3329. <https://doi.org/10.1108/BFJ-10-2019-0816>
- Kurtz, H. (2015). Scaling food sovereignty: Biopolitics and the struggle for local control of farm food in rural Maine. *Annals of the Association of American Geographers*, 105, 859–873. <https://doi.org/10.1080/00045608.2015.1022127>
- Laestadius, L., Neff, R., Barry, C., & Frattaroli, S. (2014). “We don’t tell people what to do”: An examination of the factors influencing NGO decisions to campaign for reduced meat consumption in light of climate change. *Global Environmental Change*, 29, 32–40. <https://doi.org/10.1016/j.gloenvcha.2014.08.001>
- Lambeth Food Partnership (2014). *Draft Lambeth Food Strategy*, Lambeth, UK: The Lambeth Food Partnership, Yasmin Mohsin, and the Public Health and Sustainability teams from Lambeth Local Authority.
- Law, J. (1994). *Organizing modernity*. Oxford, UK: Blackwell.
- Lombardini, C., & Lankoski, L. (2013). Forced choice restriction in promoting sustainable food consumption: Intended and unintended effects of the mandatory vegetarian day in Helsinki schools. *Journal of Consumer Policy*, 36, 159–178. <https://doi.org/10.1007/s10603-013-9221-5>
- London Development Agency (2006). *Healthy and Sustainable Food for London: The Mayor's Food Strategy*, London: London Development Agency.
- Lonkila, A., & Kaljonen, M. (2018). Animal bodies multiple: Practising genomic knowledge on dairy farm. *Geoforum*, 96, 198–206. <https://doi.org/10.1016/j.geoforum.2018.08.010>
- Mansfield, B. (2012). Gendered biopolitics of public health: Regulation and discipline in seafood consumption advisories. *Environment and Planning D: Society and Space*, 30, 588–602. <https://doi.org/10.1068/d11110>
- Marks, J. (2006). Biopolitics. *Theory, Culture and Society*, 23, 333–335. <https://doi.org/10.1177/0263276406023002152>
- Flynn, A., Harrison, M., Marsden, T. (2000). *Consuming interests: The social provision of foods*. London, UK: UCL Press.
- McDonald, B. (2000). “Once you know something, you can’t not know it” – An empirical look at becoming vegan. *Society and Animals*, 8, 1–23. <https://doi.org/10.1163/156853000X00011>
- Mol, A. (2002). *The body multiple: Ontology in medical practice*. Durham, NC: Duke University Press.
- Mol, A. (2013). Mind your plate! The ontornorms of Dutch dieting. *Social Studies of Science*, 43, 379–396. <https://doi.org/10.1177/0306312712456948>
- Moragues-Faus, A., & Sonnino, R. (2018). Re-assembling sustainable food cities: An exploration of translocal governance and its multiple agencies. *Urban Studies*, 56, 778–794. <https://doi.org/10.1177/0042098018763038>
- Morris, C. (2019). ‘Taking the politics out of broccoli’: Debating (de)meatification in UK national and regional newspaper coverage of the Meat Free Mondays Campaign. *Sociologia Ruralis*, 58, 433–452. <https://doi.org/10.1111/soru.12163>
- Morris, C., & Kaljonen, M. (2019). Urban food governance and the de-animalisation of the food system. In E. Vinnari, & M. Vinnari (Eds.), *Sustainable governance and management of food systems: Ethical perspectives* (pp. 169–175). Wageningen, the Netherlands: Wageningen Academic Publishers.
- Morris, C., Kaljonen, M., Aavik, K., Balázs, B., Cole, M., Coles, B., Efstathiou, S., Fallon, T., Foden, M., Giraud, E. H., Goodman, M., Kershaw, E. H., Helliwell, R., Hobson-West, P., ... White, R. (2021). Priorities for social science and humanities research on the challenges of moving beyond animal-based food systems. *Humanities and Social Sciences Communications*, 8, 38. <https://doi.org/10.1057/s41599-021-00714-z>
- Morris, C., Kirwan, J., & Lally, R. (2014). Less Meat Initiatives: an initial exploration of a diet-focused social innovation in transitions to a more sustainable regime of meat provisioning. *International Journal of the Sociology of Agriculture and Food*, 21, 189–208. <https://doi.org/10.48416/ijaf.v21i2.148>
- Mylan, J., Morris, C., Geels, F., & Beech, E. (2019). Rage against the regime: Niche-regime interactions in the societal embedding of plant-based milk. *Environmental Innovations and Societal Transitions*, 31, 233–247. <https://doi.org/10.1016/j.eist.2018.11.001>
- Nally, D. (2011). The biopolitics of food provisioning. *Transactions of the Institute of British Geographers*, 36, 37–53. <https://doi.org/10.1111/j.1475-5661.2010.00413.x>
- Peltola, T., Kaljonen, M., Kettunen, M. (2020). Embodied public experiments on sustainable eating: demonstrating alternative proteins in Finnish schools. *Sustainability: Science, Practice and Policy*, 16, (1), 184–196. <http://dx.doi.org/10.1080/15487733.2020.1789268>.
