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GLOBAL CENTER FOR  
**LEGAL INNOVATION ON  
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## ***2021 Global Food Governance Conference***

### ***Abstract Booklet***

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*Opportunities to strengthen trade policy for food and nutrition security: an analysis of two agricultural trade policy decisions*

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1 Research Assistant, (1) Menzies Centre for Health Policy and Economics, School of Public Health, The University of Sydney; (2) Institute for Development Studies, UK.

**Abstract:**

Food insecurity and the double burden of malnutrition have emerged as prevailing global health challenges of the 21st century. These have been influenced by trade policy decisions, particularly in relation to agriculture, which are highly political and can have large effects on global, national and local food systems. Analysing particular trade policy decisions and improving global food systems governance at the policy level is crucial in addressing these issues.

The aim of this study was to analyse two multilateral trade policy decisions relevant to food and nutrition security, to understand the political and power dynamics in the spaces in which these decisions are being made at the global level, in order to strengthen trade-related food systems governance to improve population nutrition: (1) the negotiations on agricultural safeguards that were implicated in the stalling of the 2008 World Trade Organisation (WTO) July Ministerial and; (2) the negotiations on public stockholding programmes for food security purposes that were implicated in the 2013 WTO Bali Ministerial. This qualitative policy analysis drew on data from a targeted literature and policy review, as well as in-depth interviews with eight individuals with expert knowledge and/or involvement in the case studies. The analysis focussed on policy processes and power dynamics, drawing on two frameworks from political science.

In the 2008 July ministerial, no decision was reached regarding agricultural safeguards. In the 2013 Bali ministerial, WTO members agreed on a temporary Peace Clause to exempt public stockholding programmes for food security purposes from legal action under the WTO Dispute Settlement Mechanism for a period of four years. This study found that power dynamics were shifting, such that developing countries had more of a voice at these multilateral negotiations, and were no longer willing to settle agreements that only benefited developed countries. Contextual factors such as level of food insecurity, socio-economic situation, and historical institutional processes at the WTO, were influential in shaping actor agendas. Concerns about food insecurity at the global level increased as a result of the global food crisis (2007 – 2008 and 2011 – 2012), and there was a growing recognition that previous agreements on agriculture had been biased towards developed countries interests.

These case studies of policy change reflect growing resistance from developing countries, who were unable to protect their most vulnerable. They point to the value of coalitions between developing countries, in contributing to shifts in power at the WTO. The outcome (or non-outcome) of these negotiations was a small, positive step towards changing the multilateral trade agreements shaping food systems globally. Looking to the future, the recent appointment of Dr Ngozi Okonjo-Iweala as the new WTO Director-General (first woman and first African DG), provides a basis for optimism for a more fair and equitable future of the multilateral trading system.

*Framing civil society participation in Zero Hunger (SDG2) governance: A document and policy analysis*

**Joanna Horton and Kiah Smith**

<sup>1</sup> Lecturer and PhD Candidate, Monash University

**Abstract:**

**Background:** Globally, the food system is contributing to poor health, climate change and the depletion of natural resources, threatening our planet's ability to sustain the growing population beyond 2050. Urgent transformation of our food system is critical to achieve many global targets set within Agenda 2030, including a shift in population-level diets. Local governments, particularly those in urban areas, have a vital role to play in leading transformative action. This scoping review sought to describe the types of policy interventions that local governments globally have invested in to facilitate healthy and sustainable diet-related practices.

**Methods:** Interventions were identified and analysed to: (1) describe which healthy and sustainable diet-related practices are most commonly targeted; (2) identify the political, geographic and economic context for each intervention; (3) understand how health, equity and the broader food system are considered; and (4) describe how evidence is used to develop relevant implementation and evaluation strategies. First, five databases were searched for publications which cited policy interventions implemented by local government authorities within the 199 signatory cities of the Milan Urban Food Policy Pact (MUFPP) that targeted at least one healthy and sustainable diet-related practice. Second, grey literature was sourced on included interventions. Finally, data were charted to map the strategy options included in each intervention against the MUFPP's monitoring framework.

**Results:** From 2624 screened peer-reviewed studies, 27 met inclusion criteria and cited 36 relevant policy interventions. Most interventions were in high income countries (n=29; 81%), in Europe and Central Asia (n=24; 67%), described local governments as having a role of leadership or ownership (n=33; 92%) and considered health (n=31; 86%), equity (n=29; 81%) and the broader food system beyond dietary consumption (n=34; 94%). The most commonly targeted diet-related practice related to sourcing of food produced using sustainable methods (n =31; 83%). Within the policy interventions, a range of specific activities or strategy options (n=66) were identified. The most commonly selected strategy options were food procurement policies within public facilities (n=16; 44%), establishing guidelines for school feeding programs (n=12; 33%) and allocation of urban garden plots

for food production and education opportunities for people experiencing disadvantage (n=11; 31%).

Conclusions: Local government authorities, as signatory cities to the MUFPP, are investing in interventions that consider most phases of the food system to facilitate population-wide uptake of healthy and sustainable diet-related practices. Opportunities exist for local governments to leverage the dual benefits to human health and environmental sustainability of various interventions, such as those which discourage the overconsumption of food including less meat consumption and the regulation of ultra-processed foods. Policy options and increased capacity within local government are required to address food supply and distribution challenges to shift population-level diets. The role of local governments in leading healthy and sustainable food policy is critical to achieve global planetary health targets.

## *Blockchainizing Global Food Governance? Opportunities and Challenges for Food Safety, Traceability, and Sustainability*

**Ching-Fu Lin**

<sup>1</sup> Associate Professor of Law, National Tsing Hua University

### **Abstract:**

In recent years, IBM announced a collaboration with a few major food producers and retailers, including inter alia Dole, Nestlé, Tyson Foods, Kroger, Unilever, and Walmart, to leverage disruptive technologies such as distributed ledger technologies (DLTs, colloquially known as “blockchain”) to address imminent governance challenges along the global food supply chain. Walmart has further required its upstream suppliers of leafy greens to use the cloud- and blockchain-based “IBM Food Trust” platform by September 2019. Similarly, the United Nations World Food Programme (WFP) launched the “Building Block” program since 2017. Using iris-scanning technologies and blockchains, this program helped Syrian refugees verify their identities and directly deduct what they spend from the amount of aid they receive from the WFP. Initiatives as such have the potential to help retailers and consumers to pinpoint sources of contamination at times of outbreaks or provide production details and quality certifications. Blockchains can also be combined with smart contract systems or other AI techniques to increase efficiency, simplify transactions, ensure compliance and security, and promote trade facilitation across borders.

While the far-reaching ramifications of blockchain technologies in the financial area (such as fintech and cryptocurrency issues) have been documented in media, literature, and political arenas in recent years, the opportunities as well as challenges posed by blockchain to food safety, traceability, and sustainable development have not been fully examined. The benefit of applying blockchain technologies in the global food supply chain seems salient: transforming paper-based documents into blockchain-enabled identity can, generating a high level of transparency and data integrity, enabling smaller farmers to bypass middlemen in crops trading and cash transfers, and providing efficient and cost-effective way to manage the production system. However, blockchainizing the food supply chain may pose legal and policy challenges to both developed and developing (especially underdeveloped) countries in different ways, which may in turn undermine the overall legitimacy and accountability of such techno-regulatory mechanism.

This paper therefore aims to explore the potential of blockchain technologies in revolutionizing the global food supply chain in terms of food safety, traceability, and sustainable development. More specifically, this paper will examine concrete cases in which blockchains have effectively transformed how we conventionally think about food safety, certification, and traceability (which has by and large been manual and paper-based, and therefore a labor-intensive and time-consuming). At the same time, when all participants in the global supply chain are being connected and required to upload their data to the cloud-based system and generate a transparent, traceable, immutable, and shared record of production details, quality specifications and origin facts, sustainability and fair trade certifications, and storage, import/export, and logistics information, the forms and substances of conventional food law (as well as data protection law, anti-trust law, and trade law) may need to be re-conceptualized. In this light, this paper will also endeavor to locate the possible barriers and challenges to “blockchainizing” food law at national and international levels, and offer recommendations for leveraging such technology in an effective, efficient, and responsible manner.



# The Role of Civil Society Organisations in Food System Governance in Australia

**Rebecca Smits**

1 Student, The University of Wollongong

## **Abstract:**

**Background:** Solutions to the health, sustainability, and equity challenges raised by contemporary food systems require innovative forms of governance that offer new solutions and include diverse voices and perspectives. Globally, food system governance is expanding to incorporate actors outside government, including civil society, which participates via community-based initiatives (CBIs) and other non-government organisations (NGOs). However, the role of civil society in food system governance is a much less researched topic in Australia, compared to the role of local, state, and federal governments. Accordingly, this study explores the role of Australian civil society organisations in food system governance and their contribution to building a more sustainable, more equitable and healthier food system.

**Methods and analysis:** Via a national survey, 36 Australian organisations self-identified as engaging with food system governance. The survey found that most organisations worked at multiple levels of society (i.e., local, state, national, and/or international) and used a broad range of activities to engage with food system governance. Education (22.68%) and advocating (15.46%) for change to legislative and policy frameworks were found to be the most common activities used, with the top advocacy topics identified as food production (21.05%), natural resources and the environment (12.63%). The most important factors affecting the extent of these organisations' engagement with food system governance were the degree of funding they received, the extent of established communication and collaboration networks and an overall awareness of the need for change.

**Conclusion and recommendations:** Civil society organisations have an important presence in promoting food system transformation in Australia, alongside the strengthening of food systems governance by all levels and sectors of government. However, CBIs and NGOs require additional recognition, resources and support from government, funding bodies and community members to enhance their already significant role in creating a fairer, healthier, and more sustainable food system for all. Future research should explore, in greater detail, the potential pathways through which the ability of civil society organisations to address food system challenges can be consolidated.

**Fiona McKay**

1 Senior Lecturer, Deakin University

**Abstract:**

**Background:** Food insecurity is an important contributor to health and a factor in both underweight and malnutrition, and overweight and obesity. Countries where both undernutrition and over-weight and obesity coexist are said to be experiencing a double burden of malnutrition. India is one example of a country experiencing this double burden. Despite economic growth and change, many public health indicators in India have failed to improve as quickly or as significantly as hoped. Low and irregular incomes are the root cause of urban food insecurity, but inadequate housing and basic infrastructure as well as limited access to services contribute to malnutrition and food insecurity. While there is research that has investigated the role of agriculture in food insecurity in India, there is little research that has investigated the lived experiences of food insecurity. This research aimed to investigate the experience of food insecurity among women in India.

**Method:** This research employed a mixed methods approach to explore the dietary intake, anthropometric characteristics, and food security status of rural Indian women. In total, 78 households in the village of Thuha, in Punjab were surveyed in March 2020. Interviews included food related experiences; anthropometric measurements (weight, height, waist, and hip) and dietary assessment (24-hour diet recall, two non-consecutive days); dwelling facilities; agriculture related information, including household agriculture activities undertaken; food security status (via the USDA Household Food Security Scale Measurement); and demographic information.

**Results:** Most participants were female and around 45 years of age. Most households were joint, and many had at least one child under the age of 18. Over two thirds had some land that they were able to farm, with most respondents farming wheat, potatoes, and other vegetables. Households reported an average monthly income of Rs. 20,191, with at least half of this spent on food, and almost half made decisions about household spending together. Participants were concerned about the amount of pesticides used in farming, and the impact of these chemicals on their health. Most households owned a phone and/or a television, and many households had access to a washing machine. The average waist measurement, waist to hip ratio, and BMI were all above WHO recommendations, with two thirds of participants categorised as obese. Contributing to these findings was a very limited diet, high in energy, and low in protein and iron.

Conclusions: The findings of this research suggest that the rural Indian women in this study have a lack of diet diversity and may be at risk of a range of non-communicable diseases. Further research to explore the relationship between financial choices and food insecurity is needed, as is an exploration of health behaviours.

## *The Regulatory Challenges of Wasted Food in Australia: An Introduction*

**Christopher McElwain**

<sup>1</sup> PhD Candidate & Teaching Fellow, UNSW Faculty of Law and Justice

### **Abstract:**

Globally, more than one third of all the food we grow or make is wasted, and it appears to be getting worse. The amount of food wasted in Australia is also high, nationally estimated in 2019 to be 7.5 million tonnes per year, imposing at least \$36 billion in economic, social and environmental costs. As a result, failing to address the twin problems of wasted food (that is saving more food and better managing food we waste) amounts to two of Australia's largest market and regulatory failures. Australia started national action in 2017 with the release of the National Food Waste Strategy and by committing to halve per capita levels of wasted food by 2030. This builds on earlier action by regulators at the state-level, notably Victoria and NSW. To date, this action has been loosely coordinated and disjointed, but there are emerging prospects this might change with the creation of two new national "regulatory agencies", Stop Food Waste Australia and the Fight Food Waste CRC. These existing weaknesses are compounded by proposals to use "light touch" regulatory tools such as voluntary commitment programs (the Australian Food Pact) and education campaigns, predominantly aimed at actors at the middle and end of the food system. These responses also face other significant regulatory challenges. After briefly setting the scene on wasted food globally and in Australia and then providing an overview of the history of regulatory action in this area, my presentation will explore these responses and challenges using the lens of the Australian theory of Smart Regulation. It will argue that under the current proposals, the evidence suggests Australia is very likely to miss the 2030 national target, although there are stronger prospects for better managing the food we waste. It will also propose the use of a few evidence-based regulatory tools to improve Australia's chances of meeting the 2030 national target with respect to saving more food.

*A systems approach to food systems regulation: responding to the global rise and harms of ultra-processed foods*

**Tanita Northcott**

1 PhD Candidate, Deakin University

**Abstract:**

Introduction: Ultra-processed foods (UPFs) are ubiquitous and unnecessary food products that harm human and planetary health. UPF consumption is linked to poor health outcomes, such as an increased risk of obesity and non-communicable diseases,(1-5) and also harms the environment, contributing to climate change, the depletion of natural resources and biodiversity losses.(6, 7) Despite the harms, UPF consumption and sales continue to rise.(8) This rise in UPF consumption is produced and sustained by the interrelated drivers of the modern food system, including urbanisation, the globalisation of the UPF industry, and the intensive UPF marketing practices of large transnational corporations.(8, 27) To halt the rise and attenuate the dietary harms of UPFs, a 'whole of food systems' approach to regulation is necessary.(9) Internationally, public health nutrition expert bodies, including the World Health Organization (WHO), the Food and Agricultural Organization of the United Nations (FAO), and the EAT-Lancet Commission on Food, Planet and Health, have urged governments to implement policy interventions to meet health and sustainability targets and generate food systems change.(12, 26, 35, 38, 39) The aim of this literature review is to critically analyse current policy frameworks and approaches and examine an important regulatory question that has attracted little attention to date: what does it mean to take a systems approach to the regulation of modern food systems that are generative of high UPF consumption?

Methods: A narrative review and synthesis method was used to conduct an analysis of a broad and diverse body of literature, from the fields of public health, food policy, systems science and regulatory studies.

Results: First, the review examines the modern food system as a complex adaptive system that currently operates to support and sustain excess UPF consumption, and urgently demands an integrated and systems-based regulatory approach to counter the rise and dietary harms of UPFs. Second, it finds that systems science concepts, and in particular a leverage points framework, provide robust conceptual tools that can be

applied to understand UPFs as a property of unhealthy and unsustainable food systems. Third, it indicates that existing food policy intervention frameworks lack a systems orientation and do not address the deeper levels of intervention required for transformative systems change.

Conclusion: Despite the increased attention on food systems transformation in the international food policy sphere, the components of unhealthy and unsustainable food systems are not holistically considered under current policy frameworks. Systems science concepts and a leverage points approach hold considerable promise as analytical tools to inform food systems regulation as they reframe the potential and success of regulatory interventions based on their capacity to interact with and transform complex adaptive systems, rather than simply reform or adjust parts of it. More attention must be directed at how and where to intervene in food systems to attenuate the emergent harms of UPFs..

*Why is measuring local food environments important for influencing food policy making – and how can we actually do this?*

**Penny Farrell, Anne Marie Thow, Jessica Bogard, Jillian Tutuo**

<sup>1</sup> Research Fellow, The University of Sydney

**Abstract:**

Why is measuring local food environments important for influencing food policy making – and how can we actually do this?

The triple burden of malnutrition in the Pacific region is a significant challenge, and it is clear that successfully tackling it will require strengthening policies to promote healthy food environments. However without rigorous research on food environments, countries will continue to be hampered in their attempts to develop and adopt contextually relevant policies to promote healthy food environments. This presentation draws on two related studies to explore policy-relevant measurement of food environments.

First, we present preliminary results of a scoping review into measuring food environments to inform policy. Collecting regular data on food environments is critical to channel information into, and monitor effectiveness of, policy and interventions to improve diets. If a key factor such as food pricing, which in a price sensitive environment is highly influential on people's ability to access food, changes, feeding back this information to policy makers and other stakeholders in a timely manner lets them tailor policies and interventions to improve food access (e.g. subsidies on specific food commodities).

Second, we present the survey design and initial results from a study currently underway which is collecting data from the local food environment in three provincial locations in Solomon Islands at repeated time points. The first survey was performed in mid-2020 when restrictions related to the COVID-19 pandemic commenced. This is a vendor survey which analyses the availability and pricing of local and imported foods in the external (market/store focussed) food environment. The study uses a novel survey tool which was developed based on validated tools to measure and map the external food environment and as such also offers much-needed methodological advancement in this space. Our findings give insights for policy on how food access in local food environments can be measured and improved in a food system that is vulnerable to external shocks, of which a pandemic is a significant one.

**Marissa Silverberg**

<sup>1</sup> Graduate student, Johns Hopkins University

**Abstract:**

Societies across the globe continue to face significant challenges to hunger and malnutrition while at the same time facing large environmental and social tolls from food systems. National governments have shown more consistent commitments to improving food security, nutrition, and environmental outcomes. Shifting focus towards food systems, as evidenced by the 2021 UN Food Systems Summit, presents new opportunities for improving cross-sectoral and inclusive governance of food systems. There is some fragmented evidence regarding what measures at the national level are most effective for inclusive governance and accountability toward food system transformation, but a broad understanding of best practices and evidence gaps is lacking. Similarly, there is limited research as to the most effective mechanisms to engage subnational entities, civil society, and the private sector throughout policy processes.

