



Agenda-setting in local food environment policy: A comparative Multiple Streams Analysis of the City Deal network in the Netherlands

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ABSTRACT

Purpose: Little is known about the processes through which local food environment policies gain a place on municipal policy agendas. This study examines why some municipalities within the Dutch City Deal: *Healthy and Sustainable Food Environment* succeed in placing food strategies and food environmental zoning policies on the agenda.

Methods: Guided by Kingdon's Multiple Streams Framework (MSF) and informed by interviews with 14 policymakers and policy documents from ten municipalities, we conducted a qualitative comparative case study focusing on agenda-setting windows related to food strategies and zoning policies across ten Dutch municipalities.

Results: Six municipalities adopted local food strategies, framing obesity, health inequalities, unsustainable food systems, and economic concerns as public policy problems linked to the food environment. Agenda-setting was enabled by committed politicians, alignment with broader health or sustainability agendas, and consistent views on the government's role. Four municipalities without local food strategies lacked clear framing or leadership and viewed food policy as politically sensitive. Framing fast-food dominance as a threat to health, liveability, and local businesses enabled zoning policy agenda-setting in four municipalities, while legal uncertainty and paternalism concerns constrained it elsewhere.

Conclusions: Successful agenda-setting of municipal food policies depended on strategic framing, linking food environments to broader societal goals and local priorities. Institutionalising ambitions in formal visions and structures reduced reliance on individual policy entrepreneurs. Trans-local policy networks such as the City Deal can strengthen local capacity, learning, and political commitment. Limited municipal resources, concerns about paternalism, and limited guidance for zoning policies constrained agenda-setting.

1. Introduction

Food environments encompass the collective physical, economic, policy, and sociocultural surroundings, opportunities, and conditions that shape people's food and beverage choices and nutritional status. These environments are increasingly dominated by cheap, widely available and heavily marketed unhealthy foods (Boswell & Kober, 2016; Monteiro et al., 2025; Swinburn et al., 2011, 2013). Transforming

unhealthy food environments is therefore imperative for public health (Scrinis et al., 2025; Swinburn et al., 2019). Local governments are well-positioned to influence food environments through their proximity to communities, knowledge of local contexts, and use of tools such as public procurement and urban planning, while coordinated action across local governments can also influence broader market dynamics (Baker et al., 2025; Moragues-Faus & Carroll, 2018; Sonnino et al., 2019).

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A common entry point for municipal food governance is the development of a local food strategy: an overarching framework for collaboration within and beyond government sectors on food policy (Candel, 2020). While their design varies between municipalities, most rely on soft and voluntary instruments, such as public-private partnerships, awareness campaigns and subsidies for local food-related initiatives. Local statutory regulations that impact affordability, availability and marketing exposure of unhealthy foods remain rare (Candel, 2020). Zoning policies that restrict new unhealthy food outlets are subject to local experimentation in the UK, US and Canada (Brown et al., 2022; Nykiforuk et al., 2018; Rahilly et al., 2024; Sturm & Hattori, 2015). These experiments often face political resistance, which is rooted in framings of food choice as individual responsibility (Chambers & Traill, 2011), limited trust in local authorities (van Meurs et al., 2022), scepticism about the evidence base (Borland, 2025; Sturm & Hattori, 2015), and concerns about paternalism or free-market principles (Barnhill & Bonotti, 2023; Karreman et al., 2023). Consequently, local politicians are often reluctant to act (Boswell, 2014; Moodie et al., 2013).

Research shows that this political resistance can be mitigated when food policies are linked to broader social, economic or sustainability goals, developed through participatory approaches and in wider alliances of policymakers, civil society, local businesses, and citizens (Keeble et al., 2019, 2021; Stockmann, 2012; Treutwein & Langen, 2021). Weak long-term direction, limited learning opportunities, or narrow stakeholder input can constrain agenda-setting, whereas strong leadership, external events, broad consultation, and multi-actor support can elevate food as an important municipal issue (Kugelberg et al., 2021; Minotti et al., 2022). Whether local governments develop municipal food governance and policies thus depends on how these issues gain prominence on the local political agenda (Kingdon, 2010).

In the Netherlands, the *City Deal: Healthy and Sustainable Food Environment* was launched in 2021. The City Deal network is an example of a *trans*-local food policy network aimed at fostering collaborative governance to improve local food systems (Sibbing et al., 2021). Such networks connect local, regional and national policymakers, community representatives, and representatives from food initiatives or organisations, typically within one country, to facilitate peer learning, build capacity, support research and evaluation, and foster collective action (Santo & Moragues-Faus, 2019; Steyaert et al., 2023). The City Deal network has had a particular interest in the use of zoning policies to restrict new unhealthy outlets (hereafter ‘zoning policies’), as a national law that would give local governments this power was under development at the time of writing (Ministry of Health, 2025). Previous studies of the City Deal network have examined its composition, governance, and advocacy activities, showing the network is dominated by civil servants while NGOs, businesses, and elected officials are less involved (Sibbing et al., 2021; Steyaert et al., 2023). Through this focus on the network’s structure, however, it remains largely unexplored how food policy issues gain political attention in municipalities that are part of the City Deal network.

1.1. Conceptual framework: Multiple Streams Framework

We aimed to compare how municipalities within the City Deal network did or did not succeed in elevating food strategies and zoning policies to their policy agendas. Our analysis was guided by the Multiple Streams Framework (MSF), a well-established model from the political sciences that sets itself apart from other policy process theories by positioning policy agenda-setting as the main dependent variable (Hofer, 2022; Treutwein & Langen, 2021). The MSF assumes that three separate processes, or ‘streams,’ are constantly in motion: the problem stream (how issues are recognized as problems), the policy stream (the flow of potential solutions), and the political stream (the political climate and power dynamics). When these independently operating streams align (referred to as ‘coupling’), ‘windows of opportunity’ for agenda change open (Hofer, 2022; Kingdon, 2010). ‘Policy

entrepreneurs’ put in effort to couple the streams by investing time, energy, and resources to promote specific issues, specify solutions and amass political support. Through its focus on policy agenda-setting, the MSF is well-equipped for comparing how local food policies overcome contested problem definitions in the problem stream and challenges with cross-sectoral collaboration in the policy stream, which have been flagged as core difficulties in local food policy (Herweg et al., 2018; Parsons et al., 2019).

Previous research applying the MSF has generated important insights into agenda-setting in local food governance. Freudenberg & Atkinson show how mayoral elections can function as policy windows, highlighting the role of political timing (Freudenberg & Atkinson, 2015). Quinn and colleagues show how voluntary, evidence-based instruments can create openings for policy change when formal regulation is infeasible (Quinn et al., 2015). A study about a Dutch municipality illustrates how food policy can become institutionalised while remaining vulnerable to political shifts (Sibbing & Candel, 2021). While these single-case studies provide insights about how streams couple in a particular setting, they offer limited insight into why some municipalities succeed in placing food policy on their agendas while others do not.

1.2. Study aim

The City Deal network enables a comparative case design for systematic examination of enabling and constraining conditions across municipalities within the same context, which allows for the identification of cross-case patterns and theoretically replicable mechanisms on agenda-setting (Cairney & Jones, 2016; Green et al., 2022; Zohnhöfer et al., 2022).

Therefore, this study examined the research question: “*Why do some municipalities within the Dutch City Deal network succeed in placing food strategies and zoning policies on the agenda?*” We found that agenda-setting was facilitated by framing food environments as local public problems, and supported by dedicated political leadership and local institutions as well as participation in the City Deal network. Uncertainty about the policies municipalities were allowed to implement, paternalism-related framing, and limited administrative capacity constrained agenda-setting.

