Take a joined up approach to evidence

Good policy and practice should always be based on the whole sweep of current scientific knowledge, usually from multiple disciplines. Diet shift is a particularly multifaceted issue, involving many different food system activities, outcomes and requiring insights from a range of disciplines: a single piece of evidence is highly unlikely to address all of the relevant considerations for users. For example, for policymaker evidence users, 'it is rare that all the evidence needed for a moderately complex policy problem comes from a single discipline, and rarer still that it comes from a single study' (footnote 1). This observation aligns with the common recommendation (in policy documents, academic journals, international reports and government agendas) to address food challenges using a 'systems' approach, looking holistically at an issue within the context of the broader system of activities and outcomes (footnote 2). However, this can pose a challenge for diet shift evidence, as healthy sustainable diets evidence is fragmented in a variety of ways. Ensuring you provide your evidence in a joined up way will increase the likelihood it is adopted by users.

Joining up across organisations

One of the barriers to evidence adoption is that the existing evidence on diet-shift is fragmented and dispersed across different organisations, making it difficult to find for evidence users. The existence of multiple fragmented sources also makes it more difficult for users to know which evidence to trust. For this reason, evidence users would like access to an independent body to 'signpost and curate the evidence' for them (footnote 3). Fragmented food systems data is a particular barrier; the absence of systemic monitoring has been identified as inhibiting the connection of food systems knowledge with action (footnote 4). Policymakers have pointed to the urgent need for a food system digital resource dashboard that collates evidence on UK food system drivers, activities and outcomes. This has not been created for the UK specifically, although it was a recommendation of the National Food Strategy and the global Food Systems Dashboard (footnote 5) project, which combines data from multiple sources to give users a complete view of food systems, includes the UK.

"We need an independent body to signpost and curate the evidence on this for others, such as an advisory council of some kind. Information needs to be food system specific and relevant to the different groups [along the food chain]; and the body should be neutral and trusted." - Food Retailer

In the absence of any dedicated supportive structures to bring evidence together, generators can still support users to overcome fragmentation; being aware of what evidence already exists means your evidence can be presented within its broader context and you can signpost to other complementary evidence sources which users may need in order to understand the issue your evidence is addressing. Reviews such as the National Food Strategy, and its accompanying list of evidence sources, may be helpful in getting an overview of what else is out there (footnote 6). Knowing where evidence generation is taking place, and what the focus of these different institutions is, may also help you to keep abreast of the evidence base. The Food Research Collaboration has recently produced a database of food research institutes in the UK (footnote 7).

Gaps in the diet-shift evidence base

The body of evidence on healthy sustainable diets is advancing, but specific gaps remain. A mapping exercise of the UK food system identified several challenges around evidence

availability on the activities and outcomes of the system. A recent review of evidence in food systems (footnote 8) more broadly, by the OECD, identified significant gaps (footnote 9) and noted that:

- gaps may be especially pronounced in this field because food systems are broad, encompassing food security, nutrition, environmental effects and livelihoods, among others;
- the sheer diversity of evidence makes it difficult to extrapolate findings from one context to another (footnote 10).
- in understanding different types of evidence gaps, it may be helpful to consider how they can exist on:
- problems: What is the problem, including how significant it is, who is impacted by it (for example, what is a healthy sustainable diet, what metrics is this measured by, who eats what, implications of changing diets for producers and consumers), trade-offs and unintended consequences.
- solutions: What to do, including which actions/interventions (policy and practice) can be taken in response to the problems and what evidence there is for their effectiveness in addressing problems.
- solution Design and Implementation: How to do it, including how to design and ensure effective implementation of interventions, evaluation of the process, not only the outcome (footnote 11).

Another barrier is that the kind of evidence users want is not currently available to them, either because it does not exist in the first place, or because it is not being provided in a way which supports them to take a more holistic, systems approach to transforming food systems. To do so requires evidence which is: multi-outcome; focused on the how; from multiple disciplines; and aligned to pressing current developments.