This literature review explores how policy implementation has been measured across domains intersecting food systems. It is motivated by the following research questions: 1) Does budget tracking lead to meaningful implementation? 2) How do successful implementation mechanisms at the national level conform to successful implementation at the global or subnational level? 3) What is the influence of both civil society's and the public sector's involvement in leading to meaningful implementation? The research examines stated commitments and budget tracking initiatives related to food systems, a review of tracking initiatives and frameworks such as the Global Nutrition Report, Scaling Up Nutrition, and public expenditure reviews, as well as a general review of the broader literature related to effective implementation.

Research findings indicate that to effectively track, develop, and maintain budgets to address food system transformation, systemic coordination and collaboration across entities and sectors is needed. For example, donor networks, including those coming through government departments, need to develop guidance for systemic coordination in the distribution and utilization of funds to prevent bottlenecks in successful implementation. Further, clear roles and structures for involvement of civil society have been shown to best ensure transparency and accountability while building local capacity specifically for addressing budgetary changes and donor priorities. Standardization across terminology and metrics is also essential to consistency in a global framework. Finally, there is a missing link for alignment and coordination of funding and policy



priorities across the public and private sectors. Our findings contribute to a better understanding of the evidence landscape and key gaps informing the research agenda going forward. Building on the evidence and addressing gaps can help to formulate the most effective commitments, hold governments and other actors to account, and implement inclusive policy processes capable of achieving their stated goals and achieving food system transformation.

*The (mis)alignment between Australian government policies and international recommendations to support smallholder farmers*

**Kerri-Anne Gill**

1 Honours student, University of Queensland

**Abstract:**

With the global population predicted to reach almost 11 billion by the end of this century, the agriculture sector is under pressure to provide food and nutrition security within planetary boundaries. In Australia, farm size has been increasing as successive governments have adopted agriculture policies that favoured farm consolidation, commercialisation, and global free trade of agricultural commodities. This policy direction has implications for the viability of small farms which evidence suggests play a key role in protecting biodiversity and supplying diverse foods and nutrients for human health.

Between 2011 and 2016 the United Nations Committee on World Food Security (CFS) published three sets of policy recommendations for member states to promote and support smallholder agriculture. These documents acknowledged the vital role small and family farms play in caring for land, ensuring food and nutrition security, and providing livelihoods for millions of people.

The present study sought to gauge Australian governments' adoption of the CFS policy recommendations for supporting smallholder agriculture. In the first stage of the study, 47 individual recommendations from three smallholder related CFS documents were distilled into 13 themes which covered aspects such as developing an overarching multi-sectoral vision for smallholder agriculture, ensuring access to land and natural resources, and providing relevant data and information systems. In the second stage, relevant policy documents released since the first CFS smallholder recommendations were published in 2011, were searched for and extracted from the websites of the federal, two state and two local government jurisdictions. The policy documents were reviewed against each of the 13 themes and rated to indicate whether they fully or partially covered the recommendations or did not address them at all. Further analysis identified the themes with complete, partial or no coverage in the included policies, and differences between jurisdictions.

Preliminary results indicate a dearth of policy initiatives targeting the specific needs of small farms. Most of the initiatives that could benefit smallholders targeted the broader agriculture sector or the general community. For example, public infrastructure and services that benefit the public, particularly in rural areas, also benefit smallholders. Yet,

agriculture-specific investments such as freight transport links, agricultural technology research and development, and promotion of agriculture investment opportunities to capital investors appeared to target the needs of large-scale commercial agribusinesses. Differences between jurisdictions in the recommendations adopted appeared to correspond to differences in jurisdictional powers, for example, federal policy included enhancing the powers of the anti-competition regulator to address misuse of market power by the Australian supermarket duopoly in dealings with primary producers. Meanwhile, state governments focused on ensuring biosecurity and sponsoring sustainability initiatives while local governments planned for urban expansion and the protection of agricultural land.

The results highlighted a lack of recognition of the contributions to food security and sustainability made by small and family farms in Australia. However, it also identified opportunities for policy that could better support smallholders as part of Australia's sustainable food future.

## *Poison in the package: pesticide residues in ultra-processed foods*

**Fábio Neves dos Santos, Giorgia Castilho Russo, Janine Coutinho Giuberti, Ana Paula Bortoletto Martins, Rafael Rioja Arantes**

<sup>1</sup> Regulatory Analyst, Instituto Brasileiro de Defesa do Consumidor – Idec

### **Abstract:**

Brazil is one of the world leaders in agricultural production and largest markets for pesticides. Soy, corn, wheat and sugarcane crops consume about 80% of the total volume of pesticides applied in Brazil. They are utilized in high amounts in these commodities, and are frequently detected in fresh foods. Once such commodities are the main source of ultraprocessed foods, it is also likely that the final product could have residues of pesticides due to the intensive industrial production and linkage from the agribusiness and ultraprocessed industry along food chains. Chasing this eventual link, Idec conducted the present analysis. Our objective was to detect and quantify pesticides residues in ultraprocessed foods.

Products were selected based on the Brazilian Research on Family Budget (POF-2008). Ultraprocessed products were chosen due to their well-known impacts on health, in addition to establishing links to the environmental hazards. This research also presents an innovative component, as such products are not largely investigated in Brazil and even in the world. Besides the main source of commodities in the formulation, we also considered the marketing claims to children and health of such products.

The 27 ultra-processed products were purchased in 2020 in three Brazilian big supermarket, and divided into 8 categories: sodas, fruit nectar, soy drink, snacks, breads, breakfast cereals, stuffed biscuits and crackers. Product's brands in these categories were also selected considering market share and consumer preference index and surveys. We sent the ultraprocessed foods for multi-residue analysis of pesticides, glyphosate and derivatives to an international laboratory accredited by the Brazilian authorities such as Inmetro, MAPA (Ministry of Livestock and Supply) and used by Anvisa (Agency on Surveillance on Health) in their program of monitoring pesticides.

Our results identified pesticides including: Carbendazim, Carbendazim (MBC) and benomyl, Cyhalothrin-Lambda, Cypermethrin, Chlorpyrifos, Chlorpyrifos-methyl, Bifenthrin, Deltamethrin, Fenitrothione, Glyphosate, Glufosinate, Malathion and Pymifos-methyl. At least one pesticide residue was detected in 16 products (59,3%). Glyphosate or Glufosinate residues, most used and with a classification of "probably carcinogenic to humans" from WHO, were detected in 14 products (51,8%). Diquat and Paraquat residues were not detected in the analysed products.

Our study spotlight that industrial processing does not eliminate pesticide residues of the ultra-processed foods. Our results indicate that ultra-processed foods consumed in Brazil may not be safe regarding the potential risks of acute and chronic poisoning arising from dietary exposure to pesticide residues. Although some studies claim that processing can reduce the concentration of pesticide residues. Several ultraprocessed products analysed advertise their claims to health and environment to draw consumer's attention. Companies need to provide transparency about the presence of pesticide residues in their products, carry out the tests and make the results of pesticide residues available to consumers. On the other hand, policies need to address adequate monitoring and protective regulations to reduce de production and consumption of pesticides and ultraprocessed.

Finding pesticides in 6 out of 8 categories of ultraprocessed food and beverages highlights the urgency to address this issue, although we identify that further studies and investigations are needed.

## *The political economy of healthy and sustainable food procurement in Australia*

**Maddie Heenan**

<sup>1</sup>Research Associate & PhD candidate, The George Institute for Global Health

### **Abstract:**

It is increasingly being recognised that changes to food systems are necessary in addressing the global syndemic of obesity, undernutrition and climate change. However, the complex nature of food systems makes policy change difficult with entry points at several levels of the system. Much of the policy work to date has focused on the food environment or the individual, and relied on behaviour change at an organisational level in which incentives and institutional levers are often lacking. Food procurement policies offer an opportunity to address issues at higher levels of the food system and target the supply chain and food environments collectively through government leadership.

By implementing healthy and sustainable procurement policies, governments can use their purchasing power to drive market change and improve not only economic, but also social, environmental and health outcomes. To date, however, the strategic use of procurement has been limited, typically being employed as an administrative function, placing emphasis on competition, user value and cost.

This presentation will discuss the use of political economy analysis (PEA) to identify and explain the barriers and enablers to policy implementation. A PEA situates laws, policy or program interventions within an understanding of political, economic and social structures and processes. Most importantly it suggests opportunities to address barriers to reform and identify mechanisms that could be used to improve outcomes.

In Australia, most state and territory governments have healthy food provisioning policies that target availability of unhealthy food at the retail level, and sustainability policies that promote a life-cycle approach to procurement. However, it remains unclear if health and sustainability are important considerations in awarding contracts, and whether these policies are implemented into supplier contracts. Because policies exist, our PEA framework is intended to be used for prospective analysis of implementation barriers and enablers, focusing on the structural and contextual factors, bargaining processes, stakeholders, and incentives and ideas. It will involve a desktop analysis of policies and food contracts, and key informant interviews with stakeholders across different government departments (e.g. health, environment, treasury) and industry suppliers in different food and drink categories (e.g. meat, packaged foods, beverages, fruit & vegetables).

This presentation will outline the framework used, the assumptions made and the potential outcomes and impacts. We explore the barriers and opportunities for incorporating and balancing economic, public health and environmental considerations in purchasing practices. We present Australian state government food procurement as a case study to understand the political economy surrounding healthy and sustainable sourcing of foods. However, the framework can be used in other jurisdictions and has broader applicability for food system policy.

*Method to estimate product-specific greenhouse gas emissions for packaged foods and beverages: an application to the Australian food supply*

**Allison Gaines and co-authors: Tazman Davies, Maria Shahid, Liping Huang, Jason Wu, Fraser Taylor, Michalis Hadjikakou, Simone Pettigrew, Bruce Neal**

1 PhD Researcher, Imperial College London, The George Institute for Global Health

**Abstract:**

**Background:** New policies and interventions are necessary to improve the modern global food system and reduce its adverse effects on both human and environmental health. Such actions require ways to define and demarcate the environmental impact of specific foods. While databases are available for broad food groups and dietary patterns, they are largely lacking for products as marketed to consumers. This paper provides an innovative method for estimating product-specific greenhouse gas emissions (GHGe) for packaged foods and beverages by combining existing ingredient life cycle assessment (LCA) data with information provided on packaging labels. The method is applied to a large sample of products in the Australian food supply.

**Methods:** For approximately 20,000 packaged products sampled in 2019, ingredient lists were disaggregated and each ingredient was mapped to food composition data (e.g. the Australian Food, Supplement and Nutrient Database). Using linear programming, we predicted ingredient weights when missing from product packaging. We then assigned average GHGe estimates, together with uncertainty intervals, to each ingredient using a comprehensive ingredient LCA database developed by aggregating independent data sources (including Poore & Nemecek 2018 and Ecolnvent). The weighted ingredient-level GHGe values were summed to determine a total GHGe estimate for each packaged product. Uncertainty in the product-level GHGe estimate was calculated. Further adjustments for the product's level of processing (based on NOVA classification) and country of origin information were applied when available. Finally, the product-specific GHGe estimate was validated using a top-down GHGe estimation approach.

**Results:** The means and ranges of product-specific GHGe estimates for food and beverage categories broadly align with reports from existing literature, as well as with the validation approach which employs an environmentally extended input output analysis (EEIOA). Products with animal-based ingredients had the highest GHGe, while plant-based products had the lowest. Further, the use of environmentally unfriendly oils (such as palm oil over rapeseed oil) and grains (such as rice flour over wheat flour) are examples of key differentiators of GHGe within product categories.



Conclusions: Our novel, product-specific GHGe estimation method appears to be a scalable approach to enabling the direct comparison of the environmental impacts of thousands of products in a way that rigorously accounts for ingredients and encompasses uncertainty. The resulting data outputs may be incorporated into processes for developing regulatory frameworks to control GHGe and monitor industry compliance. Potential applications include the development of environmental policy (e.g. taxation), facilitation of labelling requirements and implementation of trials to compare the effects of environmental impact labelling against or alongside health labels. There is also potential to explore the combination of human and environmental health measures into a single product label that can be provided to regulators and consumers..

*Policy and regulation for resilient food systems: Lessons from the Australian bushfires and pandemic*

**Rachel Carey and Maureen Murphy**

<sup>1</sup> Senior Lecturer, University of Melbourne

**Abstract:**

There is increasing focus on the resilience of global food systems in the context of climate change, the COVID-19 pandemic and geopolitical events. The capacity of food systems to continue meeting population food security needs in the face of shocks and stresses is influenced by policy and regulation at multiple levels of government and across many policy portfolios. This paper reports on an analysis of how policy and regulation influence food system resilience in the state of Victoria in south-east Australia.

Victoria's food system faced unprecedented challenges during the Australian bushfires of 2019-20 and more recently during the COVID-19 pandemic. These shocks highlighted vulnerabilities across the food supply chain from production through to consumption. Our research investigated how governance frameworks influenced the resilience of Victoria's food system to these shocks. We conducted 34 key informant interviews and five co-design workshops from May 2020 to May 2021 with 96 participants from government, industry and civil society organisations across Australia. Informed by a food systems and multi-level governance approach, we analysed policy documents across relevant policy portfolios at national, state and local level. Our analysis identified areas where policy and regulation both undermined and strengthened the resilience of Victoria's food system to shocks and stresses.

Food insecurity emerged as a key concern, underpinned by a weak governance framework. The provision of food relief was left largely to the charitable sector, with little government leadership, while safeguarding the food supply was seen largely as the responsibility of the food industry. Workforce issues were identified as a systemic issue throughout the food supply chain, ranging from agricultural labour shortages to COVID-19 transmission among meat processing workers, and the closure of supermarket distribution centres due to COVID-19. Current policy settings including low pay, poor working conditions and insecure work contributed to these vulnerabilities. Our research also highlighted policy enablers of food system resilience. Water, agriculture and land use planning policy can support local supply chains, keeping food production close to cities. Stakeholders emphasised the importance of networks and collaboration to food system resilience - between food system stakeholders, across levels of government and policy portfolios and within communities. Networks provided forums for planning and preparedness, and were able to activate rapidly in the event of a shock.

Our study points to opportunities to strengthen food system resilience by addressing regulatory and policy barriers, and by fostering collaborative governance through partnerships between government, industry, civil society organisations and communities. There is also a need for greater government leadership and accountability in addressing food insecurity and disruption to food supply chains. In a context of global uncertainty, the Australian bushfires and COVID-19 pandemic provided an opportunity to understand how food systems adapt and recover in the face of disruptions. This study provides insights into the policy and governance changes required to create healthy and sustainable food access for all in the face of increasing shocks and stresses to global food systems.

## *Developing the picture of food insecurity to support action in Cardinia Shire Council*

**Dr Sue Kleve, Pieta Bucello, Lisa Brassington**

1 Sue: Senior Lecturer -Public Health Nutrition Teaching and Research, Pieta:Team Leader Healthy Communities, Lisa:Collective Impact and Urban Agricultural Facilitator – Food Circles; Monash University, Melbourne, Aust and Cardinia Shire Council, Melbourne, Aust

### **Abstract:**

Cardinia Shire Council is located in the South East peri-urban growth corridor of Melbourne, Victoria. The landscape includes hillside, open plains, and swamp farmlands, with more than 30 township communities, contributing to a population of 112,159 in June 2019, an increase of 4.71% since 2018, and an estimated further growth of 58% by 2041. Currently, Cardinia Shire records higher rates of food insecurity (4.4%) and obesity (25%) than the Victorian average (3.0% and 19% respectively). The 2014 Victorian Population Health Survey identified that those who lived in Cardinia were more likely to worry about running out of money to buy food (18%) and were likely to report that they did not always have healthy food as it was too expensive (30%)<sup>1</sup>. Additional local resident survey data(n=342) identified, 14% of residents were worried of running out of food, whilst 12% of the residents experienced running out of food and were unable to purchase more in the last 12 months.

Food, is one of the 2017-29 Cardinia's Liveability Plan policy domains with the vision to increase access to affordable, nutritious food. Specifically, the Cardinia Shire Community Food Strategy is an action plan developed with community stakeholders to action the vision of creating a: healthy, delicious, sustainable and fair food system. Working towards this vision is a whole of community approach using a collective impact methodology so together they can create an accessible, vibrant and flourishing local food economy in Cardinia Shire.

The importance was recognised of the need to build the local evidence of community and household food security and its determinants in Cardinia Shire, to promote the development of approaches to support food security status. This has been of increasing importance since COVID-19. In collaboration with partners, such as Monash University, Council have been using a range of both quantitative and qualitative methods to build this evidence across the Shire. This includes understanding the: severity of food insecurity across households using the validated United States Department of Agriculture 18-item Household Food Security Survey Module, the availability of food across the Shire, physical and economic access to food – specifically food affordability and availability and understanding the current food relief models. Importantly novel approaches, such as

photo-voice, have been implemented to engage community to understand the lived experiences/perspectives.

This presentation will report the collection of the evidence to build a picture of the issue of food insecurity and how this is informing approaches to support food security now and in the future.

1) Victorian Agency for Health Information 2017, Challenges to healthy eating – food insecurity in Victoria: findings from the 2014 Victorian Population Health Survey, State of Victoria, Melbourne.

## *Local-food-to-hospital: An Australian case-study*

**Kathy Faulkner**

1 MPhil Student / Food Service Dietitian, Monash University and Royal Children's Hospital (Melbourne)

### **Abstract:**

**Background:** Local food procurement by public institutions such as hospitals is perceived to offer multiple benefits from reducing food miles (and thereby emissions) to supporting the local agricultural sector, generating employment, and cultivating resilience of the food supply. Within Australia, several state and territory governments have sought to capitalize on these benefits by establishing 'buy-local' procurement policies. Yet it is unclear how these policies can be used by hospitals to promote local food procurement. Furthermore, the authors are unaware of any Australian hospital that has attempted to quantify its local food purchase. Importantly, a baseline is needed, to identify gaps, set targets, and monitor change.

