

The George Institute for Global Health
ABN 90 085 953 331

Level 5, 1 King Street Newtown NSW 2042 AUSTRALIA

PO Box M201 Missenden Road NSW 2050 AUSTRALIA

T: +61 2 8052 4300 F: +61 2 8052 4301

info@georgeinstitute.org.au www.georgeinstitute.org

SUBMISSION TO THE COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION'S TRANSFORMING AUSTRALIAN FOOD SYSTEMS: DISCUSSION PAPER CONSULTATION FEBRUARY 2023

About this submission

The George Institute for Global Health is pleased to respond to the Commonwealth Scientific and Industrial Research Organisation (CSIRO) on the Transforming Australian Food Systems: Discussion Paper consultation (the Discussion Paper) and welcome the opportunity to contribute to the critical issues covered within.

The George Institute commends CSIRO for undertaking the important work of setting out a vision for the future of Australia's food systems and recognise the monumental scope and scale of the task. While there are deep-rooted challenges facing our food systems, there are also ample opportunities for improvement – but only if we choose to act.

As a medical research institute with a significant work program in food and nutrition policy, this submission directly addresses questions from the discussion paper based on our expertise. This submission also makes additional broad recommendations that might guide the CSIRO as it investigates intergenerational issues of concern related the Australia's food systems.

We welcome the opportunity to further engage with the CSIRO on this important issue.

About The George Institute for Global Health

The George Institute is a leading independent global medical research institute established and headquartered in Sydney. It has major centres in China, India and the UK, and an international network of experts and collaborators. Our mission is to improve the health of millions of people worldwide by using innovative approaches to prevent and treat the world's biggest killers: non-communicable diseases (NCDs) and injury.

Our work aims to generate effective, evidence-based and affordable solutions to the world's biggest health challenges. We research the chronic and critical conditions that cause the greatest loss of life and quality of life, and the most substantial economic burden, particularly in resource-poor settings.



Our Food Policy Team works in Australia and overseas to reduce death and disease caused by suboptimal diets, characterised by excessive intake of unhealthy foods and beverages, high in salt, harmful fats, added sugars and excess energy, in place of healthy foods. The team conducts multi-disciplinary research with a focus on generating outputs that will help government, industry and communities to deliver healthier food environments for all.

Our Guunu-maana (Heal) Aboriginal & Torres Strait Islander Health Program drives meaningful and ethical research and advocacy to transform the health and well-being of First Nations peoples and communities. Guunu-maana (Heal) is led through First Nations ways of knowing, being and doing to generate evidence that privileges Indigenous knowledges and voices through actions that empower communities and people. Guunu-maana (Heal) is committed to research integrity is underpinned by equity, transparency and self-determination and maintains a First Nations paradigm of health and healing that incorporates the physical, emotional, social, cultural and spiritual elements of health. The primary objective of Guunu-maana (Heal) is to create greater health equity for First Nations peoples and communities.

Acknowledgement of Country

The George Institute acknowledges the Gadigal People of the Eora Nation as the Traditional Custodians of the land on which our Australia office is built and this submission was written. Parts of this submission were also written on the lands of the Wurundjeri People of the Kulin Nation. We pay our respect to all Elders past, present and emerging and recognise that our Elders are the knowledge holders of our lands, waterways and communities.



Introduction

Australia's food systems are a major driver in some of the biggest intergenerational challenges our nation faces. Diet-related disease and overweight and obesity are two of the top three leading contributors to burden of disease in Australia (1), cause one-fifth of all deaths (1) and lead to billions of dollars in direct (e.g. health care) and indirect (e.g. lost productivity) costs (2-4). Our food system, across primary production and manufacturing to retailing and services, is responsible for a significant proportion of total greenhouse gas emissions (5), has one of the highest greenhouse gas emission intensities amongst the largest food producing nations in the world (6), and uses significant water and land resources (7).