2. Methods

2.1. The City Deal “Healthy and Sustainable Food Environment”

In 2017, the Dutch government launched the City Deal “Food in the Urban Agenda” to strengthen collaboration between national authorities, municipalities, research institutes, businesses, and societal organisations in improving the food system. Building on this, the City Deal “Healthy and Sustainable Food Environment” (henceforth “City Deal”) was established in 2021, involving thirteen cities, three ministries, and five knowledge institutes. Its ambition is that by 2030, the food supply in socioeconomically deprived neighbourhoods, around schools, and in public buildings will primarily consist of healthy and sustainable options. Participation in the network requires political commitment, administrative input, and financial contribution, in exchange for access to expertise, joint projects, and advocacy platforms.

2.2. Study setting

This study was conducted in the Netherlands, a high-income country where the national government sets the legal and strategic framework for public health, while municipalities have considerable autonomy in implementing policies and shaping local strategies (Kroneman et al., 2016). We included ten of the thirteen Dutch municipalities in the City Deal network. One municipality reported no longer being substantively involved, and two joined only after our data collection had finished. Table 1 provides an overview of the political orientation, urbanity, City

Table 1
Included municipalities in the study.

Municipality	Political orientation of council, based on municipal council election 2022	Degree of urbanisation (CBS, 2025)*	Start membership City Deal network	Overweight percentage among adults (18+) (RIVM, 2024)	Unemployment as % of total labour force (CBS, 2024)
1	Left-leaning, progressive coalition	Extremely urbanised	2021	40–45% overweight, 10–12% obesity	5%
2	Center-right coalition, including local party	Moderate urbanised	2021	45–50% overweight, 12–14% obesity	3%
3		Extremely urbanised	2024	35–40% overweight, 10–12% obesity	5%
4	Left-leaning, progressive coalition	Moderate urbanised	2021	35–40% overweight, 8–10% obesity	4%
5	Center-left coalition, including local party	Extremely urbanised	2021	55–60% overweight, 18–20% obesity	4%
6	Centrist coalition, including local party	Strongly urbanised	2024	55–60% overweight, 20–22% obesity	4%
7	Centre-right, liberal conservative coalition, including local party	Extremely urbanised	2021	50–55% overweight, 16–18% obesity	5%
8	Centrist coalition	Extremely urbanised	2023	50–55% overweight, 16–18% obesity	4%
9	Center-left coalition, including local party	Strongly urbanised	2021	40–45% overweight, 12–14% obesity	4%
10	Left-leaning, progressive coalition, including local party	Extremely urbanised	2021	35–40% overweight, 10–12% obesity	4%

*Statistics Netherlands classifies levels of urbanisation into five categories: extremely urbanised ($\geq 2,500$ addresses per km²); strongly urbanised: 1,500–2,500 addresses per km²; moderately urbanised: 1,000–1,500 addresses per km²; hardly urbanised: 500–1,000 addresses per km²; not urbanised: < 500 addresses per km²).

Deal membership, adult overweight prevalence, and unemployment rate of the ten municipalities involved in this study.

2.3. Study design

This study adopts a qualitative comparative case study design, enabling in-depth exploration of local food policy agenda-setting through systematic comparison of conditions shaping agenda-setting across different municipal contexts (Green et al., 2022; Yin, 2018). The selected municipalities all voluntarily joined the City Deal and therefore had an explicit interest in food policy, posing rich settings for real-world analysis of local food policy agenda-setting processes.

2.4. Sampling procedure and data collection

Semi-structured interviews were conducted between April and November 2024 to explore how Dutch municipalities set local food environment policy agendas, involving fourteen representatives from ten municipalities. The interview guide (Supplementary file 1) was based on a standardized template for interview questions for retrospective analysis of policy processes with MSF (Zohlnhöfer et al., 2022), and included questions on the problem, policy, and political streams, the actions of policy entrepreneurs, the role of the network, and specific food policies. We contacted all municipalities participating in the City Deal via existing contacts or the City Deal programme manager. In the Netherlands, municipal policy making involves elected city council, aldermen, and civil servants. The municipal council votes on policies, while aldermen are responsible for developing and implementing them. Civil servants support this process through technical and administrative input. Fourteen civil servants within City Deal municipalities were interviewed. Six of the fourteen respondents worked in public health or healthy living departments, including policy advisors health ($n = 4$), a policy advisor healthy living environment ($n = 1$), and a team lead healthy living department ($n = 1$). Another six respondents held positions focused specifically on food policy, including policy advisors food/food environment ($n = 5$) and a programme manager food ($n = 1$). In addition, one policy advisor strategy and public affairs ($n = 1$) and one policy advisor retail and spatial economy ($n = 1$) were included. Although these last two were not directly connected to the City Deal

network, they were recommended in earlier interviews because of their role in shaping food-environment policies. At the time of the interviews, most of the respondents had between 2 and 12 years of experience in their current role or in a closely related position. All interviews were conducted with two team members, either in person or via Microsoft Teams and lasted between 30–75 min. The interviews were recorded using a protected voice-recorder from Amsterdam UMC. Prior to each interview, respondents received an information letter and a consent form.

To contextualize the findings from the municipal interviews, we held five additional meetings with key informants from organisations and ministries involved in the City Deal network operating outside local government: Flevo Campus, a public–private innovation hub connecting policy, research, and practice around healthy and sustainable food systems; JOGG, a non-governmental organisation supporting municipalities and the national government in promoting healthier lifestyles; the Netherlands Nutrition Centre, a government-funded body providing science-based information and education on food; and the Ministries of Agriculture, Nature and Food Quality (LNV) and Health, Welfare and Sport (VWS). These conversations intended to deepen our understanding of the broader policy context and ongoing collaborations within the network.

To triangulate and supplement information provided in the interviews, we also consulted 34 supplemental data sources that informed the agenda-setting process, including policy documents, council meeting records, and local government programmes, selected based on interviewee recommendations. The study was conducted in accordance with the Declaration of Helsinki and approved by the institutional Medical Ethics Committee of the Amsterdam UMC (Approval code: 2024.0255). The interviews were transcribed, and the recordings were deleted after transcription.

2.5. Data analysis

Herweg et al. (2018) developed hypotheses and operational indicators for each of the three streams of the MSF, the actions of policy and political entrepreneurs and the opening of agenda and decision windows (Herweg et al., 2018), which we tailored to the Dutch local food governance context and the available data (Supplementary file 2).

We assessed whether interview and document data supported, contradicted, or were inconclusive for each hypothesis on food strategies and zoning policies in each municipality. Table 2 presents the MSF hypotheses that guided our analyses.

First, we carefully read the interview transcripts and coded them in accordance with the main MSF elements: the problem, policy, and political streams, as well as policy and political entrepreneurs and windows of opportunity. This step provided an initial organisation of the data according to components of the MSF. The included documents were coded in the same way, using a codebook based on the MSF (Supplementary file 3). All coding was conducted in MAXQDA (version 22.6.1) by two team members (FtE & MG). Second, three team members (FtE, JV & LH) systematically assessed for each municipality the extent to which the MSF hypotheses (Table 2) regarding the readiness of policy windows and stream coupling were supported or rejected. Both interview data and information from the selected policy documents informed this assessment. Third, based on step 2, municipalities were classified according to whether they did or did not adopt a food strategy, and whether they were or were not actively piloting or exploring zoning policies. Fourth, we compared municipalities within and across the categories to identify how and why agenda windows opened, guided by the hypothesis for the overarching hypothesis of the framework (Table 2). This analytical step, conducted collaboratively with the full research team, aimed to identify the enabling and constraining processes through which the core agenda-setting hypothesis is expressed in the context of local food strategies and zoning policies across the ten municipalities.

3. Results

3.1. Local food strategies

Six of the ten municipalities formally adopted a local food strategy between 2012 and 2023. No food strategy was adopted by the other four

Table 2

MSF hypotheses in the context of Dutch municipalities. Based on Herweg, Zahariadis, and Zohlnhöfer (2018, 30).