**Objective:** To investigate the origin of the food supply in a tertiary Victorian hospital and to describe the proportion of food budget spent on items with ingredient grown in Australia and 'locally', within the state of Victoria.

**Methods:** Food procurement data reflecting an 8-day menu cycle in October 2020, were collected, and analyzed. Manufacturers and suppliers of food products with Australian grown content were then contacted during Oct 2020 and April 2021 and invited to describe the proportion that was grown in Victoria.

**Results:** Almost 80% of the food budget was spent on items containing significant (at least 75%) Australian content, while just 11% was spent on imported foods or foods with entirely imported ingredient. Information from manufacturers and suppliers concerning the Victorian content of their products was difficult to obtain, and as a result the specific origin of 55% of the 'Australian' food budget remains unknown. Where data were available only 3% of this budget could be attributed to entirely Victorian grown foods, which included fresh fruit, vegetables, and poultry.

**Conclusion:** While a considerable proportion of Australian grown foods was purchased by this hospital, it is largely unknown whether these are local, from the state of Victoria, or not. Transparency and access to food origin information, a clear definition of 'local' food and an understanding of local food growing industries are needed to progress the 'local-food-to-hospital' agenda. Specific opportunities to increase the local food purchase for this hospital includes designing seasonal menus to take advantage of Victoria's horticulture industry.

## *The Challenge of Protecting Children's Rights to An Adequate Food*

### *Environment: The Case of Indonesian Malnourished Children During The Covid-19 Pandemic*

**Desi Yunitasari and Devi Yusvitasari**

<sup>1</sup> Fresh Graduate Students, Ganesha university of education in Bali

#### **Abstract:**

Poverty has become one of many problems in Indonesia due to the pandemic. The Central Statistics Agency (BPS) noted that in March 2021, Indonesia's poverty rate was 10.14% with the current number of poor people at 27.54 million people. Before COVID-

19, the Indonesian government had succeeded in reducing the poverty rate by 9.22% in September 2019. During the pandemic, the current poverty rate's percentage has risen above 10%. As a result, the problem of stunting in children during the Covid-19 pandemic is getting worse as they are unable to access nutritious food, sanitation, and clean water. Given that, based on the 2019 Study on the Nutritional Status of Toddlers (SSGBI) in 34 provinces in Indonesia showed the stunting rate among Indonesian toddlers reached 27.67%, which means that 3 of 10 toddlers in Indonesia are stunted. Moreover, in the

pandemic era, according to UNICEF, loss of household income can increase the risk of malnutrition in children, and at the worst level, the risk of death in children with malnutrition is 12 times the risk of death in children with good nutrition. Whereas according to the mandated in Article 4 of Law Number 23 of 2002 concerning Child Protection and its amendments, the right to health, in fact, is a reflection of the fulfilment of children's rights to live, grow and develop in accordance with their dignity and honor. This study uses a qualitative research approach with a socio-legal method using secondary data which encompasses literature reviews, articles, and any related sources. The paper focuses on the challenges of tackling the prevalence of malnourished Indonesian children, especially during the pandemic. Some of the proposed measures, among others, include social protection as well as health programs to increase the nutritional status of children. The government needs to push further by improving the quality of the programs, such as ensuring that emergency food distribution and safety-net programs (including school

meals) provide foods fortified with vitamins and minerals. Expanding cash transfer programs, using criteria relevant to a pandemic crisis including nutritional vulnerabilities, national communication campaigns about the COVID-19 pandemic reiterating the importance of prevention while continuing to breastfeed infants safely, and emphasizing the importance of basic nutrition services such as vitamin A supplementation and immunization. So that the government can answer the challenge of a stunting-free generation in the midst of a pandemic.

Keywords: Children's rights, Covid-19 pandemic, Indonesia, Stunting



*Brazilian food procurement policy governance: promoting social justice through building sustainable food systems*

**Lilian de Pellegrini Elias, Lea Vidigal Medeiros, Gabriela Perin, Ana Clara da Fonseca Leitão Duran, Evaldo Gomes Júnior**

1 NEPA/Unicamp, IPEA, NIPE/Unicamp, UNIFESSPA

**Abstract:**

The food procurement as a strategy to promote both food nutrition and security and rural and environmental development evolved in Brazil in the 2000s with programs as the Food Acquisition Program (Programa de Aquisição de Alimentos - PAA) and the mandatory direction of Brazilian School Feeding Program (Programa Nacional de Alimentação Escolar - "PNAE") to buy from family farmers. The widest and most rooted program - PNAE - is a public policy present in 5,570 municipalities serving more than 41.5 million children and adolescents. In its first years (1950s), PNAE food distribution was centralized in the federal capital and had limited food diversity and nutritional value. Over the decades, the program evolved due to pressure from civil society and from rural and urban social movements, and was decentralized along with the development of local democratic bodies to govern its implementation. PNAE governance incorporated support for the promotion of food security and nutrition, regional and healthy eating habits, rural development and biodiversity, thus adding increasingly complex aspects of social justice to its goals. This support was implemented transversally through education, public health, agriculture and the environment. New legal provisions made mandatory food and nutrition education, restrictions on the consumption of foods considered unhealthy (e.g ultra-processed), and the public procurement of products from family farmers. Mandatory designation of at least 30% of the federal resources transferred to states and municipalities for purchase from "family farmers" products was created in the context of public debate over how the program could simultaneously promote healthier and regional diets and stimulate more sustainable production methods, boost local economies and promote greater agrobiodiversity in order to build sustainable food systems. The goal of this study is to present a framework for understanding food procurement, with a focus on PNAE, as a strategy to achieve social justice by fulfilling three aspects: (i) enhancing cultural diversity, supporting livelihood maintenance and assuring food and nutrition security; (ii) standing up for autonomy and territorial rights and participatory regimes; and (iii) promoting gender equality and the distribution of economic benefits. Additionally, the framework aims to depart from social justice strategies (or pillars) in order to define (i) key problems or obstacles to social justice achievement; (ii) possible alternatives to overcome

the obstacles; and (iii) possible outcomes. The social justice perspective will be connected with the sustainable food systems approach, of which the main concerns are (i) supporting agrobiodiversity and mitigating climate change; (ii) providing equality and promoting food and nutrition security; and (iii) guaranteeing land access and land rights to strengthen territories' resilience, especially for the poorest rural communities. The framework provides a structured criteria collected from literature review to be validated using information gathered from in-depth interviews with key actors as a tool to build adaptable governance models. The main outcomes intended are a more cohesive relationship between local agents, including family farmers and their organizations, to enhance local democratic tools through training and networking based on their own governance model.

# *Sustainable Diets Under The International Agri-Environmental Regime: Past, Present And Future*

**Rebecca Williams**

<sup>1</sup> PhD Researcher in Law, European University Institute

## **Abstract:**

Increasingly, the climate impacts of our dietary choices are being recognised. Increasing numbers of consumers are reducing their meat and dairy consumption with the intention of improving the sustainability of their diets. However, to what extent are sustainable diets also promoted and pursued in current legal frameworks? Dietary choice is an issue that goes all the way down to the kitchen table, often rendering it an issue that policy makers are not keen to engage with. Nonetheless, the IPCC has recognised the importance of pursuing a sustainable global diet (often defined as one with lower consumption of livestock products and increased consumption of fruits, vegetables, legumes and wholegrains) in meeting the Paris Agreement's mitigation targets. This presentation seeks to assess the extent to which dietary change is being presented and pursued as a valid climate mitigation solution within the international agri-climate legal framework, in addition to where highlighting where tensions or synergies with other food-related policy issues exist. The scope of this presentation includes the UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, including its broader governance regime, in addition to the work path of the UN Food and Agricultural Organisation (FAO).

Through a process of critical frame analysis, the historical development of agri-climate measures on the international level are presented, demonstrating a shift from a solely adaptation focused approach towards the agricultural sector and climate change, to one that now also includes mitigation (and potentially dietary shifts). Key synergies being utilised on the international level between public health goals, such as reduction of non-communicable diseases, and sustainable diets are also delineated, in addition to highlighting where tensions or synergies with other important food-related policy goals exist, such food security. Lastly, the introduction of institutional linkages between the FAO and the UNFCCC process are presented as a fruitful avenue for future livestock emissions mitigation to be pursued due to the differing but complementary roles of both institutions.

*What are the ‘tipping points’ that drive food insecure people to procure food using methods that could be considered illegal and/or risky?*

**Michelle Watson**

1 PhD Candidate, Flinders University

**Abstract:**

Unorthodox food acquisition practices, namely practices that are risky or illegal, are increasing globally. A guaranteed right to food is enshrined in the Declaration of Human Rights to which Australia and other nations are signatories. Reliance on unorthodox food sources represents a breach of the basic human right to food, whereby signatory Nation States have a responsibility to respect, protect and fulfil that right. Given widening inequities, it is prudent to question why and how some individuals and groups use unorthodox food acquisition practices as a coping strategy during episodic food insecurity.

This paper presents the results of a 2020 scoping review that sought to understand the literature on food acquisition practices used by food insecure adults. Overall, the 18 reviewed articles revealed two overarching themes (1) “orthodox” legal coping strategies and (2) “unorthodox” illegal and risky coping strategies utilised by food insecure adults to procure food. Orthodox coping strategies included relying on friends, family, and neighbours for either food or money to buy food, the use of financial strategies such as buying items on special or in bulk, using coupons, using store credit or credit cards to purchase food, and other strategies to make money stretch further or to provide extra money for food. Of interest were the unorthodox food acquisition practices which included illegal or risky coping strategies used to procure food. These included theft of food or money to buy food, risky sexual practices, begging, or committing a crime in order to go to jail. Other practices that were considered risky to physical health included eating food from questionable sources such as rubbish bins or other people’s leftovers, skipping meals, binge eating when food was available, and eating non-food items.

In rich industrialised countries, these unorthodox practices further marginalise and exclude vulnerable people who are forced into illegal practices which increases their risk of prosecution. A better understanding of the ‘tipping points’ (ie the point at which adults augment charitable food sources with food procured through unorthodox food practices) will enable the design of sensitive, tailored policy responses to provide food access in safer and more dignified ways. There are also the implications for the charitable food relief sector, and we suspect this is due to the strict eligibility criteria, the increasing demand for charitable food relief, and the administrative burden for people trying to access food relief.

The conclusions from the scoping review have revealed drivers of unorthodox food acquisition practices are neither fully understood, nor investigated to ascertain the 'tipping point' at which these behaviours become acceptable or points of intervention to preserve dignity and the human right to food. Further research into these perspectives is important to inform the delivery of policy and programs and provide valuable insight into how to intervene before the 'tipping point' to preserve health and moral dignity for people who are already experiencing precarious food environments.

*Food system policies to prevent the spillover of zoonotic diseases: a systematic scoping review of evaluative evidence*

**Chloe Clifford Astbury, Kirsten M. Lee, Janielle Clarke, Tarra L. Penney**

<sup>1</sup> Post-doctoral fellow, Food, Systems and Policy Evaluation, School of Global Health, York University, Toronto

**Abstract:**

Introduction

The increasing incidence of zoonotic spillover events has been attributed to ecological, behavioural and socioeconomic change. As zoonotic spillover sometimes involves diseases with epidemic or pandemic potential, these events pose a serious threat to human health, with implications for food safety and food security. Strengthened governance of the food system and effective food system policies may play a key role in preventing spillover events, particularly because a substantial proportion of the animal-human interface is situated within the food system. Relevant activities include farming or hunting animals, as well as trading, processing and selling animals and animal products. The aim of this review was to identify evaluations of food system policies that target the determinants of zoonotic spillover, synthesising methodological approaches, outcome measures to evaluate the policies, and evidence of effectiveness. Our approach to identifying and analysing the literature was informed by a preventive medicine perspective and a One Health lens, acknowledging the inter-connectedness of human, animal and environmental health.

Methods

A systematic scoping review methodology was used. Identification: We searched Medline, SCOPUS, Web of Science, and Global Health using search terms combining food system policy, prevention, zoonoses, and spillover events. Selection: We screened titles and abstracts and extracted data according to published guidelines for scoping reviews. All peer-reviewed evaluations of public policies aiming to prevent zoonotic spillover events through food system governance were eligible for inclusion. Synthesis: We summarised approaches to evaluation and outcome measures used from each study, as well as mapping policies along the disease transmission pathway to outline the range of food system policies. We also conducted a thematic analysis to identify challenges related to evaluation; potential unintended and intended effects; and the role, if any, of multi-sectoral governance in policy development and implementation.

Findings

A range of policies to prevent the spillover of zoonotic disease have been implemented and evaluated across the food system, including management of wildlife populations and habitats to prevent contact with livestock; programmes of screening, culling, vaccination and disinfection for livestock traded across national borders; on-farm vaccination for livestock and workers; and disinfection and control strategies in retail settings, particularly live animal markets. The identified policies primarily targeted poultry and the prevention of avian influenza, though other diseases including brucellosis, rift valley fever, and anthrax were also targeted. A number of challenges related to evaluation were also identified, including evaluating the impacts of policies on spillover events, which happen relatively rarely. We also identified unintended consequences that policymakers may wish to consider when intervening in the food system to prevent zoonotic spillover, including changes to disease dynamics within animal populations or counter-productive changes to people's attitudes and practices. Most policies were implemented by a single government department, typically public health, animal health, or agriculture.

### Implications

Review findings will inform researchers, practitioners and policymakers on the state of the evaluative evidence around food system policies to prevent zoonotic spillover.

## *Understanding the Need for a WTO Agreement on Fisheries Subsidies: A Food Security and Sustainability Perspective*

**Jacqueline F. Espenilla**

<sup>1</sup> Assistant Professor, University of the Philippines College of Law

### **Abstract:**

Fishing plays a big role in global food security. Since time immemorial, fish have been treated as an indispensable and accessible source of sustenance for coastal communities, particularly in developing States. However, global fish stocks are increasingly coming under threat from human activities such as subsidized commercial fishing. According to the UN Food and Agriculture Organization, one-third of global fish stocks are already overfished and most of the rest are fully exploited. Billions of dollars in government subsidies contribute significantly to this situation.

For close to two decades, WTO member countries have discussed the possibility of disciplining the practice of subsidizing fishing activities. Concrete progress has been made in the sense that there is now a consensus on eliminating certain forms of fisheries subsidies that contribute towards overcapacity, overfishing and illegal unreported and unregulated (IUU) fishing, while also recognizing the importance of appropriate and effective special and differential treatment for developing and least developed country members. On 11 May 2021, the Chair of the Negotiating Group working on the fisheries subsidies issue released a draft text for the consideration of the WTO member countries. This move that was meant to galvanize action and remind stakeholders of the urgent need to finalize the agreement by the Ministerial Conference at the end of the year, consistent with Goal 14.6 of the Sustainable Development Goals.

Against this backdrop, this paper will attempt to investigate the role that an international legally-binding agreement might play in arresting the collapse of global fish stocks. Part I describes and analyzes how current fishing subsidization practices contribute to food insecurity and food inequality, underscoring the need to impose strict disciplines and sanctions. Part II considers how a new WTO agreement on fisheries subsidies can address current and future food sustainability challenges. In this regard, it will provide a background of the ongoing negotiations as well as provide legal analysis of the key features of the Chair's draft negotiating text. Finally, Part III takes a closer look at the fisheries subsidy issue from the perspective of developing coastal States. What would be the main impact of such an agreement on the sustainability of fisheries resources? What development-based issues need to be addressed in the negotiations?



*Perceived food insecurity during the early months of the COVID-19 pandemic: A multi-country survey*

**Ali JAFRI**

1 Assistant Professor, Mohammed VI University of Health Sciences - Casablanca

**Abstract:**

Objective: To investigate the perceived effects of the coronavirus disease (COVID-19) pandemic lockdown measures on food availability, accessibility, dietary practices, and strategies used by participants to cope with these measures. Design: We conducted a cross-sectional multi-country online survey between May and July 2020. We used a study-specific questionnaire mainly based on the adaptation of questions to assess food security and coping strategies from the World Food Programme's "Emergency Food Security Assessment" and "The Coping Strategy Index". Setting: The questionnaire was hosted online using Google Forms and shared using social media platforms. Participants: A total of 1075 adult participants from 82 countries completed the questionnaire. Results: As a prelude to COVID-19 lockdowns, 62.7 % of the participants reported to have stockpiled food, mainly cereals (59.5% of the respondents) and legumes (48.8%). An increase in the prices of staples such as cereals and legumes, was widely reported. Price increases have been identified as an obstacle to food acquisition by 32.7% of participants. Participants reported having lesser variety (50.4%), quality (30.2%), and quantity (39.2 %) of foods, with disparities across regions. Vulnerable groups were reported to be facing some struggle to acquire adequate food, especially people with chronic diseases (20.2%), the elderly (17.3%), and children (14.5%). To cope with the situation, participants mostly relied on less preferred foods (49%), reduced portion sizes (30%), and/or reduced the number of meals (25.7%). Conclusions: The COVID-19 pandemic negatively impacted food accessibility and availability, altered dietary practices and worsened the food insecurity situation, particularly in the most fragile regions.

*The risks for food security, safety and sustainability associated with relying on water markets to allocate water*

**Fiona MacDonald**

<sup>1</sup> PhD Student, Sydney University

**Abstract:**

My paper addresses the importance of water for food security, safety and sustainability. How we make water allocation decisions influences outcomes for water use including food production. Some, albeit insufficient, attention is given to environmental considerations relevant to water resource management. However, almost no attention is given to economic considerations that influence the acquisition and distribution of water, and how this impacts food production. To a substantial extent, recent policy for water resource management in the Murray Darling Basin, in Australia, has devolved to water markets. The reliance on water markets to distribute water is based on the belief that the economic price of water will attribute water to its highest value use. However, this assumption has not been tested and does not take account of the fact that the highest price may not be paid for food production.