All of these trends indicate the inextricable links between food systems, health and the environment (7), and require significant whole-of-system changes for related challenges to be met. While these are deep-rooted challenges, there is ample opportunity to redress them through a reimagining of the role and function of food systems in Australia. The good news is that these problems are already well-researched, and tangible, achievable and evidence-based solutions are already available. We simply need to act.

While The George Institute is supportive of the work underway at CSIRO, we join our public health and consumer colleagues across the country in raising a number of concerns with the focus and direction in which the discussion paper is taking. Chief amongst these is the lack of adequate recognition given to diet-related disease stemming from unhealthy food environments. Further, the individual-level actions – rather than systems wide reforms – will achieve little in reducing the impacts of food systems.

The George Institute therefore make the following recommendations, in addition to our direct feedback to consultation questions.

Respect and include Aboriginal and Torres Strait Islander peoples' Knowledges in decision making

The George Institute recognises the important connection to land and Country in First Nations communities, and the subsequent impacts that disruptions to this connection have on social, cultural, spiritual, health and environmental outcomes. The continued connection between First Nations people and Country has allowed communities to thrive and survive over millennia. However, this connection has been eroded due to the ongoing impacts of colonisation in Australia. The continuing impact of colonisation has adverse outcomes for food and water systems and food knowledges, leading to severe health inequities and disproportionate rates of nutrition-related health conditions for First Nations peoples.

The gradual damage to this strong connection between First Nations peoples and Country, where Country includes the complex food and water systems that embody the social, emotional, cultural, spiritual and physical aspects of First Nations Health and wellbeing (8), has had enormous impact on health and wellbeing. The George Institute recommends that the ongoing effects of colonisation, including racism, intergenerational trauma, stolen generations and loss of land, be addressed in relation to their effects on cultural continuity and well-being, as part of a holistic approach to improving Australia's food systems. The most important way to do this is to ensure that Aboriginal and Torres Strait Islander people are not only involved in but self-determine and drive solutions to food and water systems issues impacting communities.



The George Institute also wishes to strongly impress that it is only through understanding and respecting the meaning of health and food and water systems for diverse cultures that impactful actions can be conceived and developed. Unfortunately, too often there is a lack of recognition or understanding of Traditional Knowledges outside of a Western paradigm. This top-down approach results in solutions that are not fit for purpose and do not go to the heart of addressing food and water security and equitable access to healthy food for First Nations peoples. First Nations Elders and local Aboriginal Community Controlled Organisations (ACCOs) are best placed to lead the development of culturally appropriate and sustainable solutions that empower and strengthen their communities. ACCOs must be resourced so that they may be effectively engaged in both long-term planning and short-term crisis responses to food and water security.

While we are pleased to see mention of embedding Indigenous Knowledge systems that centre self-determination, this is not reflected in the climate and resilience sections where there is no mention of Indigenous Knowledges and practices in improving environmental resilience. The George Institute recommends caring for Country and Indigenous Knowledges be embedded throughout the Discussion Paper focus areas. The George Institute also recommends the Discussion Paper aligns with relevant recommendations from the United Nations Declaration on the Rights of Indigenous Peoples, such as Articles 25, 26.2, 29.1 and 32.2 (9), which the Australian Government endorsed in 2009.

Conduct further consultation with public health and consumer stakeholders

The George Institute recommends further consultation with public health and consumer stakeholders. The issues facing the food system are extremely complex and require expert contributions to understand and address. This further consultation will strengthen the Discussion Paper purpose and usefulness, as well as relevance to public health and consumer representatives, leaving it better placed to guide the transformation towards food systems that see improvements in the quality of dietary patterns, reductions in the burden of disease in Australia and reductions in the environmental burden of food systems.

Execute a new vision for 2025

The George Institute recommends that CSIRO outlines a vision for the future that ensures the challenges of today do not remain the same challenges for the next generation. This new vision should make particular reference to securing healthy food environments that are available and accessible to all in order to protect the community from diet-related disease. This in turn will focus efforts and resources towards implementation and scaling up of evidence-based, systems-level solutions that are already available.