Hypotheses for the framework's key elements	
Problem stream	A problem broker is likely to be more successful framing a condition as a problem the more an indicator changes to the negative, the more harmful a focusing event is, and the more definite a municipal programme does not work as expected.
Political stream	Policy proposals that fit the ideology of the municipal governing majority have a better chance of gaining agenda status.
Policy stream	If a policy proposal does not fulfil the selection criteria, the likelihood of gaining agenda status, and thus being coupled, decreases significantly.
Policy window	The policy window opens in the problem stream due to at least one of the following changes: change of indicators, focusing events, or feedback. The more a condition puts re-election at risk in the municipal elections, the more likely it is to open a policy window in the problem stream. The policy window opens in the political stream due to at least one of the following changes: changes in the municipal council majority, the formation of a new municipal executive, or shifts in the public mood.
Policy entrepreneur	The policy entrepreneur is more likely to successfully couple the streams during an open policy window, (a) the more access to core decision-makers she has and (b) the more persistent she is.
Hypothesis for the framework as a whole	
Agenda change	Agenda change becomes more likely if (a) a policy window opens, (b) the streams are ready for coupling, and (c) a policy entrepreneur promotes the agenda change.

municipalities. Table 3 summarises the processes that help explain these differences.

3.1.1. A policy window in the problem stream

Changing indicators, notably rising obesity rates and healthcare costs, health inequalities, and unsustainable food systems served as key indicators for framing the food environment as a public policy problem. In one municipality, improving the food environment was clearly framed as an economic opportunity: “We look at the health component and the economic component [...] for example creating a healthy business climate for companies working on food and food innovation [...] So that economic component is just as important to us as the health component.” (Respondent Municipality 2).

In municipalities without a food strategy, attention was still paid to specific changing indicators signalling whether a situation was improving or worsening, but the problems were less clearly defined and less strongly framed as public policy issues. In these municipalities, the food environment was largely absent from local policy documents. As one respondent recalled: “We are still struggling with our municipal role [...] there is no full agreement internally [...] often reasoned from outdated ideas about ‘free choice’ and paternalism.” (Respondent Municipality 8).

Changing indicators were elevated by a focusing event in three municipalities. In one such municipality, food environment policy reached the agenda due to an exposition in 2022 about sustainability and urban food challenges. In another, inspiration from an invited architect and the city’s designation as Dutch “Capital of Taste” in 2011 sparked enthusiasm that culminated in a municipal food vision in 2012.

Table 3

Manifestation of the core agenda-setting hypothesis across municipalities for food strategies (Herweg et al., 2018).

	Enabling processes	Constraining processes
Policy window opens	- Linking public problems (e.g., obesity, local economy) to the food environment - Policy feedback and focusing events - Political salience via dedicated alderman - Alignment with dominant political values - Stable political views on the municipal role - New political actors, scientific reports, media attention creating momentum	- Problems not linked to food - Food-related interventions not seen as municipal responsibility - No urgency or focusing events - Perceived political risks - Hesitancy over controversy or “free choice” - Misalignment with political orientations
Streams ready for coupling	- Food-related aldermen creating political pressure - Existing teams, budgets, structures for food policy - Institutionalised visions and strategies ensuring coherence - Cross-departmental coordination - Political entrepreneurs aligning goals	- Fragmented initiatives; concerns about paternalism - Competing priorities - No overarching vision or central coordinator - Limited capacity to engage in City Deal - Limited added value of City Deal where objectives were not clearly defined - Public debate not translating into political traction - Absence of political entrepreneurs
Policy entrepreneurs promoting agenda change	- Entrepreneurs with expertise and capacity - Committed entrepreneurs acting as bridge-builder - Institutionalised ambitions reducing reliance on individuals	- Strong entrepreneurs absent or lacking access - Fragmented or short-lived efforts

In a third municipality, a 2015 council motion requiring school garden programs drew attention to sustainable and healthy diets and the food environment. No focusing event was mentioned by respondents from the municipalities without a food strategy.

In two municipalities, the perceived failure of earlier obesity prevention programmes in combination with changing indicators opened a policy window. In one, a former alderman highlighted the concern of rising child obesity despite existing policies. In another, a respondent noted that awareness campaigns often failed to change eating habits, adding: *“You achieve more just by putting the apples out.”* (Respondent Municipality 4). In one of the municipalities without a food strategy, the limitations of existing programmes were apparent as well. A motion revealed that despite commitments under the City Deal, the municipality’s health policy lacked concrete actions to improve the food environment. The motion was ultimately rejected.

In municipalities with a food strategy, political salience of food depended largely on the political leadership of a dedicated alderman. In four of the six municipalities with a food strategy, such a position existed, with one of them appointed the Netherlands’ first “food alderman” in 2015. Municipalities without a food strategy either lacked a dedicated alderman or explicitly signalled that food could become politically problematic if given too much attention: *[a completed food strategy] was ultimately blocked in a directors’ meeting. They did support the strategy as a basis, so to speak, but they felt it was too close to the elections and did not want to adopt any new visions at that point* (Respondent Municipality 7).

3.1.2. Selection criteria in the policy stream

Across municipalities with food strategies, technical feasibility, value acceptability, and existing policy structures were particularly influential during agenda-setting. Strategies embedded within broader policy agendas were seen as more feasible. For instance, food policy was incorporated into the sustainability agenda of Municipality 5, which provided political backing and continuity for developing a local food strategy. Although the responsible policy officers changed over time, technical feasibility was supported by dedicated staff, budgets, and pre-existing structures. One respondent explained: *“There was a lot of energy both at the political level and within the management team. That really helped to build momentum. A clear vision emerged from that process, and as a result, food became part of a councillor’s portfolio, a dedicated team was established, a team working solely on this topic, and there was funding available. Those three elements together made it possible to translate the vision into an implementation plan.”* (Respondent Municipality 2).

In municipalities without a food strategy, unclear responsibilities, fragmented initiatives, and limited institutional embeddedness undermined technical feasibility of policies. One respondent highlighted: *“Who’s going to take up that responsibility? Ownership is still quite complicated.”* (Respondent Municipality 8). Also, participation in the City Deal yielded benefits when municipalities had sufficient staff capacity to actively engage. One respondent explicitly noted that *“you only benefit from it if you have the time to invest in it”* (Respondent Municipality 3), referring to the addition of an extra staff member as a precondition for meaningful participation. This was further illustrated by the respondent of Municipality 9: *“We simply don’t have the time and the capacity.”* Objectives around food were also less clearly embedded internally in this municipality, which reinforced the limited perceived value of participation. The respondent from Municipality 9 also explained, the City Deal remained *“still quite abstract”* and it was *“not very clear what exactly we could bring and what we could gain”*.

In several municipalities, concerns about paternalism and personal freedom reinforced a preference for individual-level interventions and constrained food environment policies. In one municipality, competing policy priorities reduced the perceived urgency of food-related issues: *“When you look at the municipality as a whole, we also have challenges related to affordable housing, migration flows, and the larger societal divides we see, including rising crime [...] when it comes to food, not much is really*

going wrong, although there is certainly room for improvement.” (Respondent Municipality 10).

3.1.3. A policy window in the political stream

In all municipalities with a food strategy, respondents emphasized that political stability and shared and consistent views on the government’s role facilitated agenda-setting: *“Parties have their worldview, including how they see the role of government. But there was no big rupture [within the council] over time, and that was very helpful.”* (Respondent Municipality 1).

By contrast, in municipalities without a food strategy, ideological contestation and political risk perceptions were constraining. In one case, politicians hesitated to adopt a food strategy for fear that it would expose ideological divisions, particularly around personal freedom and the role of government: *“...the preference is for the path of persuasion and cooperation and information [...] it still doesn’t quite sink in what the impact is of the food environment on the choices people make. There’s a very rational view of human behaviour behind it.”* (Respondent Municipality 7).