Using desktop research, this paper explores how safe, reliance on water markets is for maintaining Australia's food security. This is preliminary research and there is considerable further work to be done before any conclusions can be reached on whether water markets are a reliable method for allocating water resources. However, there is some evidence that water allocations may be diverted away from required agricultural production to less essential but more lucrative agricultural production and to other non-productive speculative activities. To really appreciate how secure, safe and sustainable food resources are, we need to know how secure, safe and sustainable water resources are. Water markets are being used in Australia and elsewhere as a means of allocating water resources. In a situation in which critical available water resources are being depleted and, for many areas of the world, are projected to be further depleted because of climate change, effective means of allocating water resources to the best returns to use are needed. It is essential to know if using water markets to allocate water resources provides this security.

*Fragmented food governance: Implications of the rise of regenerative agriculture amongst sustainable agriculture narratives*

**Anja Bless; Dr Federico Davila**

1 PhD Candidate; Research Principal (Food Systems), Institute for Sustainable Futures, University of Technology Sydney; Sydney Environment Institute, University of Sydney

**Abstract:**

Food security is at risk due to conflating climate, health and socio-economic factors. Feeding growing populations is pressuring agri-food systems, which both contribute to global emissions and are increasingly vulnerable to the impacts of climate change. To govern an accelerated uptake of sustainable agricultural practices, we need to understand the implications of new food production narratives. Over the last decade, regenerative agriculture has risen as the new sustainable agriculture narrative du jour. However, questions remain as to how it differs from other sustainable agriculture narratives, and whether it brings additional value and complementarity to an already crowded food governance space. To understand the rise of regenerative agriculture, and how this narrative relates to governing the radical changes needed in agri-food systems, it must be situated within the broader history of sustainable agriculture narratives. In this research we draw on Foucault's genealogical method to explore the origin, pathways and present status of prominent sustainable agriculture narratives, such as organic agriculture and sustainable intensification. This genealogy will contextualise the emerging regenerative agriculture narrative and demonstrate how sustainable agriculture narratives have evolved and compliment and compete with one another. We suggest that this competition is leading to a more crowded and conflicted governance space, and the rise of regenerative agriculture may lead to further fragmentation of food governance. A fragmentation which, we propose, is undermining the momentum needed to accelerate sustainable food system transformations.

## *False Advertising In Chicken Industry In India: An Analysis Of The Existing Unethical Practices And Its Impacts On Human Rights*

**Tejas Sateesha Hinder**

<sup>1</sup> Penultimate year Student of Law, National Law Institute University, Bhopal

### **Abstract:**

Rampant indiscriminate use of antibiotics in poultry farming in India, coupled with misrepresentations of healthiness of poultry birds owing to such use of antibiotics as well as usage within the prescribed limits, are issues plaguing in the Indian Chicken Poultry Industry. As the sector is largely out of the purview of any regulations, the pharmaceutical giants find it easier to import and sell antibiotics as feed supplement or as veterinary drugs, advertising them as growth promoters. The farmers resort to use of such supplements to increase their profits by manifolds and as a substitute to hygiene. This practice has resulted in transition of antibiotic residue to human and its environment, increasing antibiotic exposure. Studies conducted by various organisations in the recent past have verified the presence of antibiotic residue and antibiotic resistance bacteria in the meat sold in the open market.

This paper attempts to explore the extent of the issue in the Indian Poultry Industry, and its significant impact on consumer choices, ultimately leading to flagrant violation of Human Rights under the Constitution of India as well as legislations governing. In an attempt to do so, the paper first highlights violation of Human Rights due to indiscriminate use of antibiotics and false advertisements in Poultry Industry and Indiscriminate use of antibiotics in the chicken industry leads to gross violation of Animal Rights. Under the former, the paper examines the issues of widespread unregulated issue of Antibiotics in the Indian Poultry Industry and false and misleading advertisements claiming chicken to be healthy and hygienic, it looks into unaddressed issues of administration of non-therapeutic antibiotics and Violation of basic animal rights due to the Discarded In-House and transportation condition of the chicken Industry and administration of Unregulated Antibiotics. The paper then concludes, establishing the need for a comprehensive legislation in India to control and regulate the same.

*Rigorous monitoring is necessary to guide food system transformation in the countdown to the 2030 global goals*

**Kate Schneider**

1 Fellow, Johns Hopkins University

**Abstract:**

Food systems that support healthy diets in prosperous, equitable, and sustainable ways can engender progress in eradicating poverty and malnutrition; protecting human rights; and restoring natural resources. Food system activities have contributed to great gains for humanity but have also led to significant challenges, including hunger, inequity, and threats to nature. Food systems are central to multiple global commitments and goals, including the Sustainable Development Goals, yet current trajectories are not aligned to meet these objectives. As mounting crises further stress food systems, the consequences of inaction are clear; the global community is at a juncture to transform food systems. The goal of food system transformation is to generate a future where all people have access to healthy, sustainable diets, which are produced in ways that restore nature and deliver just, equitable livelihoods.

A rigorous, science-based monitoring framework can support evidence-based policymaking and the work of those who hold key actors accountable in this transformation process. Monitoring can illustrate current performance, facilitate comparisons across geographies and over time, and track progress on the path to transformed food systems. In this paper we begin to conceptualize such a framework centered around five thematic areas that include outcomes related to (1) diets, nutrition, and health; (2) environment and climate; and (3) livelihoods, poverty, and equity; and cross-cutting issues of (4) governance and (5) resilience and sustainability. We hope to call attention to the need to monitor food systems globally in order to inform decisions and support accountability for better governance of food systems as part of the transformation process. Transformation is possible in the next decade, but rigorous evidence is needed to guide the path forward.

*Building local government capacity for food systems change: experience from three LGAs in Greater Melbourne: Cardinia, Darebin and Maribyrnong*

**Nick Rose, Beth Ciesielski**

<sup>1</sup> Executive Director, Sustain: The Australian Food Network

**Abstract:**

Local governments have a critical role to play in food system security and sustainability, especially as regards working with community members and organisations to enable them to access land and resources in order to initiate and sustain local and healthy food production activities. Sustain: The Australian Food Network is a leading sustainable and healthy food systems organisation in Australia, which has been working closely with several local governments in Melbourne since its establishment in 2016, in particular Cardinia Shire Council through the innovative Cardinia Food Circles collective impact food systems initiative; and more recently the City of Darebin, since the establishment of the Melbourne Food Hub in Alphington in 2018 and the creation of the Oakhill Food Justice Farm on the site of an abandoned vicarage in Preston in 2021. In early 2021, Sustain sought to coordinate and articulate these efforts into a broader local government network in order to support staff working in several Councils to connect with and learn from each other in order to improve the effectiveness and impact of their work within their own institutions. This coordination is further informed by consultancy work that Sustain is undertaking with several local governments in Adelaide, on a project to collectively create a vision for a resilient food system for South Australia together with tools and approaches to implement that vision.

This presentation will reflect on the six years' accumulated experience of food systems work with Cardinia Shire and in the City of Darebin, and the early attempts to share that experience in a collaborative food systems governance approach via the local government food systems network. Sustain is amongst the very few civil society organisations to have engaged closely and directed with local governments in processes explicitly directed to achieve food systems change, and is therefore in a unique position to offer lessons and insights on the results of such engagement to date: what has been achieved, what have been the barriers to change, and how these might be addressed. This work has been informed by the collective impact methodology, and the presentations will contain reflections on the strengths and shortcomings of that approach as experienced in practice in the Melbourne context. The presentation will also contain reflections on a year-long engagement process with elected representatives and staff at the City of Maribyrnong in Melbourne's west, proceeding from an in-depth mapping of the

community food system in that municipality, to the initiation of an intensive community engagement process oriented towards the activation of a publicly-owned site as a potential new urban food hub.

**Alana Mann**

<sup>1</sup> Associate Professor, University of Sydney

**Abstract:**

We know that the conventional food system is unsustainable yet the actions and processes we need to achieve transformations in food systems remain poorly understood (Béné, et al, 2019). A significant knowledge gap concerns how individuals and groups challenge conventional agri-food practices by building value through emergent, sustainable business innovations and how these efforts contribute to wider systemic change. We argue that “system change is afoot” (Lynde, 2020) based on our mutual learning through FoodLab Sydney (FLS), an ‘early’ start food business incubator and ARC funded research project. Linking inclusive food economies with sustainable and just transformations this paper reveals how supportive social learning networks enrich our understanding of change processes. It also demonstrates the power of engagement in change through the socio-cultural dimensions of food.

FLS supports local residents with the ambition of starting a good food enterprise (GFE), defined by our international partner, FoodLab Detroit, as “a for-profit food firm that operates to some degree in solidarity with Good Food values (e.g. health, justice, accessibility, and sustainability), and that relies primarily or wholly on market-based revenue versus philanthropic or public funds for its continuation” (Daniels, 2016). FLS incorporates learning approaches to exploring an issue and building skills that promote and enable change. These include mentoring, facilitating and action learning in forums including kitchens, markets, food trucks and, especially during the pandemic, video communication platforms like Zoom. Attracting participants of varying ages, cultural and socio-economic backgrounds, FLS promotes plurality and diversity. Joint explorations challenge participants to reflect on their own actions and social dispositions, to negotiate and resolve conflicts, and to rethink and redesign their food business ideas.

In our presentation we will present evidence from the project to demonstrate how “successful change is fuelled by a mix of ‘un-usual’ suspects”, actively engaged in “co-producing alternative futures in a context of mutual respect and relationships of trust” (Bradbury, 2009, p. 292). Evidence of wellbeing and capability change, growth of personal networks, and development in learning, knowledge, skills, and attitudes support the success of FLS as a social broker/enabler and “network weaver” (Daniels, 2016), incorporating sustainability is a key “network property” (Stone and Barlow, 2019). FoodLab Sydney provides valuable insights into how how learning in a food business



incubator can promote not only economic participation but a “reflexive and systemic socio-ecological activism” (McKenzie, 2009, p.348) that contributes to toward transformative change.

*How do guideline development processes contribute to the variation of dairy recommendations in food-based dietary guidelines?*

**Zhaoli Dai, Cynthia M. Kroeger, Sally McDonald, Lisa Bero**

<sup>1</sup> Dr, University of Sydney; Macquarie University

**Abstract:**

Objective

Dairy recommendation varies in food-based dietary guidelines (FBDGs). This study aimed to understand the processes involved to develop these recommendations.

Methods

We searched the FBDG database at the Food and Agricultural Organization website to identify dietary guidelines published since 2009. Eligible guidelines must include dietary recommendations and describe the guideline development processes. Protocols for this review were registered (CRD42019125258; CRD42019126452) and published previously. Two reviewers independently reviewed the guidelines and extracted the data on dairy recommendations and guideline development methods. We focused on evidence retrieval and assessment, health equity, conflicts of interest (COI), and stakeholder input to evaluate the guideline development process.

Results

Among the 26 eligible FBDGs, including the Dietary Guidelines for Americans 2020-2025 recent US and the Eating and Activity Guidelines for New Zealand Adults, both of which were published in 2020. The serving sizes of dairy recommendations ranged from none (5/26, 19.2%) to 3-5 servings/day (1/26, 3.9%), with 38.5% (10/26) having at least 2 servings/day being the most common. Most guidelines (19/26, 73%) endorsed low-fat or skimmed fat dairy and recommended dairy as a source for calcium (n= 16/26, 61.5%), and 10 guidelines recommended dairy as a source of vitamin D (n=10, 38.5%). Furthermore, eight guidelines (31%) recommended plant-based dairy alternatives, among which 4 (18%) recommended soy alternatives. Systematic review methods and evidence quality assessment were implemented in 5 guidelines (19%); 50% of guidelines considered health equity, and 42% included stakeholder input during the guideline development. However, only three (11.5%) guidelines declared COI.

Conclusion

Most dietary guidelines recommend reduced-fat dairy consumption, and 31% recommend plant-based protein as dairy alternatives, although lactose intolerance is common and food sustainability is a global concern. Our data also suggests that the methodological rigor in evidence base and disclosure of conflict of interest is low and remains a challenge in dietary guideline development.

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Keywords: Dietary guidelines, guideline development methods, dairy, fat, vitamin D, calcium, health disparity and inequalities.

## *Legal and international requirements for the prevention of food insecurity in the light of health impacts assessment approach (Covid19)*

**Saleh anisi**

1 Scientific, International environmental law researcher

### **Abstract:**

We know which The most important hypothesis of Covid19 global pandemic is the outbreak from the Wuhan's wildlife market. In this market the Wuhan's people buy wild animals( alive or dead) for the food uses which once in 2003 caused the Mers virus outbreak and again in 2019 is the major hypothesis of Covid19 genesis. After the genesis of covid19 in china this virus outbreaks in all around the world which the WHO organization announced pandemic condition and it became a global crisis that caused awful damages all around the world. Reports indicate that China's government didn't do appropriate assessments to create food safety especially in wildlife markets which the health impacts assessment is the major approach in this subject that should be applied. Today the above negligence caused a lot of damages for all nations so the transboundary effects of this, are clear for all the world.

Good governance is an approach that follows sustainable development in national and international aspects. This approach has several indexes which the legal indexes play an important role in achieving its main goal. Now the question is, do the legal indexes of global food governance have enough effect in the prevention of global crises genesis? First, we should say that there is an important relationship between the international environmental law and food security creation by the international legal frameworks. About this, there are several international legal instruments which are considered as tools to implement environmental assessments approaches, but it seems they aren't enough and practical and if they were, mankind didn't face any of the above zoonotic viruses.

So, it seems that the global food governance should changes, especially in its legal indexes. In this way the related international legal instruments, are the Espoo Convention and its protocols which we explain them. this paper has been collected through library data and descriptive, analytical and applied methods. First, the different dimensions of research work are explained and then we provide legal solutions for the excellence of legal indicators of global food governance to prevention covid20 and 21 pandemics.

**Dr. Sharon Yadin**

<sup>1</sup> Research fellow, University of Haifa Faculty of Law

**Abstract:**

Front-of-package food labels meant to inform consumers of nutritional values through simple and easy-to-comprehend graphic rating and warning systems are gaining increasing popularity in regulatory spheres. Around the world, health regulators have adopted front-of-package disclosure systems based on infographics, symbols, logos, colors, numbers, and letters, via both mandatory and voluntary schemes, while others, such as the U.S. FDA, are currently considering adopting such systems.

One of the most notable recent health reforms in Israel is the 2020 food-labeling reform. The highlight of the reform was the introduction of front-of-package red warning symbols on food products containing high concentrations of sugar, saturated fat or sodium, as well as a voluntary positive green symbol on products that meet certain health standards. The purpose of this traffic light system is to encourage people to consume fresh, natural, and homemade foods; reduce consumption of foods high in calories, saturated fat, sugar, and sodium; and develop a public preference for foods that carry as few warning signs as possible. The reform is also intended to support reformulation—a shift among food companies toward developing food products that meet the new standards. The reform is estimated to prevent the death of some 2,000 people per year in Israel.

Focusing on this case-study, the research reveals consumer misinformation tactics deployed by food companies through various graphic manipulations that can be regarded as creative compliance. Creative compliance tactics typically exploit legal loopholes or gray areas in a manner that is perhaps not a violation of the law per se but can neither be regarded as full compliance with the law. While food companies meet the regulatory requirements in the technical sense, the way they comply goes against the spirit of the reform.

Most prominently, some food companies redesigned their food packaging in a way that made it difficult to recognize the new regulatory labels. The packaging color of food products has been changed to red, making it more difficult to spot the new regulatory red markings. In addition, round design elements, such as red strawberries, cherry tomatoes, and other red elements have been added or moved by food companies to be placed near the regulatory red markings and decrease their prominence.

The case-study demonstrates that while disclosure rules in the food industry are generally regarded as soft regulation, in that they do not dictate output quality, quantity, or prices but merely regulate the provision of information, they still do not guarantee industry compliance and may suffer from similar creative compliance ailments as classic command-and-control regulation. Findings of this study are of special relevance to health regulators in other jurisdictions currently considering or implementing front-of-package food label regulation.

Graphic manipulation of disclosure rules may frustrate the regulatory goals of food labeling. Adding to the policy and theory of food law and regulation, the research suggests a stick-and-carrot combined approach, using two soft law tools that rely on corporate reputation: the naming and shaming of companies by regulators and the regulatory initiation and publication of voluntary corporate social responsibility covenants.



# *Social online marketing engagement (SoMe) study of food and drink brands: Real time measurement of Australian children*

**Bridget Kelly**

<sup>1</sup>Associate Professor of Public Health, Early Start, University of Wollongong

## **Abstract:**

Food is one of the most frequently promoted commodities and promoted foods are overwhelmingly unhealthy. Marketing normalises unhealthy foods, creates positive brand images and encourages overconsumption. Limited research is available to describe the extent of food marketing to children on online media and measuring actual exposure is challenging. This study aimed to monitor the extent of children's exposure to online media food marketing, as an essential step in increasing the accountability of industry and governments to protect children. Children aged 13-17 were recruited in October 2018-March 2019. Children recorded their mobile device screen for two weekdays and one weekend day anytime they visited relevant online platforms. After each day, participants uploaded video files to a secure server. Promoted products were defined using the World Health Organization (WHO) Europe Region nutrient profile model. The sample of 95 children uploaded 267.8 hours of video data. For every hour that a child spent online on their mobile device, they saw a median of 17 food promotions. Exposures to unhealthy food marketing on digital media was almost nine times higher than children's exposure via television advertising, based on the most recent Australian television advertising monitoring data. Considering usual time online on mobile devices, over a week children would be exposed to an average of 168 online food and drink promotions, 100 of which would not be permitted to be marketed based on nutrient profiling criteria. Most promotions (59%) were peer endorsed and derived from third parties sources. This exposure to brand content is seemingly endorsed by peers or online communities but is likely initiated by brands. Food brands are able to tap into these pages' networks of online followers and social cache, heightening the marketing effect. Regulations to protect children from this marketing must extend beyond paid advertising to paid content in posts generated through online communities and influencers.