The George Institute recommends the following wording for a vision for 2050:

Australian food environments actively support and promote healthy dietary patterns, through increased affordability, availability and accessibility of healthy foods and reduced availability, accessibility, promotion and marketing of unhealthy, ultra-processed products. Food environments contribute to sustained reductions in diet-related non-communicable diseases, as well as overweight and obesity. Healthy food environments are the norm and readily accessible regardless of location, socio-economic status and cultural background. Consumers follow healthy and environmentally sustainable dietary patterns by



default, and have the knowledge, ability, equipment and facilities to maximise the nutritional value of their food purchases. Food preserves and celebrates First Nations knowledges and practices, and Aboriginal and Torres Strait Islander peoples are respected and included in decision-making processes regarding food systems.

Include water in agenda setting for food systems

Sufficient access to safe water is a critical aspect of food security, important not only for the health of individuals, households and communities, including the wellbeing of First Nations peoples, but also for the future of food production and the protection of water supplies. Water security has been defined by the United Nations as "the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human wellbeing and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability" (10). As such, The George Institute recommends water security be included in any agenda setting related to food systems.

Remove conflicts of interest in food systems regulation

The George Institute recommends that reference to rigorous safeguards against real and perceived conflicts of interest from the private sector and other government agencies be embedded throughout the Discussion Paper. To maintain public confidence in our food regulatory system, consumers must be confident that information is up-to-date, accurate and free from conflicts of interest, so that the best interests of all Australians are identified and pursued. This requires conflicts of interest be removed in the food systems regulation processes, and that public agencies remain transparent for the public.

Review current indicators

The George Institute recommends the Discussion Paper outline additional or reworked indicators that better reflect problems associated with our current food systems and meaningful progress to a healthier, more environmentally sustainable future. We outline specific indicators below.

Focus Area 1: Enabling equitable access to healthy diets

1. How can industry, government and communities work together to increase the adoption of more sustainable and nutritious diets?

To effectively achieve this goal, The George Institute recommends the development and implementation of a food and nutrition Roadmap that prioritises the protection of all Australians from diet-related disease. While the Discussion Paper recognises the failures of the current food system in regard to food access, explicit recognition of the current food system as the key driver of poor dietary patterns and consequent ill health in Australia is needed. This would ensure a stronger focus on specific actions to address the broader systemic, structural factors driving unhealthy food systems and environments, avoiding the implication of individual responsibility of diet-related disease. When the food that is available and affordable is overwhelmingly unhealthy, encourages overconsumption (11-13) and



unhealthy food marketing is omnipresent, it is extremely difficult to follow a healthy dietary pattern.

To achieve sustainable and nutritious diets for all, The George Institute recommends the prioritisation of actions in the following areas:

Addressing unhealthy food environments: Food environments have been defined by the Food and Agriculture Organization of the United Nations as "the foods available to people in their surroundings as they go about their everyday lives and the nutritional quality, safety, price, convenience, labelling and promotion of these foods" (14). They are the link between food systems and the foods that are available to individuals, and a defining determinant of dietary patterns, enabling and constraining the choices that are able to be made (14). This framing highlights the importance of structural factors on the capacity of an individual to follow a healthy diet. The problem isn't solely due to accessibility (although this is an important component of a food environment), or an individual's decision-making or will power. The food that is available, chosen and consumed is heavily influenced by the contexts in which people engage with food systems, particularly within "food deserts" (areas with limited access to affordable, nutritious food) and "food swamps" (areas with a large proportion of unhealthy food outlets) that are more common in socioeconomically disadvantaged areas of Australia (15).