In another municipality, the respondent noted that the “left-leaning” council was reluctant to act, which they attributed to uncertainty about the available policy instruments: *“I notice that even here, the college doesn’t really want to get too involved in the healthy food environment. I think that has a lot to do with the uncertainty about what tools you actually have.”* (Respondent Municipality 9).

Several respondents noted that growing public concern, reflected in media attention, scientific reports and public debate, contributed to placing food environment policies on the political agenda. This alone was insufficient, as similar developments occurred in municipalities without a food strategy. What proved decisive in municipalities with a food strategy was the appointment of political actors with a clear mandate and sustained commitment. For instance, in one city, an alderman responsible for the protein transition in 2022 leveraged existing public attention to place plant-based food at the core of the agenda, integrated climate, circular economy, and spatial goals. Other municipalities demonstrated similar bundling, integrating climate, food waste, inequality, or aligning health and sustainability objectives under dedicated political leadership. Respondents highlighted that continuity and long-standing political ambition maintained food environment policies on the agenda.

3.1.4. Policy entrepreneurs to couple the streams

In five of the six municipalities with a food strategy, respondents identified themselves or colleagues as policy entrepreneurs driving the strategy, often supported by the City Deal network. They played key roles in sustaining momentum and securing resources: *“Our department head has been very influential as she has a lot of knowledge on the topic and deliberately allocates capacity to these kinds of efforts”* (Respondent, Municipality 1). In this case, the policy entrepreneur advised the aldermen by drawing on scientific evidence and practical experience, while strategically prioritizing environmental interventions over short-term programmes.

In another municipality, the policy entrepreneur’s defining characteristic was the ability to act as a bridge-builder by reframing food policy so it aligned with colleagues’ objectives and steadily building coalitions around shared interests: *“Almost every theme can be linked in some way [...] even with the alderman for housing we ended up talking about community gardens.”* (Respondent, Municipality 4).

In two municipalities, personal commitment and intrinsic motivation were also highlighted as defining the policy entrepreneurs, while noting the importance of institutionalizing ambitions to avoid overdependence on individual motivation: *“My personal pitfall is my intrinsic motivation. Fortunately, it is also included in the coalition agreement, the spatial vision, the food vision. If that weren’t the case, I would collapse under the weight of being the only individual pushing this.”* (Respondent, Municipality 2).

In contrast, municipalities without a food strategy lacked strong policy entrepreneurs with access, authority, or networks to influence

decision-makers. Efforts to mobilize support remained fragmented and were not backed by political leadership.

3.2. Local zoning policies

None of the ten municipalities formally adopted zoning policies specifically aimed at restricting new unhealthy food outlets. Nevertheless, four municipalities were developing or piloting regulatory measures. These include the introduction of zoning and advertising policies, as well as proposals for location-based restrictions near schools and hospitals and the adoption of local product ordinances. These four municipalities are among those that have a food strategy.

In the six other municipalities, no relevant measures have been piloted, developed or implemented. Table 4 summarises the enabling and constraining processes that help explain these differences in policy progress by showing how the core agenda-setting hypothesis is operationalised in the context of local zoning policies.

3.2.1. A policy window in the problem stream

In municipalities in which zoning policies were piloted or explored, policymakers acknowledged the connection between unhealthy food environments and rising obesity and health inequalities. In some municipalities, the framing explicitly connected differences in health outcomes between population groups to food environments, particularly near schools and through food marketing. In two municipalities, the stimulation of the local economy was closely linked to zoning measures targeting the food environment. In one of these municipalities, challenges related to the current food environment were framed within a wider vision of urban development, local agriculture, and the regional economy. The respondent from Municipality 5 explained that the focus shifted towards building a stronger local food system by strengthening local producers' visibility and presence in the city.

In another municipality, a civil servant, supported by the alderman for economic affairs, framed the rise of fast-food outlets as a threat to economic vitality and spatial quality: *"Chains are closing, shopping is less*

dominant than 20 years ago, and hospitality is taking over. Health is sometimes mentioned in discussions with the alderman, but it rarely appears on paper, as we cannot directly influence it [...] So, it is about supermarkets in the city centre, the local economy, and the rise of hospitality along shopping streets." (Respondent Municipality 3).

In municipalities where no zoning policies were piloted or explored, respondents acknowledged the dominance of unhealthy options and their impact on children's health, but these issues were not consistently viewed as public policy problems requiring municipal action. Some policymakers stressed the need for more evidence, such as heatmaps showing fast-food density, before acting.

Across three municipalities in which zoning policies were piloted or explored, focusing events drew attention to zoning policies. In one of these municipalities, an initiative to limit food advertising evolved into a broader political debate about visual stimuli and creating a calmer urban environment. This led to proposals to remove all advertisements from bus shelters and to develop a broader sustainable advertising code aimed at establishing principles to reduce, and ultimately restrict advertising for unhealthy foods, gambling, and fossil fuels. In another municipality, the closure of small independent shops sparked concern about the dominance of chain restaurants and coffee bars: *"When a local wine shop closes, it's soon replaced by a chain coffee bar [...] real estate owners can earn far more from franchises. We saw this happen often and it frustrated the council"* (Respondent, Municipality 3). In contrast, in two municipalities where no zoning policies were piloted or explored, focusing events were isolated and lacked institutional follow-up. For example, political attention briefly increased after a new Burger King opened and local research was commissioned to gain insights into changes in the local food environment, but competing priorities such as economic growth and individual freedom soon dominated.

In two municipalities in which zoning policies were piloted or explored, policy feedback from previous initiatives helped raise the issue of unhealthy food environments. For example, evaluations of a policy allowing daytime hospitality in former retail spaces revealed that fast-food and other venues increasingly replaced retail businesses, raising concerns about unfair competition. In three municipalities in which no zoning policies were piloted or explored, policy feedback was also noted: one respondent highlighted that current systems and regulations fail to curb unhealthy food options near schools, while in another, a motion by the Party for the Animals pointed out gaps in the Local Health Plan, criticizing the municipality for not acting on food policy commitments.

Local dissatisfaction, public visibility, and political momentum appeared to heighten policymakers' sense of urgency or perceived benefits of acting in municipalities where zoning policies were piloted or explored. For instance, in one case, visible tensions around a snack cart near a school and public frustration among parents and teachers created pressure to respond. In another, debates over fast-food advertising evolved into broader political discussions about commercial influence in public spaces. Elsewhere, concerns about chain store dominance and the decline of local entrepreneurship have made the issue electorally salient. By contrast, in municipalities where no zoning policies were piloted or explored, the perceived political benefits of acting were limited, while *"there is also the question of how far we should go; will it be seen as patronizing?"* (Respondent, Municipality 9).

3.2.2. Selection criteria in the policy stream

In municipalities where zoning policies were piloted or explored, institutional continuity, technical feasibility, legal compliance, and alignment with societal values were key factors shaping whether policy proposals advanced. In municipalities with a formal food strategy or prior policy frameworks, the strong institutional and legal fit facilitated alignment with existing policies and allowed experimentation with measures such as location policies, market ordinance revisions for local produce, and restrictions near schools and hospitals. However, several respondents noted that these initiatives initially faced public and vendor resistance.

Table 4

Manifestation of the core agenda-setting hypothesis across municipalities for zoning policies (Herweg et al., 2018).

	Enabling processes	Constraining processes
Policy window opens	- Public policy problems (e. g. fast-food expansion) to health, spatial quality, economy, and local identity - Political motions, scientific reports, local focusing events, and media triggered attention	- Problem not clearly defined - Unhealthy food availability not seen as municipal responsibility - No urgent trigger - Conservative coalitions prioritized freedom and entrepreneurship - Perceived public resistance
Streams ready for coupling	- Support from aldermen - Coalition agreements established political commitment - Existing food or spatial-planning frameworks - Legal expertise - Learning and support via City Deal network - Strengthening joint nationally lobbying via the City Deal - Political commitment through signing City Deal	- Political resistance and/or fear of paternalism - Legal/institutional uncertainty - Low political priority or unsupportive coalitions
Policy entrepreneurs promoting agenda change	- Collaboration between committed civil servants and supportive aldermen - Linking health, economic, and spatial arguments	- Absence of strong entrepreneurs or access - Fragmented or short-lived efforts by civil servants

These challenges were particularly evident in one municipality where vendors expressed strong dissatisfaction during public meetings: *“People became aggressive... they think it makes no sense and say things like: even the hospital sells croquettes”* (Respondent Municipality 5). Reaffirmed political commitment to improving the food environment allowed the municipality to hold firm: *“Fortunately, we had the new coalition agreement, so we could say: no, we’re sticking to our decision.”* (Respondent Municipality 5).