Joining up evidence across outcomes

Users want evidence to address the range of outcomes associated with food systems, including health, environmental and social. One challenge in relation to diet shift evidence, is that health and environmental outcomes tend to be addressed separately. Where possible, addressing both health and sustainability in your evidence (along with its economic considerations, as discussed below) will help users to navigate these silos. This requires being explicit about whether your evidence addresses different outcomes (for example health and sustainability), or what is known about whether a particular action will improve different outcomes (for example specifying that an action is likely to improve health, but evidence is unclear on sustainability, and why there is a lack of clarity – for example, the metrics are less developed). Demonstrating an awareness of how your evidence aligns with evidence aimed at other aspects of the food system can also be helpful. There is also a need to bridge organisational silos which fragment evidence users when disseminating your evidence.

“We do need more systems work on the implications of moving to a more healthy sustainable diet, on production implications for the UK as well as processing and manufacturing and production.” – Third Sector Organisation

“From the public health perspective, generally speaking, food is approached and the evidence that's collected and considered valid, is largely around nutrition evidence…diet shift wider evidence around sustainability, around environmental impacts, those really have had no play, no attention or focus within the public health world.” – Regional Public Health Network

Including an economic dimension to your evidence

Health and sustainability are often the primary focus, but evidence users also want to know about the economic implications of a particular piece of evidence, or associated action. Cost implications will differ across different actors and may be direct or indirect. The cost implications may also be different at different scales. There may be economic benefits to acting on a piece of evidence to society as a whole; for example, actions which improve diets and reduce healthcare costs as a result. However, the action may create economic costs for businesses (although these should not be assumed, as discussed below). In terms of different scales, evidence may demonstrate the economic benefits of dietary shifts - price premiums, more stable and equitable relationships - whereas on-the-ground business may just see increased costs, at least in the short term.

However, economic impacts should be considered, not assumed. A number of research papers have challenged the received wisdom that intervening in the food system to achieve health or sustainability objectives will necessarily have a negative impact on costs for users. For example, evidence has demonstrated how policy interventions, such as sugary drinks levies, advertising restrictions and front-of-pack labelling, did not have the purported (primarily by the food industry) negative effects on jobs or revenues (footnote 12). It may be unrealistic to support your evidence with a full cost analysis, but it is still possible to reflect on and, where possible, include an economic dimension to your evidence. Think about associated costs and savings, who is potentially impacted and how. Cost savings to the health system are becoming a popular metric, as used in the National Food Strategy review, published in 2021. The following considerations should be borne in mind in terms of the economic interests of different types of evidence user.

Policymakers

For policymakers the costs of an initiative will be front of mind (footnote 13). As a general rule, policymakers are also more numerate than scientists give them credit for, and have access to well-trained statisticians (footnote 14). Often policymakers have to develop proposals for the annual comprehensive spending review (CSR), which has a cost/benefit analysis attached. Policymakers need to be able to make the full case to the Treasury, in the ‘Green Book Business Case process’ (footnote 15) for a particular action. To do so they need to understand if it works, how much difference it makes, how much it costs and what will the government need to stop doing to do that instead (footnote 16).

One of the principles of the What Works Network has been to ensure evidence users are presented with evidence on possible actions, accompanied by evidence on the potential costs (see Practical Examples: Taking a joined up approach to evidence).

Commercial Practitioners

For commercial practitioners, the economic aspects of a piece of evidence are clearly important because taking action has implications for the financial performance of their business. Commercial practitioners, particularly small and medium sized enterprises (SMEs), report that taking action on diet shift often means absorbing an increase in costs. Economic impacts are particularly relevant for SMEs taking action to provide more healthy and sustainable products; they might aim to source from local suppliers for sustainability reasons, but need to balance those aims with cost considerations. When evidence on economics is missing, it can act as a barrier to action. An example is the development of a Net-Zero Handbook produced by the Food & Drink

Federation and WRAP, to help manufacturing businesses take action to support climate objectives. The handbook includes guidance for business but is short on economic arguments, because the evidence on economic benefits for food businesses taking action on net zero is currently limited.