In their current forms, Australia's food environments encourage the consumption of unhealthy products and inhibit access to healthy foods (for a comprehensive overview of the healthiness of food environments in Australia, see Australia's Food Environment
Dashboard). As a result, Australians consume too many unhealthy, processed foods and beverages (16-19) that are harmful to health and wellbeing of the individual and the planet. The recognition that unhealthy food environments are driving diet-related disease and environmental degradation is fundamental to efforts to protect our community and improve health and wellbeing for all Australians.

As such, there must be a dedicated focus on food industry practices and incentives that promote the dominance of unhealthy, ultra-processed products in our food systems and our dietary patterns. The consumption of ultra-processed products is associated with a range of adverse physical and mental health outcomes (20-27), and ongoing exploitation of natural resources. In their current form, the production, availability and marketing of such products will not be adequately addressed by the strategies proposed in the Discussion Paper. In particular, there must be a focus on reducing supplier-induced demand for unhealthy products by negating their dominance in food environments, as demonstrated through the prevalence of products available, as well as ubiquitous marketing and promotions.

The George Institute recommends the next iteration of the Discussion Paper shifts from the focus on individual-level actions to prioritise and address environmental and structural systems-level issues. The George Institute also recommends that the Discussion Paper anticipate and consider future issues, such as the dominance of online food environments or the impact that autonomous vehicle food delivery systems will have.

Improving governance and government leadership: Governments and private industry have considerable influence over, and thus potential to improve, food environments. While the food industry is an important partner in many aspects of the food system, particularly with regards to food safety, by and large there has not been a demonstrated commitment to improving the healthiness of these environments of their own accord (28-31). Transformative



change thus needs strong governance structures. However, transformative change that maintains and improves quality of life for all Australians requires a dedication to reducing conflicts of interest that would see private benefits accrue to the detriment of the public good. Those who benefit from the production and sale of unhealthy, ultra-processed products must be excluded from policy development to ensure that the interests of the broader community are prioritised. This will help avoid decisions that are not based on the needs of all Australians.

There is an opportunity for all governments across Australia to set new structures and standards to ensure a sustainable, nutritious and equitable food system. It is a core function of governments to lead efforts to improve community health and wellbeing. The George Institute recommends this process be led by experiences of people from affected communities, which will help identify the problems within systems that create and perpetuate vulnerabilities and adverse outcomes, as well as the required solutions. Any efforts to improve the health and wellbeing of our communities must be co-designed directly with people with lived experience, as their perceptions likely differ to those of policymakers and program designers (32). Concurrently, The George Institute recommends reduced engagement with actors that promote consumption of unhealthy food with a profit motive.

Improving definitions of sustainability: The term 'sustainability' suggests the maintenance and reproduction of a current or pre-existing state. With regards to society and the environment, the optimal state is one relatively untouched by modern depredations that have led to increased chronic disease in our communities and degraded ecological systems. As such, The George Institute recommends that sustainability explicitly means the preservation of healthy communities and environments. The George Institute also recommends that efforts at sustainability intend to restore community health, which requires the community's protection from harmful food systems.

Our current food systems are known to cause harm to humans and environments. Any definition of sustainability that encompasses the maintenance and reproduction of harmful practices is therefore in clear conflict with ambitions to protect and improve Australia's wellbeing and environments. The George Institute recommends reducing subsidies and incentives for food companies that profit from health and environmental harms in the first instance.

Recognising a comprehensive definition of food insecurity and incorporate water insecurity: The Food and Agriculture Organization of the United Nations' definition of food security encompasses several dimensions: availability (the existence of foods), access (being able to obtain those foods), utilisation (the foods obtained providing adequate nutrition) and stability (maintaining food security) (33). Disruption to any of these indicators could constitute food insecurity.

It is important to recognise that food insecurity and hunger are not synonymous, as a person can be in a state of food insecurity but not hungry (34). There are well-documented links between food insecurity and both under- and over-nutrition (35), with the latter contributing to various diet-related non-communicable diseases, which may occur as people prioritise quantity over quality due to necessity, preference or the influence of unhealthy food environments (32).