Municipalities where no zoning policies were piloted or explored illustrated how concerns about perceived public acceptance hindered coupling in the policy stream. One respondent noted that interventions are *“quickly seen as paternalistic, reflecting the emotional weight of the topic more than the legal component”* (Respondent, Municipality 2). Other respondents emphasized residents’ distrust of government guidance on eating habits: *“There is also a lot of distrust; people do not want the government telling them what they can or cannot eat. That feeling is very strong.”* (Respondent, Municipality 7). However, respondents noted that citizens were only selectively involved in food policy, with some topics not fully open to public input. Respondents reported limited knowledge of citizen opinions, and support was generally perceived to be higher among high-educated groups and for interventions with clear, tangible benefits for children such as healthy school environments.

Several municipalities reported considerable uncertainty regarding the legal basis for banning unhealthy food outlets through zoning policies based on health considerations. Few seemed to have a clear understanding of what they could or could not do legally. Three municipalities highlighted the value of coordinated lobbying through the City Deal network to request clearer national legislation enabling restrictions on new unhealthy outlets: *“As a small municipality we cannot effectively lobby the national government on our own [...] That is why it is important to jointly ask the national government for changes.”* (Respondent Municipality 4). National-level actors, based on key informant meetings, noted that many municipalities adopted a wait-and-see approach, anticipating changes in national legislation before taking action. One ministry official emphasized that municipalities already have substantial scope for action, not specifically on health grounds, but through existing provisions related to traffic nuisance, waste, odour, or spatial planning tools, though this potential was not widely recognized at the local level. Two respondents highlighted clearly the supportive role of the City Deal network: *“We are all, in my view, kind of pioneering in this area. Other municipalities within the City Deal network have more capacity and move faster, which we can learn from [...] What instruments do we have for that? What is possible?”* (Respondent Municipality 10).

3.2.3. A policy window in the political stream

Municipalities where zoning policies were piloted or explored showed that progress was closely linked to local politicians’ views on entrepreneurship. In municipalities that did not pilot or explore zoning policies, they were seen as barriers to entrepreneurship. In municipalities that did explore zoning policies, they were seen as ways to promote broader health and social goals as well as protect local entrepreneurs. As one respondent noted, the closure of local shops *“adds to the sentiment among council members that high-turnover operations such as coffee shops or hospitality franchises are replacing independent local businesses, which is not always fair [...] this sentiment is particularly strong among left-leaning members.”* (Respondent Municipality 3). Elsewhere, a former alderman seeking to restrict unhealthy outlets faced strong opposition: *“He stood relatively alone in the college [...] the liberal faction strongly opposed it, seeing it as unnecessary. The current coalition prioritizes entrepreneurship, meaning we cannot impede business.”* (Respondent Municipality 7)

Similarly, right-leaning parties in another municipality questioned the need for action, stressing the small scale of the issue and the struggles of local entrepreneurs: *“We only have one large fast-food chain [...] many small outlets are still recovering from COVID-19.”* (Council questions Municipality 2).

Some municipalities where zoning policies were piloted or explored

benefited from shifts in the political stream. In one case, revising location policies and integrating food into broader environmental and urban planning agendas helped make the food environment a political priority. The appointment of two new aldermen and formation of a coalition explicitly committed to reducing fast-food in city centres, schools, and sports canteens, while expanding healthier options, reinforced this shift.

In contrast, municipalities that did not pilot or explore zoning policies encountered barriers including leadership shifts, weak political commitment, legal ambiguity, and scepticism about public acceptance. Two other municipalities in this group were reluctant to proceed due to legal uncertainty and unclear policy instruments, leading them to depend on experimentation and precedents established by City Deal municipalities with greater capacity and expertise on this issue.

3.2.4. Policy entrepreneurs to couple the streams

In all municipalities where zoning policies were piloted or explored, both policy and political entrepreneurs were identified. In one case, agenda change was driven by the persistent efforts of a committed policy entrepreneur, supported by the alderman for economic affairs. Together, they framed the dominance of chain stores and fast-food outlets as a threat to spatial quality and retail diversity, thereby mobilizing support for restrictive zoning measures. In one municipality, although the agenda window appeared closed, the health alderman consistently advocated legal measures to curb unhealthy temptations in food, tobacco, and gambling. By contrast, in municipalities that did not pilot or explore zoning policies, the lack of strong political or policy entrepreneurs has been noted as a barrier. Yet, in one municipality, a policy entrepreneur noted that the City Deal network provided legitimacy and political backing: *“We are part of the City Deal, and the City Deal is signed by the city council. So at least you have that behind you. They [the council] now also know that it is an issue in several cities, and that it is gaining attention nationally.”* (Respondent Municipality 7).

4. Discussion

4.1. Key findings

This comparative study shows that agenda-setting for food environment policies in Dutch municipalities was most effective when policy entrepreneurs actively linked the unhealthy food environment to local priorities such as rising obesity rates, health inequalities and the local economy. Political attention was facilitated by policy entrepreneurs, often members of the City Deal network, and by political entrepreneurs in the form of a dedicated alderman who actively seized windows of opportunity created by local focusing events, media attention, or new scientific reports. Cross-departmental coordination and previously established visions or agreements reduced the reliance on individuals, and consistent views on the role of the government in promoting change provided continuity for establishing food strategies. Regulatory feasibility appeared more decisive for adopting zoning policies, which were also more prone to political hesitancy, especially in conservative coalitions where such policies would be seen as paternalistic. The City Deal network provided learning opportunities and support, strengthened joint lobbying at the national level, and fostered political commitment.

4.2. Lessons for food policy agenda-setting

This study shows that political willingness to adopt food environment policies strongly depended on policymakers’ perceptions of public support, particularly for zoning policies. Public will, understood as citizens’ attitudes, expectations, and policy preferences (Cullerton et al., 2016), thus played a central role in shaping political commitment. Across municipalities where agenda change stalled, respondents repeatedly expressed concerns about low public acceptance for regulatory measures. However, policymakers also reported having limited insight into residents’ actual views, and citizen involvement in local

food policymaking remained minimal. These findings resonate with earlier work on local obesity prevention policy in the Netherlands, showing that distance between citizens and local governments can undermine policy effectiveness by undermining trust (ter Ellen et al., 2025). In this study, that distance also appeared to generate political risk aversion. Policymakers feared that top-down regulatory interventions might provoke public resistance, reducing willingness to build bottom-up support for food environment regulations. At the same time, food policy innovations have internationally often required strong community engagement and bottom-up campaigns (Baker et al., 2025; Cullerton et al., 2016; Hagenaaers et al., 2020, 2024). Dutch municipalities considering food environment regulations should therefore extend ownership of food environment policy beyond municipal departments to local communities, and actively support citizen-led movements and advocacy for local food policy change.

The Dutch City Deal provides an example of a national-local collaboration platform that facilitates knowledge exchange and mutual learning between municipalities and national actors, while fostering local political engagement. Network membership was not enough when municipalities had weak policy alignment, constrained resources, fragmented policy support, and low administrative continuity. The finding that the City Deal platform added value while not being sufficient to bring about change in these settings resembles findings from a UK-based food policy network (Jones & Hills, 2021). One notable difference, however, was that considerable uncertainty persisted in the City Deal network's policy stream, particularly regarding the legal feasibility and strategic use of zoning policies. Clearer national guidance on regulatory instruments could reduce this ambiguity and strengthen municipalities' confidence to act.