Third Sector Practitioners

For third sector practitioners, the financial impacts on the communities they work with are paramount. When working with disadvantaged communities, in particular, any evidence or action that increases the costs of food will make acting on it a challenge. For example, it may be unrealistic to expect a food bank manager to improve the sustainability of particular foods given the organisation's means, and those of its customers. Another way third sector evidence use is impacted by economics is that third sector practitioners often make decisions about which evidence to act on based on available funding streams, such as grant money, start-up funds, or popular interest (which may mean enhancing their ability to generate revenue from the public via models like kick-starter campaigns). This may leave them in the difficult position of choosing to do something that has general approval (from the government and public) such as increasing vegetable consumption, over pursuing an action that may have longer-term impact but is more expensive and less popular, such as reducing meat consumption. Funders also often prefer more visible consumer information campaigning, which requires less resources or is deemed more appropriate (footnote 17). Evidence users describe going with the lower-cost option, despite evidence of its limited impact, as it is 'better to do something than nothing'. For third sector participants, it may be particularly helpful to signpost potential sources of funding to reduce any additional costs associated with your evidence.

"I'm actually on the board – now there are four directors; I'm one of them – and we make decisions based on what our resources are and what we see as impactful in the community." – Local Food Partnership

Joining up evidence to current priorities

A further challenge is that evidence can lag behind diet shift developments or political priorities, so it's important to ensure your evidence aligns as closely as possible to current priorities and plugs any evidence gaps. Examples of gaps on diet shift identified by evidence users in the UK include the economic aspects of moving toward net zero diets and the nutritional quality of processed vegan diets (footnote 18). A good place to start is UK Government departmental Areas of Research Interest (footnote 19), which they publish to signpost evidence generators to gaps in the evidence base they are particularly interested in filling.

Joining up evidence across disciplines

Joining up evidence in the ways described above will require multiple disciplines working together. One particular identified gap in the types of disciplinary evidence available to policymakers is on the behaviour change aspects of implementing interventions. In part this is due to a wider Government trend for drawing on some academic disciplines - natural sciences and economics - more than others, such as history and other social sciences, arts and humanities (footnote 20). For this reason, the UK's Chief Medical Officer (and former departmental chief scientific advisor) has described 'a wide open goal for timely, relevant, rigorous and readable qualitative and quantitative social science addressing practical questions in policymaking', especially on the behaviour change aspects of policy initiatives, where the supply of research is limited compared to the demand (footnote 21). Users also want evidence which is informed by system stakeholders, including policymakers and practitioners, and also citizens, as outlined in Principle 2.

“There is a limited amount of research on consumer behaviour related to when you bring both aspects of human and planetary health together. To date most work has been done on either healthy diets or environmental aspects and not in combination.” – Policymaker

Joining up the why with the how

Along with more joined-up evidence, users want evidence to focus more on the how of healthy sustainable diet shift. Evidence users agree that ‘describing the problem that needs resolving is only useful until the description is clear’ and they want to see more evidence on what to do to tackle the problems, including the most effective actions they can take. It is important that evidence generators recognise when sufficient evidence on a particular problem, and the need for action, has been established, and not to continue to ‘describe a problem in greater and greater detail for years’ after evidence users have accepted it without moving to the next stage of looking at the solutions (footnote 22).

However, focusing on the how is challenging because of evidence gaps on the effectiveness of solutions (footnote 23). One systematic review on policy interventions for sustainable diets identified a big gap in knowledge regarding effectiveness, because a rich body of systematic evaluations of proposed interventions is not available in sufficient numbers (footnote 24). The producers of an ‘evidence gap map’ on food systems and nutrition measures also found that widely implemented interventions are not well researched, which risks negative consequences and the inefficient use of funds (footnote 25). A review of food systems policy levers found that evidence on policy levers is fragmented and rarely includes information about evaluations or effectiveness, or details on the process of policymaking used to develop or implement the policy, making interventions harder to replicate (footnote 26). This situation echoes the evidence base beyond food; it is common for activities to be used in policy and/or practice which are not evaluated.

Generators can help enable evidence users by addressing the existing gaps through generating new evidence, and also including - where possible - considerations of the how of healthy sustainable diets, when presenting existing evidence; including information on what the evidence is for the effectiveness of a particular intervention, how robust the evidence is, and how the intervention was developed and implemented, or could be.