"Food systems producing enough food" should not be understood as "individuals/households having enough nutritious food to live a healthy and productive life". As such, The George



Institute recommends that the Discussion Paper explicitly considers both the quantity and nutritional quality of food that is available, accessible and consumed when examining matters related to equitable access to food. A focus on the healthiness of foods must be embedded and prioritised.

Sufficient access to safe water is another critical aspect of food security, important not only for the health of individuals, households and communities, including the wellbeing of First Nations peoples, but also for the future of food production. The George Institute recommends that the inextricably related issue of water security also be thoroughly considered.

In addition, emerging thinking around food security highlights the importance of agency (the ability of individuals and groups to choose the foods they consume and engage in broader food systems and food systems governance) (33). Building upon this, the concept of food sovereignty may provide a useful reference point in efforts to understand and address the underlying factors creating and perpetuating issues with food production, distribution and access. This entails a holistic view that prioritises the perspectives and needs of those who produce, distribute and consume food, encompassing "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems" (36).

2. What legislative and policy opportunities can ensure equitable access to healthy diets?

Food policies and actions to support healthier dietary patterns need to be considered not just in relation to food access and consumption, but across the whole food system and across multiple sectors. A clear evidence base already exists, and the necessary legislative and policy actions needed to achieve healthy, equitable and sustainable diets have been clearly described in previous literature (37-39). The opportunity now is for cross-sector investment into implementing the actions required to truly transform Australia's food system for the better, supported by intentional community engagement to ensure actions are appropriate for different contexts. Action should focus on several key components of food environments, including production and manufacturing, availability and accessibility (physical, social and economic), and marketing practices. Improving this enabling context is essential to ensuring that healthy food is provided, selected and consumed.

The George Institute recommends, as a priority, the development of a broad National Food and Nutrition Strategy to facilitate coherent action across the entire food system, from farm to fork to flush, that will prioritise the health of all Australians. A national strategy will also provide a blueprint for other jurisdictions to implement local policies and actions, such as healthy and local procurement policies and shorter supply chains.

The George Institute recommends the prompt implementation of more tangible, evidence-based activities that will directly address the significant impact of unhealthy food environments on both Australian food systems and dietary patterns (see various Food Policy Index Australia reports for examples). While the Discussion Paper acknowledges the negative health and environmental impacts of the proliferation of ultra-processed and unhealthy foods in our food supply, there are no specific strategies or actions listed to address this issue. The George Institute recommends a comprehensive suite of policy actions to support effective interventions that curb the reach and influence of unhealthy food environments. These include diverse policies such as a stronger, mandatory reformulation



program and Health Star Rating system, improved urban planning controls and restrictions on marketing of ultra-processed foods. In addition, the review of the FSANZ Act, which underpins our food regulatory system, must prioritise both short and long-term public health.

The George Institute recommends an equity lens be applied to efforts to understand and improve our food systems to ensure the physical, social and economic accessibility of healthy food for all and at all times. Equity must encompass a wide range of attributes and experiences, from socioeconomic status to gender to cultural background, and include reference to intersecting attributes and experiences.

Finally, The George Institute recommends the consideration of activities and priorities that reside outside of the food system but that will improve the healthiness of dietary patterns. These include society-wide actions necessary to change the structural conditions and systems driving inequity and vulnerability. The George Institute recommends urgent action be taken to improve the affordability of healthy diets, which can include direct financial support to address poverty and increase household incomes, as well as fiscal initiatives such as subsidies for healthy foods and health levies on unhealthy products. This may also include hypothecated funds for initiatives to encourage healthier food environments and dietary patterns.

With particular regard to First Nations people, The George Institute recommends community perspectives and recommendations be acted upon and respected, with the community retaining decision-making authority to ensure government accountability, respect and reciprocity, transparency and responsiveness. First Nations community members and Elders should be involved at all levels of decision making and implementation, prioritising local expertise, local needs and local governance structures in both long-term planning and emergency responses to food and water security. All communities, regardless of location, should be supported through local, community-led strategies that address nutrition and environmental outcomes – not a one size fits all strategy.