In MSF terms, the City Deal functioned as a policy community that shaped which problem definitions and policy solutions were considered legitimate (Hoefer, 2022; Kingdon, 2010). Within this community, food environment issues were predominantly framed around health and environmental sustainability and municipalities awaited national legal reforms for zoning policies based on health arguments. However, some City Deal municipalities framed zoning or advertising restrictions in terms of stimulating the local economy, urban aesthetics, or liveability, securing political support beyond public health. Municipalities outside the City Deal also show that non-public health alternative framings can effectively mobilize support. For example, plans for a McDonald's in the Dutch municipalities Raalte and Rheden sparked concerns about traffic, litter, and nuisance, with residents highlighting impacts on nature, safety, and wildlife (Bruggeman, 2025; de Vries, 2024). Consistent with the MSF, these cases suggest that when policy communities are less tightly integrated, alternative ideas on viable policies and policy framing may gain traction, thereby expanding the policymaking toolbox (Cairney & Jones, 2016). Previous work also shows that connecting food policies to societal goals beyond public health, such as urban liveability, local economic development and social cohesion can enhance legitimacy and broaden support, flagged as the *Health for All Policies* instead of the *Health in All Policies* approach (Greer et al., 2022; Keeble et al., 2019, 2021).

Regarding the applicability of our findings to settings outside the Netherlands, it is important to note that Dutch municipalities were assigned additional responsibilities in the public health and social care domain following decentralisation reforms implemented in 2015. These reforms intensified administrative and financial pressures on municipalities (de Braal et al., 2026), potentially limiting capacity to prioritise food environment policies, but they may have also triggered municipalities to consider upstream causes and solutions to public health problems. Our lesson that national-level frameworks on municipal responsibilities and possibilities on food environmental policy need clarity may therefore resonate in similar settings with decentralised systems of local government, such as Denmark, Sweden and France (Verschuere et al., 2012).

In our interviews, respondents seldomly mentioned explicit

anticipation of food industry opposition. One possible explanation is that the exact policies under consideration were not threatening enough for the industry, with only four municipalities exploring or piloting regulatory measures. Zoning policies are likely to trigger industry resistance, however, as food industry actors whose interests would be negatively affected have a track record of framing government regulations as paternalistic overreach (Baker et al., 2020, 2025; Barnhill & Bonotti, 2023). For example, McDonald's challenged local restrictions on fast-food outlets in England by emphasizing individual choice and contested evidence, supported by legal threats and industry-backed experts (Borland, 2025). Through these tactics, the food industry reinforces frames that normalize unhealthy food environments, shift responsibility to individuals, and portray public intervention as illegitimate (Campbell et al., 2020; Maani et al., 2022; Westbury et al., 2023), thereby shaping social norms and public discourse and constraining policy change (Hagenaaers et al., 2024; Karreman et al., 2023). Therefore, as Dutch municipalities progress exploring regulatory food environment policies, they need to anticipate, recognise and respond to industry resistance.

4.3. Methodological considerations

Our study focused primarily on municipal policymakers within the City Deal network, which limits insight into the roles of other actors such as community groups, local businesses, and residents. Future research could therefore explore how these actors contribute to local food policy agenda-setting. By systematically applying MSF hypotheses at the municipal level within a comparative case study design, this study nonetheless offers detailed insights into how municipalities navigate agenda-setting processes, demonstrating the framework's applicability beyond the United States federal context. Dutch municipal politics differ in several structural respects compared to federal policy processes in the United States on which MSF is based: decision-making is more consensus-oriented, formal veto players are largely absent, and policy processes often rely on long-term collaboration between aldermen, civil servants, and local partners. Our findings from these relatively stable and consensus-oriented local governance contexts demonstrate that municipalities with an adopted food strategy often exhibited ideological stability and alignment within the political stream. This finding diverges from Kingdon's original conceptualisation, in which policy windows typically open due to changes in the political environment, such as elections, shifts in public mood, or administrative turnover (Kingdon, 2010). Our findings further highlight the City Deal network's role in enabling agenda-setting. Since the MSF focuses less on the internal dynamics of such policy networks, future studies interested in that aspect could benefit from applying the Advocacy Coalition Framework which is better-suited for understanding coalition dynamics and belief systems within trans-local food policy networks (Clarke et al., 2016).

4.4. Conclusion

Our findings show that municipalities succeeded in placing food policy on the agenda through strategic framing that aligned with local priorities and broader social, economic, or sustainability goals. Zoning policies in particular would benefit from clearer national guidance, while embedding broader food strategies in municipal institutions through formal visions, budgets, and structures reduced reliance on individual policy entrepreneurs. Trans-local policy networks such as the City Deal can amplify local capacity, facilitate shared learning, and reinforce political commitment, though sufficient municipal staffing and resources remain essential. Policymakers should also anticipate local barriers, such as concerns about paternalism or resource limitations. Future research could explore how the City Deal shapes policy outcomes and examine agenda-setting in municipalities outside the network.

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CRediT authorship contribution statement

Fleur ter Ellen: Project administration, Investigation, Formal analysis, Data curation, Writing – review & editing, Conceptualization, Writing – original draft. **Mika Grijzenhout:** Writing – review & editing, Project administration, Investigation, Formal analysis, Data curation, Conceptualization. **Jesse Vastenhoude:** Writing – review & editing, Methodology, Formal analysis, Conceptualization. **Joost Oude Groeniger:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization. **Frank J. van Lenthe:** Writing – review & editing, Conceptualization, Funding acquisition. **Karien Stronks:** Writing – review & editing, Funding acquisition, Conceptualization. **Karen M. Oude Hengel:** Writing – review & editing, Funding acquisition, Conceptualization. **Luc L. Hagenaars:** Writing – review & editing, Supervision, Project administration, Methodology, Funding acquisition, Formal analysis, Conceptualization.

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Appendix A. Supplementary file 1-3: Interview guide, MSF hypotheses and codebook

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.foodpol.2026.103097>.

Data availability

The qualitative data analysed during the current study are not publicly available as this would violate participant consent. The used documents, hypotheses assessment and codebook are available from the corresponding author upon written request.