- Powell, D. (2014). Childhood obesity, corporate philanthropy and the creeping privatisation of health education. *Critical Public Health*, 24, 226–238. <https://doi.org/10.1080/09581596.2013.846465>
- Rabinow, P., & Rose, N. (2006). Biopower today. *Biosocieties*, 1, 195–217. <https://doi.org/10.1017/S1745855206040014>
- Santo, R., & Moragues-Faus, A. (2019). Towards a trans-local food governance: Exploring the transformative capacity of food policy assemblages in the US and UK. *Geoforum*, 98, 75–87. <https://doi.org/10.1016/j.geoforum.2018.10.002>

- Scarborough, P., Appleby, P. N., Mizdrak, A., Briggs, A. D. M., Travis, R. C., Bradbury, K. E., & Key, T. J. (2014). Dietary greenhouse gas emissions of meat eaters, fish-eaters, vegetarians and vegans in the UK. *Climatic Change*, *125*, 179–192. <https://doi.org/10.1007/s10584-014-1169-1>
- Sexton, A. E. (2018). Eating for the post-Anthropocene: Alternative proteins and the biopolitics of edibility. *Transactions of the Institute of British Geographers*, *43*, 586–600. <https://doi.org/10.1111/tran.12253>
- Sexton, A. E., Garnett, T., & Lorimer, J. (2019). Framing the future of food: The contested promises of alternative proteins. *Environment & Planning E*, *2*, 47–72. <https://doi.org/10.1177/2514848619827009>
- Singer, R. (2017). Neoliberal backgrounding, the Meatless Monday campaign, and the rhetorical intersections of food, nature, and cultural Identity. *Communication, Culture & Critique*, *10*, 344–364. <https://doi.org/10.1111/cccr.12155>
- Springmann, M., Clark, M., Mason-D’Croz, D., Wiebe, K., Bodirsky, B. L., Lassaletta, L., de Vries, W., Vermeulen, S. J., Herrero, M., Carlson, K. M., Jonell, M., Troell, M., DeClerck, F., Gordon, L. J., ... Willett, W. (2018). Options for keeping the food system within environmental limits. *Nature*, *562*, 519–525. <https://doi.org/10.1038/s41586-018-0594-0>
- Stehfest, E., van Bouwman, L., den Vuuren, D., Elzen, M., Eickhout, B., & Kabat, P. (2009). Climate benefits of changing diet. *Climatic Change*, *95*, 83–102. <https://doi.org/10.1007/s10584-008-9534-6>
- Swinburn, B. A., Kraak, V. I., Allender, S., Atkins, V. J., Baker, P. I., Bogard, J. R., Brinsden, H., Calvillo, A., De Schutter, O., Devarajan, R., Ezzati, M., Friel, S., Goenka, S., Hammond, R. A., ... Dietz, W. H. (2019). The global syndemic of obesity, undernutrition, and climate change: The Lancet Commission report. *The Lancet*, *393*, 791–846. [https://doi.org/10.1016/S0140-6736\(18\)32822-8](https://doi.org/10.1016/S0140-6736(18)32822-8)
- Taylor, C. (2010). Foucault and the ethics of eating. *Foucault Studies*, *9*, 71–88. <https://doi.org/10.22439/fs.v0i9.3060>
- Twine, R. (2017). A Practice Theory framework for understanding vegan transition. *Animal Studies Journal*, *6*, 192–224. <https://ro.uow.edu.au/asj/vol6/iss2/12>
- Twine, R. (2018). Materially constituting a sustainable food transition: The case of vegan eating practice. *Sociology*, *52*, 166–181. <https://doi.org/10.1177/0038038517726647>
- Tziva, M., Negro, S., Kalfagianni, A., & Hekkert, M. (2020). Understanding the protein transition: The rise of plant-based meat substitutes. *Environmental Innovation and Societal Transitions*, *35*, 217–231. <https://doi.org/10.1016/j.eist.2019.09.004>
- Vinnari, M., & Vinnari, E. (2014). A framework for sustainability transition: The case of plant-based diets. *Journal of Agricultural & Environmental Ethics*, *27*, 369–396. <https://doi.org/10.1007/s10806-013-9468-5>
- Wheeler, B. (2018, October 11). Are we living in a ‘nanny state’? *BBC News Online*.
- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., Wood, A., Jonell, M., Clark, M., Gordon, L. J., Fanzo, J., ... Murray, C. J. L. (2019). Food in the anthropocene: The EAT–Lancet commission on healthy diets from sustainable food systems. *The Lancet*, *393*, 447–492. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)

**How to cite this article:** Morris C, Kaljonen M, Hadley Kershaw E. Governing plant-centred eating at the urban scale in the UK: The Sustainable Food Cities network and the reframing of dietary biopower. *Geogr J.* 2021;00:1–12. <https://doi.org/10.1111/geoj.12388>