“There is a growing amount of evidence on the need to tackle net zero. However there is less evidence on the how which is what we need as a retailer. We know we need to reduce the amount of meat in our stores but how do we do that and take the consumer with us on that journey?” – Food Retailer

Many evidence users also recognise that for diet shift to occur, multiple interventions will be needed across multiple scales, rather than a single ‘silver bullet’ and want this to be reflected in the evidence they are given. For example, some are interested in evidence that integrates ‘non-linear’ models that account for complexity and interactions across, between and along the food chain. Recent work on making better policies for food systems by the OECD supports this, calling for coherent multi-pronged policy frameworks in the food system (footnote 27). This will require more systemic evidence, which makes links between individual interventions, to support it.

The importance of evidence synthesis

It is clear from the barriers identified above, that one of the most important contributions that academics can make to policymaking is rigorous, unbiased synthesis of evidence (footnote 28). However, evidence synthesis may be deemed as low prestige by some parts of the academic community - including those working on food - and many evidence generators overlook its importance (footnote 29). Many assume a two-stage process; first individual research is conducted and then secondly, policies adopted as a result. This perception may be exacerbated by pressure

on academics to demonstrate impact on their own particular piece of research. In reality - as the UK Chief Medical Officer explains - this should be a three-stage process; with an extra stage being synthesis of research from multiple evidence generators, across disciplines, and policies then adopted based on that synthesised evidence. The need for synthesis also applies to practitioners. For example, commercial practitioners find organisations such as the Scientific Advisory Committee on Nutrition, (Food Standards Agency) Expert Scientific Advisory Committees, European Food Safety Agency, BRI and Leatherhead as useful sources of synthesised evidence (footnote 30).

“We have found really useful where researchers have synthesised evidence across multiple disciplines. A great recent example is the Global Food Security programme resilience report which synthesised findings across 14 multi-disciplinary projects. We need more of this type of evidence.” – Policymaker

Practical examples: Taking a joined up approach to evidence

The following examples of good practice when it comes to taking a joined up approach to evidence may provide inspiration on how you can both identify existing research, and tailor your own research:

- What Works Centres are specialist evidence brokers, which specialise in understanding, collating, synthesising and sharing evidence more effectively so it gets adopted. For example, What Works Wellbeing produces briefings, based on systematic evidence reviews, which specify how strong the evidence is for different dimensions of wellbeing. The National Food Strategy Independent Review proposed two ‘What Works Centres’, one on farming and one on diet shift, to address this barrier, noting that the evidence currently available is fragmented, incoherent and confusing. The idea is to improve generation, translation and adoption of actions to shift food systems, based on the What Works model ‘which has been tried and tested across a range of complex areas of policy and public services’ (footnote 31)
- several What Works Centres produce at-a-glance toolkits, outlining possible actions, along with information on how robust the evidence is, their effectiveness, and costs. An example is the Education Endowment Foundation’s Teaching and Learning Toolkit
- the National Food Strategy Independent Review included estimated costs for recommended actions, along with suggestions on where funding could be sought from
- the World Health Organisation’s NCDs ‘Best Buys’ and the ‘42 Policies’ project (linked to the Food Systems Dashboard), are helpful existing evidence sources on the effectiveness of health interventions (footnote 32).

Checklist

- have you familiarised yourself with the existing evidence base?
- is your evidence positioned within the wider context?
- are you clear which evidence gap you are filling, and have you explained how it fills that gap (for example, is it filling an evidence gap on the problems, or the solutions and how to implement them)?
- have you demonstrated an awareness of how your evidence aligns with evidence aimed at other aspects of the food system?
- are you able to link to any complementary evidence sources?
- is it clear which outcomes - health, sustainability - your evidence is relevant to?
- have you considered the economic implications of your evidence?
- can you say anything specific about potential costs or savings?
- have you considered the economic pressures on different evidence user groups?

- are you familiar with the range of objectives or trade-offs the relevant users face when deciding whether to take action?
- how you included how considerations in your evidence?
- have you considered the behaviour change aspects of your evidence?
- have you considered undertaking evidence synthesis on a particular issue?

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