References

- Baker, P., Machado, P., Santos, T., Sievert, K., Backholer, K., Hadjilakou, M., Russell, C., Huse, O., Bell, C., Scrinis, G., Worsley, A., Friel, S., Lawrence, M., 2020. Ultra-processed foods and the nutrition transition: global, regional and national trends, food systems transformations and political economy drivers. *Obes. Rev.* 21 (12). <https://doi.org/10.1111/obr.13126>.
- Baker, P., Slater, S., White, M., Wood, B., Contreras, A., Corvalán, C., Gupta, A., Hofman, K., Kruger, P., Laar, A., Lawrence, M., Mafuyeka, M., Mialon, M., Monteiro, C.A., Nanema, S., Phulkard, S., Popkin, B.M., Serodio, P., Shats, K., Barquera, S., 2025. Towards unified global action on ultra-processed foods: understanding commercial determinants, countering corporate power, and mobilising a public health response. *Lancet* 406 (10520), 2703–2726. [https://doi.org/10.1016/S0140-6736\(25\)01567-3](https://doi.org/10.1016/S0140-6736(25)01567-3).
- Barnhill, A., Bonotti, M., 2023. Healthy eating policy and public reason in a complex world: normative and empirical issues. *Food Ethics* 8 (2), 22. <https://doi.org/10.1007/s41055-023-00131-9>.
- Borland, S., 2025. McDonald's triumphs over councils' rejections of new branches—by claiming it promotes “healthier lifestyles”: Video 1. *BMJ*, r163. 10.1136/bmj.r163.
- Boswell, J., 2014. ‘Hoisted with our own petard’: evidence and democratic deliberation on obesity. *Policy Sci.* 47 (4), 345–365. <https://doi.org/10.1007/s11077-014-9195-4>.
- Boswell, R., Kober, H., 2016. Food cue reactivity and craving predict eating and weight gain: a meta-analytic review. *Obes. Rev.* 17 (2), 159–177. <https://doi.org/10.1111/obr.12354>.
- Brown, H., Xiang, H., Albani, V., Goffe, L., Akhter, N., Lake, A., Sorrell, S., Gibson, E., Wildman, J., 2022. No new fast-food outlets allowed! evaluating the effect of planning policy on the local food environment in the North East of England. *Soc. Sci. Med.* 306, 115126. <https://doi.org/10.1016/j.socscimed.2022.115126>.
- Bruggeman, S. (2025, December 11). McDonald's wants to open a branch in Raalte, but not everyone is on board: ‘It's a matter of common sense. AD.
- Cairney, P., Jones, M.D., 2016. Kingdon's multiple streams approach: what is the empirical impact of this universal theory? *Policy Stud. J.* 44 (1), 37–58. <https://doi.org/10.1111/psj.12111>.
- Campbell, N., Mialon, M., Reilly, K., Browne, S., Finucane, F.M., 2020. How are frames generated? Insights from the industry lobby against the sugar tax in Ireland. *Soc. Sci. Med.* 264, 113215. <https://doi.org/10.1016/j.socscimed.2020.113215>.
- Candel, J.J.L., 2020. What's on the menu? a global assessment of MUFPP signatory cities' food strategies. *Agroecol. Sustain. Food Syst.* 44 (7), 919–946. <https://doi.org/10.1080/21683565.2019.1648357>.
- CBS, 2024. Employment participation by region 2024. <https://opendata.cbs.nl/#/CBS/nl/dataset/86088NED/table>.
- CBS, 2025. Degree of urbanisation. <https://www.cbs.nl/en-gb/our-services/methods/definitions/degree-of-urbanisation>.
- Chambers, S.A., Traill, W.B., 2011. What the UK public believes causes obesity, and what they want to do about it: a cross-sectional study. *J. Public Health Policy* 32 (4), 430–444. <https://doi.org/10.1057/jph.2011.45>.
- Clarke, B., Swinburn, B., Sacks, G., 2016. The application of theories of the policy process to obesity prevention: a systematic review and meta-synthesis. *BMC Public Health* 16 (1), 1084. <https://doi.org/10.1186/s12889-016-3639-z>.
- Cullerton, K., Donnet, T., Lee, A., Gallegos, D., 2016. Playing the policy game: a review of the barriers to and enablers of nutrition policy change. *Public Health Nutr.* 19 (14), 2643–2653. <https://doi.org/10.1017/S1368980016000677>.
- de Braal, P., Oosterlynck, S., Leyshon, M., Leyshon, C., 2026. Opening the black box of the municipal government: exploring the lived experiences of local public servants with citizen participation and decentralisation in the Netherlands. *J. Soc. Policy* 55 (1), 344–360. <https://doi.org/10.1017/S0047279425101050>.
- de Vries, D., 2024, May 14. McDonald's denied permit for restaurant in Rheden after local residents' protests. *Volkskrant*. <https://www.volkskrant.nl/binnenland/mcdonald-s-krijgt-geen-vergunning-voor-restaurant-in-rheden-na-protest-omwonenden~bcf25d84/>.
- Freudenberg, N., Atkinson, S., 2015. Getting food policy on the Mayoral table: a comparison of two election cycles in New York and London. *Public Health* 129 (4), 295–302. <https://doi.org/10.1016/j.puhe.2015.02.018>.
- Green, J., Hancel, B., Petticrew, M., Pappas, S., Shaw, S., 2022. Case study research and causal inference. *BMC Med. Res. Method.* 22 (1), 307. <https://doi.org/10.1186/s12874-022-01790-8>.
- Greer, S.L., Falkenbach, M., Siciliani, L., et al., 2022. From health in all policies to health for all policies. *Lancet Public Health* 7 (8), 718–720. [https://doi.org/10.1016/S2468-2667\(22\)00155-4](https://doi.org/10.1016/S2468-2667(22)00155-4).
- Hagenaars, L.L., Jevdjic, M., Jeurissen, P.P.T., Klazinga, N.S., 2020. Six lessons from introducing sweetened beverage taxes in Berkeley, Cook County, and Philadelphia: a case study comparison in agenda setting and decision making. *Health Policy* 124 (9), 932–942. <https://doi.org/10.1016/j.healthpol.2020.06.002>.
- Hagenaars, L.L., Schmidt, L.A., Groeniger, J.O., et al., 2024. Why we struggle to make progress in obesity prevention and how we might overcome policy inertia: Lessons from the complexity and political sciences. *Obes. Rev.* 25 (5), e13705. <https://doi.org/10.1111/obr.13705>.
- Herweg, N., Zahariadis, N., Zohlnhöfer, R., 2018. The multiple streams framework: Foundations, refinements, and empirical applications. In *Theories of the policy process* (4th ed.).
- Hoefler, R., 2022. The multiple streams framework: understanding and applying the problems, policies, and politics approach. *J. Policy Practice Res.* 3 (1), 1–5. <https://doi.org/10.1007/s42972-022-00049-2>.
- Jones, M., Hills, S., 2021. Scaling up action on urban sustainable food systems in the united kingdom: agenda setting, networking, and influence. *Sustainability* 13 (4), 2156. <https://doi.org/10.3390/su13042156>.
- Karremans, N., Huang, Y., Egan, N., Carters-White, L., Hawkins, B., Adams, J., White, M., 2023. Understanding the role of the state in dietary public health policymaking: a critical scoping review. *Health Promot. Int.* 38 (5). <https://doi.org/10.1093/heapro/daad100>.
- Keeble, M., Burgoine, T., White, M., Summerbell, C., Cummins, S., Adams, J., 2019. How does local government use the planning system to regulate hot food takeaway outlets? a census of current practice in England using document review. *Health Place* 57, 171–178. <https://doi.org/10.1016/j.healthplace.2019.03.010>.
- Keeble, M., Burgoine, T., White, M., Summerbell, C., Cummins, S., Adams, J., 2021. Planning and public health professionals' experiences of using the planning system to regulate hot food takeaway outlets in England: a qualitative study. *Health Place* 67, 102305. <https://doi.org/10.1016/j.healthplace.2020.102305>.
- Kingdon, J., 2010. *Agendas, Alternatives and Public Policy*, 2nd ed. Pearson.
- Kroneman, M., Boerma, W., van den Berg, M., Groenewegen, P., de Jong, J., van Ginneken, E., 2016. The Netherlands: health system review.
- Kugelberg, S., Bartolini, F., Kanter, D.R., Milford, A.B., Pira, K., Sanz-Cobena, A., Leip, A., 2021. Implications of a food system approach for policy agenda-setting design. *Glob. Food Sec.* 28, 100451. <https://doi.org/10.1016/j.gfs.2020.100451>.
- Maani, N., van Schalkwyk, M.C., Petticrew, M., Buse, K., 2022. The pollution of health discourse and the need for effective counter-framing. *BMJ*, o1128. 10.1136/bmj.o1128.
- Ministry of Health, W. and S., 2025. National Health Policy Document 2025–2028. <https://www.rijksoverheid.nl/documenten/rapporten/2025/12/12/landelijke-nota-gezondheidsbeleid-2025-2028>.
- Minotti, B., Affinita, V., Calori, A., Federici, F., 2022. The integration of food policies in a local administration system: the case of the Milan food policy. *Agroecol. Sustain. Food Syst.* 46 (7), 1087–1109. <https://doi.org/10.1080/21683565.2022.2091718>.