*Are there unintended consequences of policy actions to reduce added sugar consumption? The global rise of non-nutritive sweeteners*

**Cherie Russell; Phillip Baker; Carley Grimes; Mark Lawrence**

<sup>1</sup> PhD Candidate, Deakin University

**Abstract:**

Introduction: Humans have a biological preference for sweetness. Subsequently, the food industry has increasingly saturated the market with highly desirable and potentially addictive products sweetened with added sugars. Added sugars are a recognised dietary risk factor for many health outcomes, leading to international policy actions to limit their consumption, including sugar-sweetened beverage (SSB) taxes and front-of-pack labelling. Several policy actions have promoted the reformulation of packaged foods, which may involve a reduction in sugar counterbalanced with non-nutritive sweeteners (NNS): non-caloric substances which impart sweetness. Despite their lack of calories, NNS display biological effects, the health impacts of which are contested. Potential substitution of ultra-processed foods containing NNS for nutritious whole foods is also of concern. No study to date has assessed the impacts of policies to reduce added sugar consumption on overall changes in sweetener use, nor considered the potential consequences for global public health. The aim of this study was to assess how worldwide policy actions to reduce added sugar consumption relate to longitudinal trends in sales volumes of nutritive and non-nutritive sweeteners.

Methods: We undertook a mixed-methods analysis to address the aims, including policy mapping of global policy actions to reduce added sugar consumption and a longitudinal trend analysis of the apparent consumption of added sugars and NNS using per capita market sales data. Data were sourced from the Euromonitor Passport Database and the NOURISHING Database.

Results: SSB taxes were the most prolific policy actions implemented globally. Europe, Asia, and Latin America implemented the most policy actions. The overall sweetness of the food supply has increased over time. The total sales volume of added sugars, used as a proxy for consumption, decreased in high income countries (HIC) but increased in upper- and lower- middle income countries (UMIC and LMIC) for beverages. Added sugar sales volumes increased in most regions for food. Comparatively, the total sales volume of NNS increased in all country-income categories for beverages but was stable for food.

Discussion: The increased use of NNS in beverages reflects the increasing implementation of SSB taxes. The regions with the most policy actions had increased NNS sales volumes. We hypothesise that increased sales volume of NNS is driven by industry responses to proposed/implemented policy; consumer demand for low energy/sugar products; favourable regulatory environments; and technological advances in novel sweetener varieties, blends, and methods of extraction. The increasing overall sweetness of the food supply was mostly influenced by increased added sugar sales volumes in L-UMIC. The growth of NNS and added sugars in L-UMIC could reflect the overall increased supply of ultra-processed foods in the global south, associated with the 'nutrition transition'.

Conclusion: The food supply is getting sweeter. Policy actions that target added sugar may exacerbate the increasing use of NNS, especially in L-UMIC. The health and dietary impacts of this increasingly sweet food supply, and increased NNS intakes, are a concern for public health.

## *Benchmarking the nutrition-related commitments and practices of major Belgian food companies*

**Iris Van Dam**

<sup>1</sup> PhD student, Sciensano and INRAE

### **Abstract:**

**Background:** To benchmark and quantitatively assess the transparency, specificity and comprehensiveness of nutrition-related commitments and practices of the largest Belgian food companies.

**Methods:** The 'Business Impact Assessment on Obesity and population-level nutrition' (BIA-Obesity) was applied to evaluate nutrition-related commitments and practices concerning product formulation, labelling, promotion and accessibility made by the biggest Belgian packaged food and non-alcoholic beverage manufacturers (n=19), supermarkets (n=5) and quick-service restaurants (n=7). Publicly available commitments were collected and company representatives given the opportunity to verify and complete the information (2019-2020). Commitments were scored according to the BIA-Obesity. To assess company practices the following indicators were calculated: median Nutri-Score of product portfolios, the proportion of products not-permitted to be marketed to children (using the World Health Organisation Regional Office for Europe nutrient profile model), the proportion of ultra-processed food products (using the NOVA classification) and the proportion of products displaying Nutri-Score. Supermarket flyers were analysed over a one-year period and quick-service restaurant density around schools was calculated. Correlations between commitments and performance indicators were calculated applying the Spearman's rank correlation coefficient.

**Results:** 18 out of 31 companies participated (56%). Overall BIA-Obesity scores ranged from 2% to 75% (median: 35%) with notable variation across policy domains and food industries. The proportion of portfolios consisting of A and B Nutri-Score ranged from 0% to 100% (median: 29%), median portfolios were for 81% (12%-100%) not-permitted to be marketed to children and consisted for 75% (2%-100%) of ultra-processed foods. No significant correlations were observed between the strength of commitments and performance indicators.

**Conclusion:** Food industry actions do not meet recommended best practices. Performance indicators show large potential for improvement across domains and industries. Government regulation is urgently needed to support food industry efforts and ensure that commitments translate into improved practices.

*How to design laws to restrict the exposure of children to unhealthy food and beverage marketing*

**Fiona Sing<sup>1</sup>, Kathryn Backholer, Angela Carriedo, Tim Tenbensal, Sally Mackay, Boyd Swinburn**

<sup>1</sup> PhD Candidate, University of Auckland

**Abstract:** Comprehensive government-led legislation is required to adequately protect children from exposure to unhealthy food and beverage marketing. This research draws on two different journal articles that examine country experiences with attempting to regulate the food and beverage industry by looking at lessons learned. This research is amalgamated with best practice policy design from international case studies and literature including tobacco law to help governments design effective regulatory responses to unhealthy food and beverage marketing.

*The effectiveness of food system policies and interventions on nutrition, the environment and inequalities – A scoping review*

**Celia Burgaz**

1 PhD Candidate, Sciensano

**Abstract:**

**Background:** Providing humanity with nutritious and healthy diets is at the centre of all decisions related to sustainable development as, by 2050, the global population will be close to 10 billion. This cannot be met by simply upscaling current practices, as today's food systems are not sustainable, both for people and the planet. Thus, a pressing question is how to act at policy level to meet the demand for nutritious food, providing healthy and accessible diets for all, without impairing biodiversity, natural sources and the environment.

**Methods:** The aim of the scoping review is to identify the effectiveness of food systems policies or interventions on nutritional, environmental and equity outcomes. In July 2021, a literature search was conducted using four database (Medline, Scopus, Embase, Web of Science). From the resulting reviews, a preliminary title and abstract screening was performed. The selected reviews were extracted and classified according to the ten subdomains within food systems, prior-defined through the information taken from a broad compilation of 33 international policy reports. An initial collection of key information (year of publication, policy subdomains, outcomes evaluated) was extracted.

**Results:** The 232 full-text reviews filtered by title and abstract screening to be assessed for eligibility were selected out of a total of 9,215. An initial analysis of these reviews was conducted, of which 63% (n=148) were published within the last five years (2017-2021). We included only reviews in English assessing the effect of food policies or interventions on at least one outcome measure of nutrition, environmental sustainability or equity. For food supply chains, reviews shall be published within 2001 and 2021, whereas for food environments, from 2011 to 2021, as this domain had been further studied according to our pilot search. A vast majority of the reviews (162) focused on food production, provision, prices, composition, or food environments in general. Important gaps on the effectiveness of policies exist both for nutrition and environmental outcomes in the domains of food processing, storage, packaging, loss/waste, trade and labelling. Within supply chains, the main outcome studied is undernutrition, present in 38 out of 73 reviews, followed by environmental sustainability (in 32 reviews); for food environments, overnutrition represents the main focus, being assessed in 91 out of 158 reviews.

Conclusions: Current evidence available is limited and heterogeneous across policy interventions. The initial data extracted indicates a need for more systemic, accurate and evidence-based policy evaluations, especially within food handling, loss/waste, trade agreements and labelling. After the ongoing full-text screening, data sources from the reviews meeting the inclusion criteria will be categorised into an evidence data extraction table with additional information (e.g. types of interventions, population, setting, main results, effectiveness), assessing their quality and risk of bias, to further evaluate interventions' effectiveness. A list of excluded reviews with reason will be provided. The up-to-date impact of current food systems policies and interventions, englobing supply chains and food environments, on nutritional and environmental outcomes will be further described in the scoping review, to identify which policies have double and triple duty potential.

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A right to a healthy diet? How the human rights framework can be used to promote healthier diets in the Pacific region

**Clare Slattery and Daiana Buresova**

1 Clare Slattery, Legal Policy Advisor; Daiana Buresova, Regional Manager - Pacific Region, McCabe Centre for Law and Cancer

**Abstract:**

The Pacific region is facing a noncommunicable disease (NCD) crisis with unhealthy diets being a major contributor. Overweight and obesity rates in the Pacific are among the highest in the world. World Health Organization data shows an estimated 43% of adults in Pacific Island countries are obese. This rate is more than three times the global average. Previously, there had been limited recognition of the catalysing role that human rights law and associated mechanisms that have developed to ensure compliance with human rights obligations can have in addressing this NCD crisis. The main regional instrument on NCDs, the Pacific NCD Roadmap Report, adopted in 2014 is silent on the link between human rights and an unhealthy diet, or other NCD risk factors more broadly.

However, since 2014, Pacific countries have increasingly seen NCDs as a human rights issue and adopted a human rights lens to address the NCD crisis. Seeing NCDs as a human rights issue has resulted in a progressive and people-centred approach to NCDs in the region. Pacific countries have referred to unhealthy diets, and other NCD risk factors, in human rights reporting mechanisms and domestic policies have increasingly paid attention to the link between NCDs and human rights. Human rights mechanisms are also steadily focused on NCD risk factors in the Pacific. In March 2020, Samoa hosted the first extraordinary outreach session of the Committee on the Rights of the Child with session recommendations including, among others, measures to combat unhealthy diets, and NCD risk factors more broadly, as part of the right to health.

This presentation recognises that the increasing attention to human rights more generally in the Pacific region offers opportunities for further utilising the human rights framework and its associated mechanisms to enable the State to respect, promote and realise healthier diets, and address NCD risk factors more broadly, as part of the rights to health and food. This can also be complemented by empowering rights holders to make the State accountable in upholding the right to a healthy diet.



Nutrition Classification Schemes for informing nutrition policy: Nutrient-based, food-based or dietary pattern-based?

**Sarah Dickie**

1 PhD Candidate, Deakin University

**Abstract:**

**Background:** Policy makers are increasingly using nutrition classification schemes (NCSs) to assess a food's health potential for informing nutrition policy actions such as front-of-pack labelling, taxation, restrictions to marketing and the regulation of health claims, yet there is no 'gold standard' for this purpose. Currently there are efforts towards harmonisation of nutrition policy actions internationally through Codex and the European Union, therefore it is important to determine the most effective approach to food healthiness classification to successfully reduce the burden of diet-related disease.

**Objective:** This study aimed to compare the agreement of nutrient-, food-, and dietary pattern-based NCSs in their assessment of a food's health potential within the Australian food supply and examine the conceptual underpinnings and technical characteristics that explain differences.

**Methods:** A dataset combining food and beverage compositional data from the Mintel Global New Products Database and the AUSNUT 2011-2012 database (n=7,322) was assembled. Products were classified by seven prominent NCSs representing one or other of nutrient-based, food-based, or dietary pattern based NCSs: the Chile nutrient profiling model (NPM), the Health Star Rating (HSR), Nutri-score, the World Health Organization European Region's (WHO-Euro) NPM, the Pan American Health Organization's (PAHO) NPM, NOVA, and the Australian Dietary Guidelines (ADGs). The proportion of food products classified as 'healthy' and 'unhealthy' was calculated, in addition to pairwise agreement using Cohen's Kappa statistic, over the whole sample and by sub-category. Key conceptual and technical characteristics that accounted for differences were identified by analysing subcategories in which the highest pairwise disagreement occurred.

**Results:** The PAHO NPM classified the lowest proportion (22%) of products as 'healthy', and the HSR the highest (63%). The PAHO NPM, NOVA, WHO-Euro NPM, and the Chile NPM classified >50% of products as 'unhealthy', and the ADGs, HSR and Nutriscore, classified <50% of products as 'unhealthy'. Among the paired comparisons the HSR and Nutri-score had the highest agreement (k=0.7809, 89.70%), and the PAHO NPM and HSR the lowest agreement (k=0.1793, 53.22%). The HSR and Nutriscore classified a relatively higher proportion of ultra-processed foods as 'healthy' compared to the other NCSs. Characteristics of NCSs that accounted for the major differences included:

category-specific assessment versus across-the-board assessment, the classification of categories as always 'healthy' or 'unhealthy', consideration of level of food processing, thresholds for 'risk' nutrients that do/do not penalise whole foods; and allowance/no allowance for the substitution of ingredients.

Conclusions: Wide variation was observed in agreement among the NCSs analysed in their assessment of the health potential of individual foods. The differences highlight limitations in nutrient-only-based and dietary-based NCSs for informing food-based policy actions. Conversely, the analysis indicates a food-based approach is logically more consistent with rating a food's health potential. The key characteristics identified in this studied could be considered in the design of an effective NCS for a range of nutrition policy actions.

*Brands off our kids! Protecting our children from unhealthy food marketing in the digital world*

**Katarnya Hickey**

1 Legal Policy Adviser, Obesity Policy Coalition

**Abstract:**

**Context:**

In Australia, and across the world, children are exposed to significant amounts of marketing for unhealthy food as part of their daily lives. Increasingly, digital marketing of unhealthy food is an increasing concern, as the online environment plays an important role in children's lives, with children using it for education, information, communication and recreation. This presentation will provide an overview of key forms of digital marketing and will outline the features of this marketing that result in it being of particular concern. It will also discuss the influence of exposure to unhealthy food marketing on children's health.

**Policy and regulatory environment:**

Globally, children are not adequately protected from digital marketing of unhealthy food. This is for a variety of reasons, but ultimately because governments have not implemented strong, comprehensive regulation to protect children in the digital space.

This presentation will provide an overview of why current protections are not adequate or effective in the digital environment, outlining key issues with current self-regulatory and government led approaches.

It will also discuss international developments to recognise the importance of protecting children from unhealthy food marketing in the digital environment, for example from the UN Committee on the Rights of the Child, and the UK Government. The presentation will also discuss the increasing movement to recognise and protect the collection, use and disclosure of children's information online, and its relationship to digital marketing of unhealthy food.

**Policy and regulatory proposal:**

The Obesity Policy Coalition has developed a proposal, Brands off our kids, that sets out four key government actions to effectively protect children from unhealthy food marketing. One of the actions is that children be protected from digital marketing of unhealthy food. To achieve this, we advocate for a broad restriction, essentially stopping all digital marketing of unhealthy food unless it can be guaranteed children will not be exposed.

This presentation will explore key elements of effective regulation, discussing what must be included to ensure it acts to protect children online. This will include coverage, key definitions and application.

It will outline the rationale for the recommended approach, including discussion of the complexity of the digital environment and of digital marketing practices, and the reasons why alternative forms of restriction (such as those based on time, targeting, age gating/verification, audience measures) may be ineffective or not recommended.

**Courtney Thompson**

1 PhD Candidate, School of Exercise and Nutrition Science, Faculty of Health, Queensland University of Technology

**Abstract:**

**Introduction:** While many aspects of the food environment, such as affordability, accessibility and availability have been extensively explored and evaluated, there is still a limited understanding of the relationship between these aspects and consumer behaviours. Consumer behaviours consist of food acquisition, preparation, meal practices and storage; all elements encompassed within food literacy. The most frequently cited and agreed upon definition of food literacy, that of Vidgen & Gallegos (2014) is supported by a conceptual framework, consisting of 11 components of food literacy organised into four inter-related domains of planning and managing, selecting, preparing, and eating. Of the existing 66 measures assessing components of food literacy, none comprehensively assessed all domains and components, only one used cognitive interview methods with adults to determine items for inclusion and exclusion and all varied in their ability to capture totality of eating. Therefore, this study aimed to determine items for inclusion and exclusion in a food literacy item pool and capture the general public's interpretation of everyday food literacy practices. A comprehensive food literacy questionnaire is needed to investigate its relationship to various food-related outcomes such as diet quality, nutrition behaviours, social connectedness and food security.

**Methods:** Beginning with an item pool from previous studies, cognitive interviews were conducted using think-aloud and verbal probing methods. Data were first analysed for applicability, clarity, ambiguity, and logic, then for emergent themes to ensure items captured the totality of the participant's eating. Australian residents over 18 years of age recruited via Facebook residential groups (n=20).

**Results:** Of the original 116-items, 11 items had limited applicability; 13 items had unclear references; 32 items had lexical problems and 11 items had logical problems. In total, 29 items were deleted, 31 retained and 56 revised. Thematic analysis revealed participants limited their responses to consider only conventional practices such as grocery shopping, cooking and planned meals rather than the totality of their eating. An additional 84 items were developed to address eating out, incidental eating occasions and inconsistencies between participants assumed correct knowledge and that of public health guidelines. This resulted in a refined 171-item pool.

**Conclusion:** This study progressed the development toward a comprehensive, validated food literacy questionnaire that may provide further insight into the relationship between aspects of the food environment and people's diets. Further, this study identified

important elements of people's interpretations of food and eating that should be considered when evaluating and monitoring in public health nutrition.

*Factors influencing the development and implementation of government-led food environment policies: A systematic review*

**SeeHoe Ng<sup>1,2</sup>, Heather Yeatman<sup>1</sup>, Bridget Kelly<sup>1</sup>, Sreelakshmi Sankara Narayanan<sup>2</sup>, & Tilakavati Karupaiah<sup>2\*</sup>**

<sup>1</sup>Early Start, School of Health and Society, University of Wollongong, Australia.

<sup>2</sup>School of Biosciences, Faculty of Health and Medical Sciences, Taylor's University, Malaysia.