3. What strategies would be most effective to improve affordable community access to healthy food in regional and remote Australia?

The George Institute recommends the implementation of strategies to maintain GST exemptions on basic healthy foods, support freight subsidies and provide government income supplements for remote households experiencing vulnerabilities.

While some experiences of other groups living in regional and remote Australia may cross over, the experience of Aboriginal and Torres Strait Islander communities is directly related to ongoing impacts of colonisation on sovereign unceded lands. Therefore, any strategies to specifically reach these communities require further contextualisation.

4. Are there any other R&D priorities that should be addressed to ensure Australian food systems become more equitable? Which priorities are the most urgent?

As noted above, the problems facing Australians and solutions to improving population diets are largely already known. The priority now is to fund and implement activities, which may require some additional R&D with implementation science researchers and practitioners to support the application and scalability of these evidence-based, effective actions.



The George Institute supports the proposed recommencement of a national diet and nutrition survey to collect comprehensive and accurate data on the dietary patterns of Australians, noting that it must be regularly collected to be useful. It is critical that comprehensive measures of food insecurity (which encompasses nutritional quality and water security and is characterised by more than just food accessibility) are also included, to address the current gap in data and lack of transparency of this issue in Australia. Robust and regular surveillance of the prevalence and long-term health impacts of contaminants and residues, novel processing techniques and ingredients, and the healthiness of food supplies and environments, should also be prioritised to understand their impact on Australians and the food supply, including with reference to trade. The George Institute recommends that the impact of environmental change on food systems and vice versa must be closely monitored, as well as mapping power dynamics in the food system.

The George Institute is pleased to note that the "improved collection of data metrics for Aboriginal and Torres Strait Islander Australians" is recommended in the Discussion Paper. The George Institute recommends this is informed by data sovereignty principles. This is critical to ensuring that Aboriginal and Torres Strait Islander peoples' data is collected, analysed and used in a self-determined way.

The George Institute recommends the "precision and targeted nutrition" R&D priority is unnecessary, as most people in our community would be best served by actions to improve food environments generally to ensure the adequate provision and consumption of everyday, environmentally sustainable and healthy foods.

Similarly, research into "best practice industry guidance" is unnecessary, given both the evidence base that already exists and the ongoing failures of voluntary or self-regulated initiatives in Australia and around the world (38, 40-44). With regards to the food industry, actions must be prioritised that that will be effective in improving food environments (i.e. by reducing the production and marketing of unhealthy food) and translate into effective regulation (including monitoring and enforcement). The George Institute recommends against R&D priorities that incentivise and subsidise the unhealthy food industry to continue their harmful practices.

Focus Area 2: Reducing waste and improving circularity

The George Institute understands the importance of reducing food waste and making sure everyone has access to a healthy balanced diet. There has been a growth in surplus food redistribution schemes to address these problems over the last few decades. However, it is important that such schemes do not become institutionalised, leading to a two-tier food system where some in our community must rely on food charity.

A reliance on food charity is insufficient to improve food security. While food banks are important to address acute shortages of food, they do not resolve the issues causing food insecurity (45), and international experience has highlighted their limited utility and sustainability (46), although they may be valuable sites for the delivery of additional programs (47-49).

The George Institute recommends attention be dedicated to the social and economic causes of food insecurity (50). Enhanced supports to comprehensively mitigate inequalities and improve access are sorely needed (45, 51-55). International experiences demonstrate the effectiveness of policies and interventions that address the underlying social and economic



determinants of food security (46). As such, governments should ensure that all people have access to adequate income and facilities to secure a healthy diet for themselves and their dependents. Such schemes are most effective if they are geared towards supporting people to obtain adequate housing and incomes and access appropriate infrastructure and support, rather than just providing free food.