- Monteiro, C.A., Louzada, M.L., Steele-Martinez, E., Cannon, G., Andrade, G.C., Baker, P., Bes-Rastrollo, M., Bonaccio, M., Gearhardt, A.N., Khandpur, N., Kolby, M., Levy, R. B., Machado, P.P., Moubarac, J.-C., Rezende, L.F.M., Rivera, J.A., Scrinis, G., Srouf, B., Swinburn, B., Touvier, M., 2025. Ultra-processed foods and human health: the main thesis and the evidence. *Lancet* 406 (10520), 2667–2684. [https://doi.org/10.1016/S0140-6736\(25\)01565-X](https://doi.org/10.1016/S0140-6736(25)01565-X).
- Moodie, R., Stuckler, D., Monteiro, C., Sheron, N., Neal, B., Thamarangsi, T., Lincoln, P., Casswell, S., 2013. Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *Lancet* 381 (9867), 670–679. [https://doi.org/10.1016/S0140-6736\(12\)62089-3](https://doi.org/10.1016/S0140-6736(12)62089-3).
- Moragues-Faus, A., Carroll, B., 2018. Reshaping urban political ecologies: an analysis of policy trajectories to deliver food security. *Food Secur.* 10 (6), 1337–1351. <https://doi.org/10.1007/s12571-018-0855-7>.
- Nykiforuk, C.I.J., Campbell, E.J., Macridis, S., McKennitt, D., Atkey, K., Raine, K.D., 2018. Adoption and diffusion of zoning bylaws banning fast food drive-through services across Canadian municipalities. *BMC Public Health* 18 (1), 137. <https://doi.org/10.1186/s12889-018-5061-1>.
- Parsons, K., Hawkes, C., Wells, R., 2019. Brief 2: Understanding the food system: Why it matters for food policy. <https://openaccess.city.ac.uk/id/eprint/22795/>.
- Quinn, E., Johnson, D.B., Krieger, J., MacDougall, E., Payne, E., Chan, N.L., 2015. Developing local board of health guidelines to promote healthy food access - King County, Washington, 2010–2012. *Prev. Chronic Dis.* 12, E58. <https://doi.org/10.5888/pcd12.140544>.
- Rahilly, J., Williams, A., Chang, M., Cummins, S., Derbyshire, D., Hassan, S., Huang, Y., Keeble, M., Liu, B., Medina-Lara, A., Mytton, O., Savory, B., Schiff, A., Sharp, S.J., Smith, R., Thompson, C., White, M., Adams, J., Burgoine, T., 2024. Changes in the number and outcome of takeaway food outlet planning applications in response to adoption of management zones around schools in England: a time series analysis. *Health Place* 87, 103237. <https://doi.org/10.1016/j.healthplace.2024.103237>.
- RIVM, 2024. Overweight per region. <https://www.vzinfo.nl/overgewicht/regionaal/overgewicht>.
- 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>.
- Scrinis, G., Popkin, B.M., Corvalan, C., Duran, A.C., Nestle, M., Lawrence, M., Baker, P., Monteiro, C.A., Millett, C., Moubarac, J.-C., Jaime, P., Khandpur, N., 2025. Policies to halt and reverse the rise in ultra-processed food production, marketing, and consumption. *Lancet* 406 (10520), 2685–2702. [https://doi.org/10.1016/S0140-6736\(25\)01566-1](https://doi.org/10.1016/S0140-6736(25)01566-1).
- Sibbing, L., Candel, J., Termeer, K., 2021. The potential of trans-local policy networks for contributing to sustainable food systems—The Dutch City Deal: Food on the Urban Agenda. *Urban Agric. Reg. Food Syst.* 6 (1). <https://doi.org/10.1002/uar2.20006>.
- Sibbing, L.V., Candel, J.J.L., 2021. Realizing urban food policy: a discursive institutionalist analysis of Ede municipality. *Food Secur.* 13 (3), 571–582. <https://doi.org/10.1007/s12571-020-01126-8>.
- Sonnino, R., Tegoni, C.L.S., De Cunto, A., 2019. The challenge of systemic food change: Insights from cities. *Cities* 85, 110–116. <https://doi.org/10.1016/j.cities.2018.08.008>.
- Steyaert, A., Dessen, J., Prové, C., 2023. Exploring approaches to equal and effective participation of governance actors in trans-local city food networks. *Geoforum* 145, 103831. <https://doi.org/10.1016/j.geoforum.2023.103831>.
- Stockmann, D.P., 2012. The new food agenda: Municipal food policy and planning for the 21st century.
- Sturm, R., Hattori, A., 2015. Diet and obesity in Los Angeles County 2007–2012: is there a measurable effect of the 2008 “Fast-Food Ban”? *Soc. Sci. Med.* 133, 205–211. <https://doi.org/10.1016/j.socscimed.2015.03.004>.
- Swinburn, B.A., Kraak, V.I., Allender, S., et al., 2019. The global syndemic of obesity, undernutrition, and climate change: the lancet commission report. *Lancet* 393 (10173), 791–846. [https://doi.org/10.1016/S0140-6736\(18\)32822-8](https://doi.org/10.1016/S0140-6736(18)32822-8).
- Swinburn, B.A., Sacks, G., Hall, K.D., McPherson, K., Finegood, D.T., Moodie, M.L., Gortmaker, S.L., 2011. The global obesity pandemic: shaped by global drivers and local environments. *Lancet* 378 (9793), 804–814. [https://doi.org/10.1016/S0140-6736\(11\)60813-1](https://doi.org/10.1016/S0140-6736(11)60813-1).
- Swinburn, B., Sacks, G., Vandevijvere, S., Kumanyika, S., Lobstein, T., Neal, B., Barquera, S., Friel, S., Hawkes, C., Kelly, B., L'Abbé, M., Lee, A., Ma, J., Macmullan, J., Mohan, S., Monteiro, C., Rayner, M., Sanders, D., Snowdon, W., Walker, C., 2013. INFORMAS (international network for food and obesity/non-communicable diseases research, monitoring and Action support): overview and key principles. *Obes. Rev.* 14 (S1), 1–12. <https://doi.org/10.1111/obr.12087>.
- ter Ellen, F., Oude Groeniger, J., Stronks, K., Hagenaaars, L.L., Kamphuis, C.B.M., Mackenbach, J.D., Beenackers, M.A., Freijer, K., Coenen, P., Poelman, M., Oude Hengel, K.M., van Lenthe, F.J., 2025. Understanding the dynamics driving obesity in socioeconomically deprived urban neighbourhoods: an expert-based systems map. *BMC Med.* 23 (1), 2. <https://doi.org/10.1186/s12916-024-03798-x>.
- Treutwein, R., Langen, N., 2021. Setting the agenda for food waste prevention—a perspective on local government policymaking. *J. Clean. Prod.* 286, 125337.
- van Meurs, T., Oude Groeniger, J., de Koster, W., van der Waal, J., 2022. An incongruous intervention: exploring the role of anti-institutionalism in less-educated individual's limited uptake of nutrition information. *Sociol. Health Illn.* 44 (2), 432–450. <https://doi.org/10.1111/1467-9566.13430>.
- Verschuere, B., Brandsen, T., Pestoff, V., 2012. Co-production: the state of the art in research and the future Agenda. *Volunt. Int. J. Volunt. Nonprofit Org.* 23 (4), 1083–1101. <https://doi.org/10.1007/s11266-012-9307-8>.
- Westbury, S., Oyebo, O., van Rens, T., Barber, T.M., 2023. Obesity stigma: causes, consequences, and potential solutions. *Curr. Obes. Rep.* 12 (1), 10–23. <https://doi.org/10.1007/s13679-023-00495-3>.
- Yin, R., 2018. *Case Study Research and Applications: Design and Methods*, 6th ed. Sage.
- Zohlnhöfer, R., Herweg, N., Zahariadis, N., 2022. How to Conduct a Multiple Streams Study. In *Methods of the Policy Process*. Routledge, pp. 23–50. <https://doi.org/10.4324/9781003269083-2>.