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**Abstract:**

Government policy is critical for reducing the burden of obesity and diet-related non-communicable diseases, including policies to promote healthier diets. Transforming food environments to favour human health, social equity and wellbeing offers a solution. Healthy food environments should enable accessible and affordable healthy foods to the population. Despite governments enacting food environment policies (FEPs) to materialise this objective, factors may either impede or enable policy processes and influence the intended outcomes. Understanding these factors is crucial to facilitate good governance and promote policy reforms that transform food environments. This systematic review identified the most cited barriers to and facilitators of the development and implementation of government-led FEPs. Included policies were government-led FEPs related to food composition, food labelling, food retail, food price, food promotion, food provision and food trade and investment. Policy barriers and facilitators were explored based on policy nature (voluntary vs mandatory) and country development status (low to high vs very high Human Development Index (HDI) countries). The review followed the PRISMA reporting guidelines, covering eligible literature published between January 1988 and January 2021. Ten academic and seven grey literature databases were systematically searched, together with 45 national websites and manual searches of publication references to complement the electronic search. Publications in all languages were included. Extraction from eligible publications included information on the FEPs, barriers and facilitators. Quality appraisals and data synthesis were conducted to identify themes and related sub-themes using the constant comparison approach. Verification was performed on 10% of the total eligible publications to determine data accuracy and consistency. Case counts were ranked to determine the top cited barriers and facilitators of FEP processes. A total of 142 eligible studies was identified, of which most were classified as 'fair' quality (n=72) and published in the previous decade. 'Industry resistance or disincentive' and 'lack of resources' were the most cited barriers to policy development, irrespective of the investigated policy nature or country development status. 'Technical challenges' emerged as the most frequently cited barrier for policy

implementation. In contrast, frequently cited facilitators during FEP processes were identified as 'resource availability or maximisation', 'strategies in policy process' and 'stakeholder partnership or support'. Barriers and facilitators were antithetical in most cases, with nuanced differences observed as per the policy nature and country development status. Little evidence was available from low to high HDI countries and on voluntary policies, which warrants more research in the future. This review collated practical experiences in the FEP processes that were retrieved from various countries and large databases, which strengthened the generalisation of the findings. Health reform stakeholders need to recognise the common barriers and facilitators and translate practical considerations into good governance practices and momentum to build healthy food environments.



## *Comparison of Commercial Foods for Infants and Toddlers in Australia against World Health Organization Europe Recommendations*

**Andrea Schmidtke**

1 Legal Policy Adviser, Cancer Council Victoria

### **Abstract:**

#### Background

Commercial foods for infants and toddlers have increased in popularity over recent years. In Australia there are some regulatory requirements regarding content, labelling and promotion of foods for infants under 12 months. However, there are no equivalent requirements for toddler foods up to 3 years, leading to concerns by some that they may be promoted as healthy foods for young children while not being nutritionally adequate. This study analysed composition, nutrient content, labelling and claims on pack of infant and toddler food in Australia against proposed international guidelines.

#### Methods

We conducted a survey of infant (4-12 months) and toddler (1-3 years) foods instore and online at 3 major Australian supermarket chains. Front- and back-of-pack pictorial and word-based labelling, nutrient composition and ingredients were recorded. We compared the foods to guidelines proposed by the European Office of the World Health Organization for commercial foods for infants and young children.

#### Results

The final sample contained 250 items. Most Australian infant and toddler foods contained free sugar (sugars which are harmful to health), and some exceeded proposed sodium limits, but most were otherwise in line with other nutrient composition recommendations. Foods for toddlers 1-3 years were more likely than infant foods to be high in sodium. A large portion of the products for both infants and toddlers (73% and 52% respectively) had >15% energy from total sugar. Many products were inappropriately labelled as suitable for infants under 6 months. All products contained on pack health or nutrition claims going against the proposed WHO guidelines.

#### Conclusion

Infant and toddler foods available in Australia are often labelled with appealing claims about health and nutrition but are often high in sugar and sometimes salt and fall short of the proposed European WHO guidelines. Given the poor adherence to nutrient recommendations and the potentially misleading claims made, updated regulation that protects toddlers and provides better protection for infants would be an efficient means to improve the composition, labelling and promotion of these foods.



*Policymaker perspectives on implementation of cross-sectoral policy measures for improving nutrition in the Western Pacific Region*

**Erica Reeve**

1 Research Fellow, GLOBE Deakin

**Abstract:**

**Background and purpose:** The promotion of healthy diets and sustainable diets is a global priority. There is growing evidence around best-practice policies to address drivers of unhealthy food supply, but implementation of effective nutrition policies remains a challenge. The objective of this study was to draw on national policymaker perspectives to identify strategies that can sustain the implementation of cross-sectoral food and nutrition policies.

**Methods:** We extracted participant contributions from the proceedings of 29 food or nutrition-centred meetings and consultations hosted by the Western Pacific Regional Office of the World Health Organization (WHO)(2004-2020), to provide a systematic approach to representation of the collective needs of policy practitioners with respect to policy implementation. We coded relevant extracts against a deductive coding framework, using concepts from established theories of policy implementation and capacity needs.

**Results:** Country-level implementation of food policy relies on strong policy design, organizational planning, and governance mechanisms that promote collective responsibility across multiple sectors. Policymakers identified major challenges resulting from limited capacity, both within and external to government, particularly in relation to monitoring and enforcement activities. Successful implementation of food policy measures will require greater political will to provide the requisite resources and institutional structures to ensure sustained policy effectiveness. Policymakers identified the need for a more compelling and contextually-relevant body of evidence to convince governments to resource food and nutrition approaches. External partners, including international agencies such as WHO and researchers, have a clear opportunity to support policy implementation by providing technical support to Member States on framing cohesive action on food in a compelling way, and by building the organisational and structural capacity of policymakers to coordinate cross-sectoral policy.

**Conclusions:** This analysis has outlined the ways in which a lack of commitment to food policy across government likely undermines implementation within countries. It identified important opportunities to improve technical and political support for the sustained implementation of cross-sectoral policy to meet global food and nutrition goals.

*Big Food and Big Meat healthwashing “alternative proteins” – a critical analysis of nutritional marketing strategies and silence around ultra-processing*

**Jennifer Lacy-Nichols**

1 Academic Specialist in NCDs, University of Melbourne

**Abstract:**

**Background:** ‘Alternative proteins’ (APs) refer to the range of novel products designed to imitate the look, taste, texture, aroma and other sensory attributes of conventional meat products. Framed as a solution to a range of problems and limitations associated with livestock production and consumption, the market for APs is expected to grow exponentially in the next decade. However, little is actually known about whether and how these products can contribute to a healthy diet, and studies have raised concerns about the ultra-processed character of some AP products. Given this uncertainty, it is important to understand how companies are using nutritional marketing to promote APs. This is particularly important given a lack of evidence-based dietary guidance on replacing meat with APs and ongoing regulatory debates about whether and how to regulate these products.

**Methods:** We identified the largest food manufacturers, meat processors, and alternative protein companies selling plant-based alternative protein products in the United States. Using publicly available data, we analysed the voluntary health and nutrition claims made on front-of-pack labels and company webpages. We also analysed company websites for further nutrition and health-related statements about their products or alternative proteins more generally, in particular whether and how companies discussed types of processing. Claim classification was guided by the INFORMAS (International Network for Food and Obesity/Non-Communicable Diseases Research, Monitoring, and Action Support) taxonomy for health-related food labelling.

**Results:** 1394 health and nutrition-related front-of-pack label (FOPL) claims were identified on 216 products, including 685 nutrition claims and 709 ‘other health-related’ claims. No FOPL health claims were identified. Most nutrient claims were for nutrients associated with meat, with 94% of products carrying a protein claim and 30% carrying a cholesterol claim. 74% of products carried a GMO-free claim and 63% carried a plant-based claim. On their websites, some companies expanded on these claims or discussed the health benefits of specific ingredients. Companies were largely silent on types of processing.

**Conclusions:** Companies involved in this category appear to be using nutritional marketing primarily to position their products in relation to meat. There is a focus on nutrient and ingredient claims, with discussion of processing largely avoided. The findings

highlight the challenges companies face in positioning AP products as healthy against the backdrop of debates about ultra-processed foods.

**Ashleigh Hart**

<sup>1</sup> Research Assistant, The George Institute for Global Health

**Abstract:**

**Background:**

Taxes on sugar-sweetened beverage (SSBs) are recommended by the World Health Organization (WHO) and other global bodies as part of comprehensive policy action to prevent diet-related NCDs. However, only around one quarter of WHO Member States have adopted SSB taxes; governments report facing a range of politico-economic challenges in implementing this cross-sectoral policy intervention.

**Methods:**

This comparative study used qualitative case study research methods, to examine the experience of 16 countries in implementing SSB taxation between 2016 and 2019. The aim was to analyse the characteristics and patterns of potential enabling factors leading to adoption and implementation of recent SSB taxes, as well as indications of policy learning that have occurred between countries, in order to draw lessons for future adoption of SSB taxes.

We developed a novel political science-oriented theoretical framework, drawing on 'Diffusion of Innovations' theory and theories of policy learning. Data collection and analysis focussed on four elements: (1) characteristics of the SSB taxes (the 'innovation'); (2) characteristics of the innovating country (the 'innovator'); (3) change agents (policy entrepreneurs actively supporting or opposing the SSB tax); and (4) diffusion networks.

Data was collected from three sources, based on our framework: (i) policy documents – indicators relevant to the policy instrument and the government's health and fiscal priorities; (ii) national statistics – characteristics of the countries and diffusion networks; and (iii) media – indicators relevant to framing of the tax, and the presence of change agents. We used thematic analysis and a narrative synthesis approach to conduct an integrated case study analysis across countries, both across and within the elements of the theoretical framework.

**Findings and interpretations:**

We found adaptation and heterogeneity in the design of SSB taxation (the innovation) with most countries adopting excises taxes; some utilizing tiered tax rates with objectives to incentivise product reformulation. The case study countries differed with respect to WHO region, income grouping, percentage of government health expenditure and type of governing regime. We found consistent health frames and strategic engagement with

the policy process, in some cases by cross-sector coalitions. Common public frames supporting the taxes included reducing obesity/NCDs and raising revenue (government) and subsequent health system savings (non-government actors). Opposition was mainly articulated on the basis of regressivity and incoherence with other economic policy (government) and that taxes would be ineffective for health and have negative economic impacts on the food industry (industry). Policy learning was evident in reference to taxes in other countries.

#### Conclusions:

We identified three key lessons for countries considering adoption of SSB taxes. First, engaging with the economic context is important: (i) tax system reform appears to offer a policy window and (ii) economic concerns formed the basis for strong opposition by industry. Second, consistent framing and alliances can enhance health sector advocacy. Third, robust evaluation and reporting of SSB taxation may foster global policy learning.

**Shoba John**

<sup>1</sup> Doctoral Researcher, University of Edinburgh

**Abstract:**

**Background:** A coherent approach across policy spheres may help to better address national nutrition challenges. At the national level, policy coherence has largely been applied to examine developmental concerns such as poverty. This study extended its application to health governance, more specifically to examine policy coherence in partnership-based approaches to nutrition governance. SUN (Scaling Up Nutrition) is such a global multi-stakeholder nutrition partnership with in-country platforms. Bangladesh, a SUN partner since 2011, with under and over nutrition challenges and longstanding efforts promoting inter-sectoral approaches to nutrition, presented a suitable context for the study.

**Methods:** Qualitative key informant interviews with SUN partners and other nutrition stakeholders across national, regional and global levels were conducted to collect the data. Deductive thematic analysis was carried out to identify barriers and facilitators to policy coherence in Bangladesh nutrition in the context of the SUN partnership. The thematic analysis focused on horizontal dimensions of coherence among sectors and stakeholders at the national level.

**Results:** Key informants identified several facilitators and barriers to coherent nutrition governance in Bangladesh. Several interviewees across sectors and stakeholders perceived SUN's advocacy to have strengthened Bangladesh's efforts at multisectoral coordination for nutrition by way of nutrition awareness raising among non-health sectors leading to sector-wide nutrition initiatives; and promoting multistakeholderism and establishing a SUN multistakeholder platform. Some interviewees viewed SUN to have also mobilised donor interest in nutrition and facilitated country capacity building such as through inter-country learning opportunities.

On the other hand, thematic analysis revealed interviewees identifying four principal barriers to coherent nutrition governance: 1) contestation between health and economic goals among government sectors such as foreign investment drives seen to attract unhealthy commodity industries; 2) tensions from SUN's partnership with food companies perceived to facilitate access to baby food and ultra processed food companies; 3) divergence between government and donor priorities for funding like in food fortification; and 4) implications of SUN's approach for obesity.

**Conclusion:** SUN's advocacy has improved interest and multistakeholder coordination for nutrition in Bangladesh. The barriers arising from the disparate partner priorities and their



conflicting partnership approaches need to be addressed to facilitate greater coherence within the initiative as well as with Bangladesh's nutrition goals.

*Effects of advocacy initiatives and campaigns that target industry on company policies, practices, and population health outcomes: a systematic review of the evidence*

**Professor Cliona Ni Mhurchu**

1 Professor of Population Nutrition: National Institute for Health Innovation, The University of Auckland, 1) National Institute for Health Innovation, School of Population Health, The University of Auckland; 2) The George Institute, Australia; 3) University of New South Wales, Australia

**Abstract:**

There is limited research regarding the effectiveness of advocacy interventions targeting food, alcohol, or tobacco industry companies, to improve company policies and practices.

The purpose of this systematic review was to determine the effect of advocacy initiatives and campaigns directed at industry groups, on company policies and practices, consumer behaviour and population health outcomes, in high-income countries. The review focused on interventions directed at the food and non-alcoholic beverage, alcohol, or tobacco industries. Information from relevant studies was synthesised descriptively. Thematic analysis of barriers to and facilitators of implementation and effectiveness of initiatives was conducted.

Seventeen initiatives were identified: 13 targeted the food/non-alcoholic beverage industry; three targeted the alcohol industry; one targeted both. No initiatives that met the inclusion criteria targeted the tobacco industry. Initiatives included voluntary programmes, government-financed initiatives, advocacy campaigns, retail environment interventions, and certification/accreditation programmes.

Interventions varied in their methods, goals, and effectiveness. Few studies identified theoretical models underlying the interventions, and there was no common theoretical framework across studies. Industry engagement and public support/consumer engagement were identified as important factors in the success of advocacy interventions.

This review highlights the importance of ensuring industry practices targeted by advocacy initiatives are sufficiently connected to public health outcomes, and the need to consider key drivers of consumer behaviour. Advocacy interventions should be designed with consideration of the facilitators and barriers to action. Findings also highlight the importance of evidence-informed policy making, particularly with respect to how voluntary agreements between government and industry should be operationalised.

*Turning users into “unofficial brand ambassadors”: marketing of unhealthy food and non-alcoholic beverages on TikTok*

**Ruby Brooks**

1 Casual research fellow, Deakin University

**Abstract:**

The social networking platform TikTok is rapidly rising in popularity, including among adolescents. The extent and nature of unhealthy food marketing on the platform, however, has not been explored. One form of marketing on TikTok is ‘branded hashtag challenges’, in which brands combine paid media (i.e., paid advertisements with the brand as the source), owned media (i.e., content on brand accounts) and user-generated content to encourage users to create and post videos that share a specific theme and are tagged with a specific hashtag. We aimed to examine (i) the use of owned media by major unhealthy food brands on TikTok and (ii) the nature of branded hashtag challenges and of user-generated content created in response to these. A cross-sectional observational study assessed the: (i) content of all videos posted on 16 accounts of top food and non-alcoholic beverage brands according to global brand share, and (ii) content and sentiment (positive, negative or neutral) of a sample of user-generated content created in response to 10 branded hashtag challenges instigated by these brands. Videos were coded against a pre-specified coding guide based on previous studies of owned media and user-generated content. 539 videos had been posted on the 16 included brand accounts from posting of first video on each account (between 5 July 2019 and 16 March 2021) until 30 June 2021. 60% of all videos were posted in the first six months of 2021. The most frequently used marketing strategies were branding (87% of videos), product images (85%), engagement (31%) and celebrities/influencers (25%). Branded hashtag challenges included those that featured brands’ products, brands’ videos, and branded effects. Each branded hashtag challenge had received millions, if not billions, of views. Of a sample of 628 videos generated in response to the 10 branded hashtag challenges, 96% featured branding, 68% product images and 41% branded effects. Most portrayed a positive (73%) or neutral/unclear (25%) sentiment, with very few negative (3%). In effect, brands appear to be successfully using the platform to turn users into, in TikTok’s own words, “unofficial brand ambassadors”. User-generated content, such as that created in response to branded hashtag challenges, blurs the distinction between commercial and peer activity. Content can be easily monitored by brands seeking to more effectively market their brands and products, can reach wide audiences at minimal cost, and is potentially exploitative when children are encouraged to create it. Our findings reinforce the need for the adoption and implementation of policies that protect children from the harmful impacts of food marketing, which include comprehensive controls on digital and social networking platforms.

*Nutrients, foods, and dietary patterns: a document content analysis of evidence use associated with Australian food and nutrition policy decision-making*

**Patricia Ribeiro de Melo**

<sup>1</sup> PhD Candidate, Deakin University

**Abstract:**

Rationale

The body of evidence that informs food and nutrition policymaking has been derived mostly from three types of nutrition exposures: nutrients, foods, and dietary patterns. The different views towards the causes of public health nutrition problems, as well as the best solutions to address these problems, are what will ultimately determine which type of nutrition exposure will inform the making of different types of policy actions.

The dominant evidence synthesis and translation approach to informing the development of food and nutrition policies has been adapted from evidence-based medicine, where the quality of evidence is assessed using hierarchy methods that typically rate evidence derived from experimental studies as high-quality evidence. In food and nutrition policymaking, these methods tend to privilege evidence obtained from nutrient exposure-oriented studies, as such interventions are better suited to be evaluated using clinical studies when compared to food and dietary pattern-oriented studies. Currently, public health nutrition policy agendas are dominated by nutrient-informed policies. This can be exacerbated by the political nature of decision-making, wherein actors' worldviews and interests can influence which types of evidence are prioritised in the political arena. Building upon this rationale, the present study aims to identify which types of evidence are informing food and nutrition policymaking in Australia and to determine the representation of the three nutrition exposures in policy actions to date.

Methods

A desk-based policy mapping will be conducted to identify all national food and nutrition policy actions that have been implemented in Australia since 1992. Data collection will involve searching the grey literature and examining the reference lists of policy documents. Policy actions will be categorised against the principles outlined in a Nutrition Exposure framework, which are: Purpose of policy, Theory (mechanisms linking nutrition exposures and health outcomes), and Methods for obtaining evidence. To analyse the trends in the scope of nutrition policies, documents will be presented in a chronological timeline. Purposive sampling will be employed to identify three case studies deriving from distinct nutrition policy processes. Data will be analysed through comparative thematic analysis.

## Results

Preliminary findings from the policy mapping search have identified sixteen national level policy actions in the areas of nutrition regulations, food advertising, food supply, nutrition education, and strategies or plans with nutrition components. Initial analysis has shown that nutrients were the most common exposure, followed by foods and dietary patterns.