Focus Area 4: Improving environmental and economic resilience

In line with our above comments on sustainability, The George Institute recommends the term "resilience", and efforts to support resilience must protect communities and environments from harm. Resilience is undermined, and made more expensive, by the burden of disease, ecological degradation and environmental change wrought by unhealthy food systems as a whole and unhealthy food companies individually. Economic "resilience" must align with the need to protect public goods, not work to support the continued production of and profit from harm.

With regards to Aboriginal and Torres Strait Islander peoples, we consider that this section is lacking reference to the critical need to embed Indigenous Knowledges into developing solutions for environmental resilience. It is important to consider the long history of Aboriginal and Torres Strait Islander peoples' sustainable ecological management of their lands for many thousands of years prior to colonisation and their subsequent removal from traditional lands. The George Institute recommends better understanding of the interplay between ecological management and cultural practices, that includes First Peoples' sophisticated knowledge systems around land management and environmental resilience. Respectful sharing of this Knowledge is of benefit not only for the safety of all Australians, but also to a collective sense of Nationhood and in celebrating their own rich and diverse cultural history.

The George Institute recommends that any examination of impacts on the population should recognise and value a holistic understanding of health and wellbeing that includes the physical, social, emotional, cultural and spiritual health of individuals and communities. By understanding Indigenous ways of knowing, being and doing, we can better understand the link between us as human beings and land/Country. Through this paradigm, it becomes clear that when Country is unwell (e.g. through impacts of unsustainable land management practices, climate change, natural disasters) then people are also unwell, placing an increased burden on our healthcare and social systems.

Indicator shortlist

While we agree that the proposed approach should be used to track a range of issues associated with our current food systems and any food systems transformation that takes place, The George Institute recommends that actions and indicators are directly appropriate to monitor diet-related disease and environmental damage caused by our current food systems, including in sectors strictly outside of the food sector. We have demonstrated through our responses above a strong justification for the indicators to better represent the current problems and the desirable future state.

While comment was requested on "currently existing indicators with Australian data", The George Institute recommends an expansion to include data that isn't currently collected. Where data does not currently exist or is inadequate, it must be collected and reported in



order to better reflect progress towards an improved (more healthy, environmentally sustainable and inclusive) future food system. For instance, data on food insecurity is not currently collected on a population level and recent collections have relied upon inadequate instruments (56-58), yet it is undeniably important to monitor food insecurity comprehensively to assess how our food systems are performing. There is a large range of diverse and developing data sources that should be better investigated for inclusion. The George Institute has recently established the Healthy Planet, Healthy People Centre for Research Excellence to improve monitoring of the human and planetary consequences of patterns of food and beverage consumption, and thus recommends filling data gaps as a priority action.

Regarding potential indicators, The George Institute recommend:

- A focus on governance in food systems and the healthiness of food environments, drawing upon indicators contained within Australia's <u>Food Environment Dashboard</u>.
- The burden of diet-related disease be included, expressed in terms of disability and early death.
- A comprehensive conception of food and water insecurity be embedded within monitoring systems and tools.
- The inclusion of indicators that relate to connection to culture, Country and First
 Nations wellbeing. This could include indicators of holistic wellbeing such as access
 to sovereign lands, cultural practices and traditional foods, as well as indicators of
 Aboriginal and Torres Strait Islander governance and self-determination. As
 discussed previously, we emphasise that any indicators relating to First Nations
 Australians should be considered in relation to data sovereignty principles.
- A wide range of attributes and experiences be captured and reported, including
 intersecting attributes and experiences, to better understand inequities experienced
 by communities and individuals. Indicators to reflect community and consumer
 involvement in decision-making should also be explored.

Contact

Chelsea Hunnisett
Policy and Advocacy Advisor
The George Institute for Global Health
chunnisett@georgeinstitute.org.au | 0426 439 947

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