## Conclusion

These preliminary results highlight a potential dominance of evidence derived from nutrient exposures for informing food and nutrition policy actions in Australia. Despite providing high-quality research, this nutrient-orientation skews the body of evidence towards supporting nutrient-oriented policies, while neglecting other types of interventions that could more efficiently tackle policy concerns related to foods and dietary patterns.

**Abstract:**

Marketing restrictions constitute one of the policy levers for protecting populations against the marketing of ultra-processed foods (UPF). The governance of these policies is a common challenge globally, as their development involves a diverse range of actors and institutional processes, making food marketing a highly contested policy arena which complicates the process of formulating and implementing comprehensive policies. Given these challenges, this study sought to examine how different actors assert authority to influence policies that regulate the marketing of UPF in Australia.

We conducted semi-structured interviews with government, industry, civil society and technical experts who are involved in the regulation of food and beverage marketing in Australia. We drew on Avant and colleagues' typology of authorities which identifies five sources of authority that actors draw on to demonstrate their legitimacy and exert influence. These entail - institutional, delegated, expert, institutional, principled and capacity-based authority.

Our analysis of actors' interview data identified four common sources of authority used by government, industry, technical experts and civil society actors. These are institutional, expert, capacity-based and principled authority. The assertions of these authorities reflects three major themes (i). Claims of authority (ii). Claims of limited authority and (iii). Contestations of authority. Industry actors claim more authority types than other actors, which demonstrates the dominance of food, media and advertising industries and the multiple pathways they use to exert influence in the food marketing regulation system. Industry claims to authority are cohesive and networked as they all refer to one other throughout the interviews. In contrast, while civil society actors and technical experts claim and affirm one another's expert authority, there is less cohesion as there are some disagreements about the type of evidence needed to get political support and the capacity of existing research methods to produce that research. Claims of limited institutional authority are predominantly observed among federal government actors such as the National department of health, Australian Media and Communications Authority (ACMA) and Food Standards Australia New Zealand (FSANZ). Contestations of authority were observed in relation to institutional authority, expert authority and capacity-based authority. Civil society actors challenge the authority of industry actors in regulating food marketing while industry actors contest the government's capability to adequately regulate food marketing in favour of self-regulation. Unlike civil society actors who contest the institutional authority of the industry, the federal public health actors affirm institutional

authority of the industry. This may be indication that the interests between the federal government actors and industry actors.

Claims to and assertions of authority by the actors interviewed here highlight the fragmented manner and siloes in the Australian food marketing regulatory system and have implications for which actors should be held accountable for the current challenges in the governance of food marketing policies.

*How are online food delivery services changing food accessibility? Preliminary analysis using the DIGIFOOD Dashboard*

**Sisi Jia, Dr Farzaneh Boroumand, Dr Karice Hyun, Dr Alice Gibson, Dr Stephanie Partidge**

1 PhD Candidate, Research Associate, 1 Engagement and Co-Design Hub, School of Health Sciences, University of Sydney 2 Concord Hospital, ANZAC Research Institute, University of Sydney 3 Menzies Centre for Health Policy and Economics, University of Sydney

**Abstract:**

**BACKGROUND/AIM:** Compared to higher socioeconomic areas, low socioeconomic areas are typically associated with a higher concentration of convenience stores, fast-food outlets and have limited access to fresh produce, which is reflected in lower levels of fruits and vegetable consumption. The rising use of online food delivery services (OFDS) enable individuals to conveniently access foods from over 3km away, which is beyond traditional neighbourhood food environments. This increased accessibility may have implications on the geographic accessibility to food outlets and subsequent obtainment of healthful or unhealthful foods. We aimed to investigate the differences in the healthiness of food outlets available on a market leading OFDS across varying socioeconomic areas in Australia.

**METHODS:** We developed the data driven DIGIFOOD dashboard to monitor the impact of OFDS across all areas of Australia with OFDS coverage (n=2725 postcodes). Baseline data from the market leading OFDS was collected in January 2021 via web-scraping services. The healthiness of food outlets was determined using the Food Environment Score and coded by two researchers who are also university-trained dietitians. Preliminary data analysis was performed for 821 postcodes with available data on the dashboard. A paired t-test was applied to compare the healthiness of food outlets that are locally available (physical) versus food outlets that could deliver to a specified postcode via OFDS (online). A linear regression model was used to test the trend of healthiness scores of food outlets (physical and online) across quintiles of Index of Relative Socio-economic Advantage and Disadvantage (IRSAD; 1 representing most disadvantaged and 5 most advantaged), adjusting for the density of physical outlets.

**RESULTS:** From the 816 food outlets mapped on the dashboard, outlets that can be accessed online via OFDS have a healthier score than outlets that can be physically accessed within a specified postcode in Australia (Mean difference  $0.11 \pm 0.88$ ,  $p=0.0003$ ). Mean healthiness scores of physical food outlets ( $p <.0001$ ) and online food outlets ( $p<.0001$ ) improved from IRSAD 1 to IRSAD 5. When we compared the differences in healthiness scores between food outlets that are physically available versus



what is available online (physical subtracted by online) across IRSAD quintiles, we found that there was no linear trend observed when adjusting for density of outlets. However, when IRSAD 1 was compared to IRSAD 5, this difference in healthiness scores between physical and online was significant ( $p=0.0049$ ).

**CONCLUSION:** Our preliminary findings suggest that OFDS may be increasing accessibility to healthier food outlets by providing more options than what can be physically accessed within an individual's residential postcode in Australia. Furthermore, there is a significant difference in the healthiness of physical vs online food outlets in areas with more socioeconomic disadvantage compared to areas with less disadvantage. In future, further analysis involving a more extensive dataset of the physical food environment will be undertaken. It is critical to consider the impact of emerging trends such as OFDs on the current food environment in Australia and improving accessibility to healthy food, particularly in lower socioeconomic areas should be a high priority for policy makers.

**Genevieve James-Martin**

<sup>1</sup> Dietitian, CSIRO

**Abstract:**

Background: Food-based dietary guidelines (FBDGs) provide population-level guidance on healthy eating. There has been increasing recognition of the synergies between diets for health and for environmental sustainability (ES). However, the degree to which ES is addressed in FBDGs remains unknown.

This study describes depth and breadth of inclusion of ES messaging within FBDGs globally and compares this to relevant international recommendations.

Methods: The FAO website was used to identify countries with FBDGs and locate relevant documents. Included documents were searched for mention of ES using keywords. Relevant content about ES was extracted, in duplicate, and assessed against grading criteria based on the FAO Guiding Principles for Sustainable Healthy Diets.

Results: FBDGs from 83 countries were reviewed; 37 countries mentioned ES. Background FBDG documents addressed ES in greater depth than consumer documents. ES content was often limited to explanations of 'what', with few FBDGs addressing why ES is important, how dietary changes can be made or providing quantified advice for implementing a healthy and sustainable diet.

Conclusions: Despite being a critical global issue, less than half of the FBDGs reviewed raised ES, and the depth of discussion varied. There is a need to develop FBDGs that emphasise the link between human and planetary health and provide practical advice to support populations to implement healthy, equitable and sustainable diets.

Learning objectives: Establish a method for assessing inclusion of ES against global recommendations and benchmarking, monitoring and surveying depth and breadth of ES considerations in FBDGs globally.

*Divergent perspectives of key Australian food systems stakeholders on healthy and sustainable diets.*

**Luke Spajc**

<sup>1</sup>Student, Adelaide Medical School, University of Adelaide

**Abstract:**

**Background:**

There is increasing global recognition of the need to shift to healthy and sustainable diets (HSDs) for human and planetary health. Many policies have been proposed to facilitate HSDs including incorporating sustainability into national dietary guidelines, realising the true cost of food, and restricting advertising of unhealthy and unsustainable foods. Yet few policies to encourage HSDs have been adopted by national and subnational governments. As a result, no country has reversed its obesity trend. Further, the very notion of healthy and sustainable diets remains controversial. Yet a key research gap remains regarding the detailed views of key food system stakeholders from industry, government, civil society, and research about policies to encourage HSDs. This study aimed to address this gap and explore the political feasibility of policies for HSDs in Australia.

**Methods:**

36 semi-structured interviews were conducted with senior food system stakeholders from Australian industry, government, civil society, and research institutions between August 2019 and March 2020. Interviews covered stakeholder's perceptions of the current health and sustainability performance of Australia's food system, the definition of HSDs, the desirability of various policies and innovations (e.g. alternative proteins) to encourage HSDs, and the most significant barriers and opportunities to achieving HSDs in Australia. Framing analysis was conducted to identify the priorities, values, and worldviews of participants.

**Results:**

Four overarching perspectives were identified, related to the degree of change perceived as required to achieve HSDs in Australia and thereby a healthy and sustainable Australian food system. From least to most change needed, these were: System Refinement (predominantly industry), Change Incentives (mixture of sectors), Food System Transformation (predominantly researchers), and Alternate Food System (predominantly civil society). Significant disagreement was noted about the current performance of Australia's food system, the definition of HSDs, the role of different sectors in encouraging HSDs, and which (if any) policies are acceptable and desirable. Animal-source food

consumption was particularly polarised. These disagreements reflected divergent priorities, values, and worldviews of key Australian food system stakeholders.

Discussion:

HSDs are a highly contentious policy issue in Australia, reflecting a deep conflict between key stakeholders' priorities, values, and worldviews. Policy implications for researchers and advocates of HSDs are discussed, as well as potential relevance for international food system debates.

*Industry interference in food and nutrition policymaking: Promoting healthy diets through conflict of interest rules*

**Andrea Lucas**

1 Legal Research Officer, McCabe Centre for Law & Cancer

**Abstract:**

Food industry interference is a recognised barrier to the implementation of measures to address diet-related noncommunicable diseases (NCDs). It impacts a number of food and nutrition policy areas, such as restricting harmful marketing of unhealthy foods, taxing sugar-sweetened beverages, and the adoption of front-of-package nutrition warning labels. Conflict of interest rules are a way to minimise such interference and to protect the formulation and implementation of public health policies from the food industry to the greatest extent possible.

Currently, there are no binding international treaty obligations for governments to manage conflicts of interest with the food industry. This contrasts with the position in tobacco control, where Article 5.3 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) and its implementation guidelines govern, among other things, the interaction between policymakers and the tobacco industry. There are, however, several non-binding instruments that apply to various situations, such as the World Health Organization (WHO) Framework for Engagement with Non-state Actors (FENSA) which governs relations between the WHO and non-state actors, the Scaling up Nutrition Movement's Toolkit on Preventing and Managing Conflicts of Interest, and the WHO 'Draft approach on the prevention and management of conflicts of interest in the policy development and implementation of nutrition programmes at country level' developed in 2017.

This presentation will compare existing instruments and consider their suitability and robustness to managing food industry interference. It will look at some of the approaches taken by current international guidelines and will examine various elements contained in these governance tools. In particular, the presentation will broadly focus on how existing instruments address conflict of interest and how it may be identified, prevented and managed. It will also focus on the usability of international guidelines and their applicability to food and nutrition policymaking and in different country contexts, as well as examining how food industry actors are defined and to what extent consultation with the food industry is permitted.

*The scope and impact of digital marketing of breast-milk substitutes*

**Alexandra Jones, Jing Zhao, Georgia Morelli, Nina Chad, Laurence Grummer-Strawn, Soumyadeep Bhaumik**

1 Senior Research Fellow (Food Policy and Law), The George Institute for Global Health, UNSW, Sydney

**Abstract:**

**Background:** Worldwide, too few children are breastfed. Commercial promotion of breast-milk substitutes is one factor undermining breastfeeding globally. The International Code of Marketing of Breast-milk Substitutes was adopted by the World Health Assembly in 1982 to protect and promote appropriate infant and young child feeding. It calls for prohibition on all forms of direct-to-consumer promotion of breast-milk substitutes by manufacturers and distributors, and specifies appropriate practices in relation to public education about infant feeding. As marketing practices increasingly move online, there is concern that tactics not yet conceived when the Code were written are now being used regularly to reach women and their families in a way that undermines breastfeeding. We conducted a systematic scoping review to analyse existing literature on the scope and impact of digital marketing for promotion of breast-milk substitutes to inform a report to the World Health Assembly in 2022.

**Method:** We used scoping review methodology and reported our work in compliance with the PRISMA-ScR extension. We searched eight electronic databases and hand-searched relevant websites for relevant studies irrespective of study design and published from 2000 onwards. Two reviewers independently screened the study. Data on the scope and impact of digital marketing was synthesised narratively.

**Findings:** From 1946 records, we identified 29 studies and 22 case reports which met inclusion criteria. Breast-milk substitutes are being marketed in a strategic and integrated fashion across digital media channels including but not limited to social media platforms, manufacturer owned websites and online retailers, blogs, mobile apps and digital streaming services. Exposure to digital marketing is common, as self-reported by women in many studies, and evidenced by manufacturer reports in case studies of campaigns with millions of views, 'likes' and 'shares'. Strategies used by companies to market in a digital context include tactics prohibited by the Code including posting positive imagery and/or wording that idealises use of breast-milk substitutes, and offering coupons, samples and discounts in online retail sites. The digital context also provides new opportunities for marketers, including widespread harvesting of consumer data to facilitate targeted cross-device marketing to specific segments of the market, new avenues such as apps to initiate direct contact with parents in real-time, and establishing financial relationships with parents to promote products to their peers. Available studies suggested this marketing has a negative impact on intention to breastfeed, and a negative impact on breastfeeding initiation. Academic literature on impact is supplemented by

manufacturer self-reports of the benefits of digital marketing in increasing intention to use, recruiting new users, and ultimately increasing product sales.

Conclusions for law and policy: Addressing the impact of digital marketing of breast-milk substitutes will require strengthened action to implement, monitor and enforce the Code internationally, and through national legislation. Additional avenues for law and policy include targeting the advertising policies of social media platforms, and exploring the application of regulations to maintain data privacy. Renewed action to ensure that regulation keeps up with constantly evolving and increasingly sophisticated digital marketing tactics will be critical to protect the health of families worldwide.

*Over the Top: Food Advertising Expenditures Targeted at Children in Canada*

**Monique Potvin Kent, Elise Pauzé, Lauren Remedios, Julia Soares Guimaraes, Adena Pinto, Mariangela Bagnato, Meghan Pritchard, Mary L'Abbé, Christine Mulligan, Laura Vergeer, & Madyson Weippert**

<sup>1</sup> Associate Professor, University of Ottawa

**Abstract:**

The prevalence of obesity has more than doubled among children since the 1980's and over one third of children aged 5 to 17 have excess weight or obesity. The quality of children's diets is also poor, typically high in ultra-processed foods, sugar and sodium, and low in fruit and vegetables. The pervasive marketing of unhealthy foods and beverages has been identified as a potent driver of poor dietary intake and excess weight gain among children. Food marketing to children under age 12 is self-regulated by the food and beverage industry in Canada, while all commercial advertising directed to children under 13 is regulated in Quebec. The objective of the current study was to determine how much food companies are spending in various media channels, in which food categories they are spending the most, and how much is being spent to promote brands targeted at children. We also sought to determine whether advertising expenditures differed between Quebec and the rest of the country.

All expenditure data were licensed from Numerator, a company that provides advertising creative and spend monitoring of various media. Food advertisement spending for 55 food/beverage categories in 2019 across 94 television stations, 41 radio stations, 6 out-of-home suppliers, 64 newspapers, 95 magazines, and over 1000 websites for desktop display, desktop video and mobile were examined. Brands or products were deemed "child-targeted" if they were among the 50 most advertised products or brands on child speciality stations across all markets examined in Canada (excluding Quebec) in 2019, if 25% or more of the brand's advertisements were placed on child speciality stations or if the marketing techniques used in advertising suggested it was child-targeted. Overall and child-targeted advertising expenditures were described by food category, by media/source and by the nutrient profile model classification (i.e. marketing permitted or restricted according to Health Canada criteria.) Descriptive statistics were tabulated across all markets examined in Canada (excluding Quebec) and for Quebec.

Overall, expenditures on food advertising in Canada were high. Across all markets examined in Canada (excluding Quebec) and in Quebec, approximately \$511 million and \$117 million were spent, respectively, on food advertising across all media in 2019, with television accounting for about two thirds (67%) of net expenditures in both regions. Digital media accounted for the second largest share of expenditures (12.3%), while this was the case for out-of-home food advertising (13.2%) in Quebec. A preponderance of spending on overall food advertising and child-targeted food advertising was focused on



fast food. Expenditures on child-targeted products varied by media channel. Most food expenditures for child targeted products were classified as restricted according to Health Canada's proposed nutrient profile model.

Food advertising expenditures are high, fast food advertising expenditures dominate across all media and advertising expenditures are most significant in television and digital media. The high levels of expenditures for child-targeted products that are classified as restricted for marketing suggest that the current self-regulatory policies in Canada are falling short and that food marketing to children and youth needs be regulated by government.

*Enhancing food system governance: conceptualizing unhealthy foods and beverages as risky products*

**Oscar Cabrera, Isabela Barbosa, Ariadna Tovar Ramírez, Margherita Melillo**

<sup>1</sup> Director and Associates (respectively), O'Neill Institute

**Abstract:**

Building on the scholarship by Ulrich Beck, we show that modern food systems create modern life risks: man-made products that have unwanted side effects that are hazardous to human health. The food and beverage industry plays a key role in this scenario, as on one hand it engages in aggressive advertising of its unhealthy products, and on the other hand it hinders their effective regulation. Meanwhile, the legal frameworks that seek to deal with this problem often end up being activated on a product-to-product basis, which makes it difficult to keep up with the food and beverage industry's dynamism. Against this background, we argue that unhealthy foods and beverages should be understood and regulated as risky products. The concept of risky products goes beyond risk regulation, and addresses concepts like redistribution of risks. We illustrate how different legal frameworks have developed tools to deal with risky products across the board. Examples include objective and subjective liability; precautionary measures; and access to information mechanisms, as well as institutional oversight considerations. In all these examples, risk has a different meaning, and may not be entirely applicable to the hazards stemming from unhealthy foods and beverages. However, we argue that, to the extent that it is possible, policy-makers should consider relying on these existing tools to advance the regulation of unhealthy foods and beverages in a more comprehensive way.

*Co-producing public health law alongside government to promote healthy food retail environments in South Australia*

**Janani Shanthosh**

1 Research Fellow, The George Institute for Global Health

**Abstract:**

In 2011, South Australia became the first state in Australia to include non-communicable disease (NCD) prevention provisions in its Public Health Act. This means South Australia's Minister for Health and Wellbeing is empowered to declare a NCD and issue a code of practice to prevent or reduce impact. However, these provisions have not yet been activated. This project, in collaboration with Wellbeing SA, an attached office to South Australia's Department of Health and Wellbeing, will co-design codes of practice and process evaluations to inform new policy. The Minister's powers may be used to regulate how specific goods (sugar-sweetened beverages, for example), substances or services are advertised, sponsored, promoted or marketed, manufactured, distributed, supplied, sold or accessed by the public. This is significant in stemming lifestyle-related chronic disease. The NCD chronic disease-prevention provisions are the first attempt to transform a core piece of public health law in response to Australia's chronic disease epidemic including type 2 diabetes, stroke, cardiovascular disease and some cancers. South Australia's Public Health Act 2011 is an example of infrastructural public health law. These laws provide legal frameworks that empower or force public health agencies to act, by defining the scope of their powers and duties. Public health concerns contained in infrastructural public health law, such as core public health acts, have traditionally focused largely on sanitation and communicable disease. We undertook a prospective legal analysis of the South Australian Public Health Act in order to identify potential opportunities for intervention. We then engaged in a novel co-production process with a Technical Advisory Group (TAG) of policymakers and prevention researchers to design an acceptable, evidence-based and feasible intervention to improve nutrition in South Australia. Phase 1 involved establishing governance arrangements using Terms of Reference, confidentiality agreements, project timelines and an explicit priority setting criteria. Phase 2 and 3 involved a priority setting workshops and consultation sessions to prototype and test the intervention. These phases resulted in the drafting of a code to eliminate junk food from all checkout areas within retail stores in South Australia called the Family Friendly Checkout Code of Practice. Phase 4 will involve developing a communication strategy to convey the public health benefits of the intervention to the general public and within government. Phase 5 (planned for 2022) will see us evaluate this co-production process as well as the potential implementability of our healthy checkout intervention.

*Stakeholder perspectives on food industry self-substantiation of food health claims - preliminary results*

**Sally McDonald**

1 PhD student, Charles Perkins Centre, the University of Sydney

**Abstract:**

Standard 1.2.7 of the Food Standards Code is the legislative instrument under which health claims are legislated in Australian and New Zealand. This standard allows food industry to produce supporting evidence for health claims on food labels by carrying out a systematic review (SR). This is controversial due to the lack of public availability of these reviews and concerns about their methods.

This study aims to identify the perspectives of different stakeholders on the use of systematic reviews to self-substantiate of health claims under the standard. We also explored general attitudes about the standard. We recruited 14 participants from three stakeholder sectors (industry, public health/academia, regulators) and conducted semi-structured interviews via Zoom. Inductive thematic analysis was used to identify themes and concepts.

Broad perspectives existed between stakeholder sectors around the standard: food industry felt the requirement to produce a SR impedes innovation, while public health groups felt it did not do enough to protect consumers. All stakeholder groups expressed concerns about industry self-substantiation and potential flaws in the standard. Industry supported health claims but considered the standard to be over-regulation or “regulatory vandalism”, while public health expressed concerns that claims appeared misleading and were a marketing tool. Public health participants also felt that industry producing their own evidence that is not publicly available presents a conflict of interest. Several stakeholders in the public health sector expressed concerns that enforcement of compliance appears inconsistent between jurisdictions, and as SR are not publicly available due to commercial-in-confidence, this would create issues with transparency. All stakeholder groups raised concerns about so-called dubious claims made by industry that appeared unlikely to be supported by evidence. For example, several participants provided the example of large number of claims on dietary collagen and cosmetic outcomes that appear unlikely to be supported by evidence, or other claims that reflected popular health fads. Public health stakeholders felt that these may mislead consumers, while industry was concerned about reduced trust in industry. Further, there is no mechanism to remove claims notified by industry from the regulators website. Participants were concerned that this meant implicit support by the regulator.

Food regulation should protect public health and enable informed decisions by consumers. Our preliminary findings suggest that significant concerns exist with the standard among all stakeholder sectors, due to risks of dubious claims, conflicts of interest and limited transparency related to the systematic reviews used to substantiate claims, and inconsistent enforcement of the standard. Independent evaluation of the SR prior to allowing claims on market would address a number of these concerns.

*A retrospective case study analysis of written submissions to Bermuda's consultation on a Sugar Tax*

**Sarah Williams**

1 Master's student, University of Warwick

**Abstract:**

Introduction and research question

The consumption of health harming products including alcohol, tobacco and foods high in fat, salt or sugar is a leading cause of non-communicable diseases. The production of these products is a multi-billion pound industry and commercial actors often seek to influence policy which could affect the consumption, and therefore sale, of these goods. This study examines how commercial and health actors sought to influence policy debate on a proposed 'sugar tax' in Bermuda.

Methods

The study draws on frame analysis which is situated within a constructivist paradigm. A two-stage deductive and inductive open coding of long-form written submissions to the government's policy consultation on sugar tax was undertaken. This led to broad themes of policy 'problems' and 'solutions'.

Results and implications

The findings are that commercial actors framed the 'problem' of obesity as one which was complex but driven by individual action. Their preferred policy solution was market-led with informed consumer choice and there was no support for the 'sugar tax'. Health actors were less clear in their framing of a 'problem' of obesity, although they also argued the causes were complex. Their preferred solution included interventions to address affordability. However, they expressed hesitancy over innovative policy measures. Policy makers wishing to introduce measures to prevent commercial causes of non-communicable disease should clearly frame their arguments, particularly if the policy is innovative.

*Who governs food investment policy in Australia?*

**Ashley Schram; Sharon Friel; Anne-Marie Thow**

1 Braithwaite Fellow, School of Regulation and Global Governance, Australian National University

## **Abstract:**

Humanity's future depends on investment into a food system that supports healthy people and a healthy planet. Consequently, who and what shapes investment is critical to the future of food systems. The current research, which is part of the ARC Discovery project 'Governing harmful commodities: the case of ultra-processed foods in the Asia Pacific region', investigated the people, power, politics, and policies driving investment into Australian food systems and the implications for population nutrition. This presentation will report on initial findings from 23 key informant interviews regarding the identification of critical public and private stakeholders, their roles, interests, and an analysis of power relations in this policy landscape. Early results indicate that COVID-19 has been a significant catalyst at the federal level for the establishment of formal institutional mechanisms to incentivise investment in food systems, most notably the Modern Manufacturing Strategy. Implementation of the Modern Manufacturing Strategy has enhanced the influence of the Department of Industry, Science, Energy and Resources to shape the future of food systems as they roll out priority areas for food investment and provide financial supports to businesses in this space. Interviewees flagged the absence of a national food policy as an obstacle to integrating nutrition priorities within industry policy. Our investigation of investment policy also shed light on the economic power and influence of financial actors such as banks, superannuation funds, and venture capitalists in food system design. Goals for the healthfulness of food systems investment, of which there are some, are being driven primarily as a market response to consumer demand, while sustainability has been articulated by the federal government as a goal in and of itself. Our analysis has identified new levers for influencing food system transformation, such as regional responsible investment networks – a subset of ethically-guided financial actors – to improve food system outcomes for people and planet.

*#trending: a discursive analysis of innovation and Agri-FoodTech in the future of food systems investment*

**Ashley Schram; Sharon Friel; Anne-Marie Thow**

1 Braithwaite Fellow, School of Regulation and Global Governance, Australian National University

## **Abstract:**

While blueprints for global food system transformation required to support healthy people and a healthy planet vary widely, one element has come to dominate many public and private policy positions: innovation. More specifically, innovation brought forth by investment in new food and agricultural technologies (Agri-FoodTech). In the current project we interviewed 23 key informants with expertise in food-related investment policy in Australia. One of the clearest emergent themes in our analysis of discursive power was the deployment of innovation and Agri-FoodTech as both a key mechanism to drive change and a criterion by which to assess the value of investment. In this presentation we will share initial results which demonstrate a government position almost exclusively based on Agri-FoodTech and innovation, alongside a divided private industry regarding this frame. Our results demonstrate an emerging class of powerful private actors from technology industries and venture capital pushing innovation as the only path to positive food system transformation, while many traditional food system actors contest the rationale and evidence for this frame. We will unpack various understandings of innovation, the language by which these ideas are communicated and contested, and the implications for health and sustainability within food systems.



*The political economy of NCDs: The case of sugar sweetened beverage taxation in Vanuatu & Fiji*

**Lana Elliott, Gade Waqa & Stephanie Topp**

1 PhD Student & Lecturer, James Cook University, Queensland University & Fiji National University

**Abstract:**

Non-communicable diseases (NCDs) are responsible for >80% of deaths in the Pacific. In response, nations across the region have implemented proactive and innovative multisectoral health reforms. Technical recommendations outlining what nations should do to address NCDs are abundant. However, there remains a dearth of evidence surrounding how countries can, do or should negotiate the complex and context-specific processes that underpin policy enactment. Utilising the introduction of sugar sweetened beverage (SSB) taxations in Vanuatu and Fiji as case studies, this research seeks to trace the ideas, interests and institutions that have shaped such multisectoral reform.

The case study drew on 49 key informant interviews, document analysis and direct observation. Analysis of the ideas, interests and institutions that influence reform drew on theories power and policy formulation.

Findings indicate that economic insecurity and governments' pursuit of additional revenue were significant drivers of the SSB taxation in both countries. While differing in their development, the introduction of both SSB taxes were enabled by strategic partnership between actors with distinct health- and economic-interests. In Vanuatu, trade liberalisation's erosion of domestic protections for the local (beverage) industry and the concurrent rising burden of NCDs enabled a coalition of NCD and trade-interested actors. Alignment with growing global support for health-related taxation framed reform as progressive and health-oriented; providing cover to those whose interest in the measure were more economically motivated and/or industry-friendly. Similar issue priming was also apparent in Fiji where the idea of an SSB taxation grew out of a civil society and health coalition. However, upon transfer of the idea to economic actors to action, critical technical detail surrounding the breadth and rate of taxation was lost undermined the potential health impact of the measure. Ultimately, loose coalitions were key to the ideation and political passage of SSB taxes in Vanuatu and Fiji. However, in both instances they lacked incentive, ongoing expertise, and the power necessary to ensure 'win-win' outcomes for health and the economy. Complex policy ownership combined with low public visibility, bureaucratic instability and political discontent has meant that, in both cases, policy success remains ill-defined and hence poorly monitored.

NCD policy has been at the forefront of Pacific health and development agendas. Technical recommendations, such as SSB taxations, present countries with guidance on what to do. However, as demonstrated by the experience of policy adoption, adaption

and co-option in Fiji and Vanuatu, greater attention must be paid to the political process of how reform takes shape. Keeping NCDs on the agenda and fending off stagnation, co-option and political or industry opposition capable of sidelining these desperately needed health wins is an ongoing challenge. In this challenge attention to detail is vital.

*How have private regulatory measures been used to create healthier food retail environments – A Scoping Review*

**Jane Dancey**

<sup>1</sup>PhD candidate, Department of Nutrition, Dietetics and Food, Faculty of Medicine, Nursing and Health Sciences, Monash University

**Abstract:**

Worldwide, 63% of all deaths are attributed to non-communicable diseases (NCDs) and an estimated one-third of these are attributable to dietary risk factors alone, with the highest specific risk factors being high intakes of sodium and alcohol, and low intake of whole grains and fruits.

Creating healthier food environments – including food retail environments - is key to decreasing the burden of diet-related NCDs. Regulatory measures created by government have been used to create healthier food environments and include food and menu labelling policies, sugar taxes, subsidies for fruits and vegetables, restrictions on junk food advertising to children, and zoning and bylaws preventing fast food outlets near schools.

The use of private regulatory measures however, to create healthy food retail environments, is not well documented in the literature despite anecdotal reporting of their growing popularity. In the absence of government-led legislative intervention in this area in Australia, we undertook a review of the international literature for evidence of the use and effectiveness of private regulatory measures to create healthy food retail environments.

We aimed to identify the types of private regulatory measures used to create healthier food retail environments, including private regulatory measures created by food retailers (self-regulation), and regulatory measures created by government but implemented by non-government entities. In addition, we examined mechanisms for implementation, monitoring and enforcement using a public health law framework.

The first author searched seven health and business databases with key words for food retail settings (the population), forms of regulation (the intervention) and healthy food (the outcome) and returned ~14000 papers. A second reviewer (MF) screened 10% of papers and confirmed papers at full text inclusion stage to ensure consistent application of inclusion/exclusion criteria. Peer reviewed papers from any jurisdiction, published in English, detailing the use of private regulation embedded in formal documentation (policy, procedure etc), that aimed to created healthy change in a food retail environment were included. Schools, as a type of food retail setting, were excluded.

Data were extracted and summarised on the regulatory creator, the type of food retail setting, specific form of regulation used and its aim, details on implementation, monitoring and enforcement and overall effectiveness of the regulatory mechanism.

Twenty-eight full text articles were included. These articles described the use of private regulatory measures created by various actors ranging from a private health insurer, a national restaurant association, a supermarket to government entities. Specific terms used to describe the regulatory measures were rebate programs, programs, policies, commitments, initiatives, strategies, nutrition guidelines, standards, contracts and pledges. Few articles described governance structures including monitoring and enforcement.

This scoping review will offer insights into how private regulation that aims to improve the healthiness of the food retail environment is initiated, implemented, monitored and enforced, which may help to inform strategies for improving the efficacy of such measures in achieving this goal.

## *Political Economy of Fiscal Policies and Regulations to Promote Healthy Diets in Sri Lanka*

**Sunimalee Madurawala**

1 Research Economist, Institute of Policy Studies of Sri Lanka

### **Abstract:**

Non-communicable Diseases (NCDs) have been a critical health challenge for Sri Lanka for several decades now. Unhealthy dietary patterns are one of the leading contributing factors of escalating NCD incidences in the country. Economic as well as political factors have contributed to creating unhealthy food habits among most Sri Lankans. A proper understanding of these factors and their interactions can help formulate better policies to combat the NCD challenge.

Against this backdrop, this ongoing study aims at examining the political economy setting of two fiscal and regulatory interventions [(1) Tax on sugar-sweetened beverages (SSBs) - 2017 and (2) traffic light labelling for SSBs -2016] and the country's food environment in general.

It is expected that this political economy analysis (PEA) would facilitate identifying strategies for public health actors to advocate for more effective policy strategies. Further, it would help to improve the efficiency of fiscal and regulatory measures related to the food environment in Sri Lanka.

Kingdon's theory of agenda-setting and Campbell's institutionalist approach were followed in developing the theoretical framework of the study. Given that the selected policy interventions are in place for a considerable time, policy development (agenda-setting) and policy implementation stages are considered in framing the research questions. Accordingly, it is expected to review ideas, institutions, power (influence), and evidence of the policy development and implementation. The study takes a qualitative approach and the data sources are in two forms; documentary sources and people.

The findings of the documentary sources highlight some key points. NCDs, nutrition, and food environment have been duly recognized as important policy issues and framed well in policy documents produced by the institutes that come under the health sector. Yet many of those policy documents have not devoted adequate attention to some crucial elements of a public health policy (i.e., funding sources, governance, gender sensitivity and stakeholder identification). Consumption and production of healthy foods, social marketing and health promotion campaigns, nutrition labelling, nutrition education and retail of healthy food are covered relatively well. However, adequate attention has not been given to public procurement of healthy food, guidelines for healthy catering and linking agriculture to food provision. In many incidents, there is no clear commitment to implement fiscal measures. In terms of institutions, the Ministry of Health plays a crucial

role in developing policies and regulations (agenda setting) to promote healthy diets in Sri Lanka. Apart from the institutions that come under the agriculture sector, there is little recognition of NCDs and food environment issues in the policies formulated by other sectors. These findings highlight the need of taking a more holistic and cohesive approach in developing the policies, which aim to address the NCDs challenge and promote healthy dietary patterns in Sri Lanka.

Key Words: Non-communicable diseases, fiscal policies, regulations, healthy diets, food environment, political economy, Sri Lanka

*The rise and fall of government policy to restrict unhealthy food and alcohol advertising on publicly owned assets in Queensland, Australia*

**Kathryn Backholer, Oliver Huse, Rebecca Christidis, Florentine Martino, Alexandra Chung, Christina Zorbas, Ruby Brooks, Christine Dove, Ainslie Sartori, Kelly Kennington, Jennifer Browne**

<sup>1</sup> Associate Professor, Deakin University

**Abstract:**

It is widely accepted that the ubiquitous marketing of highly processed foods and beverages is a key driver of excess population weight and lifelong negative impacts on children's health and well-being. With little national leadership to protect children from the harmful impacts of food marketing, some sub-jurisdictions have been taking the matter into their own hands and banning unhealthy food advertising on public assets that are under their control. Whilst there are some examples of successful policy adoption and implementation in this regard, too often public health policy development is negatively influenced by opposing interests. In April 2019, the Queensland government in Australia announced their proposal to ban unhealthy food and drink advertising on all government owned advertising spaces. However, since that time all documentation related to the policy has been removed from government websites and the policy has not been formally adopted or implemented. In this study, we aimed to identify the key actors that opposed this policy proposal and describe their key arguments by analysing public consultation documents released under a 'Right to Information' request. All documents were analysed using the framework method and a conventional thematic content analysis. Key actors opposing the proposed policy included the food and beverage industry, the advertising industry and health (mainly cancer) agencies (who propagated the arguments put forth by the advertising industry). Key thematic arguments identified included i) accountability - industry should be responsible for regulating marketing as they have the necessary experience, respect and understanding of the problem; ii) existing policy proposal is not fit-for-purpose - policy is unclear, not appropriately targeted and implementation should be avoided or delayed, iii) misalignment of policy proposal - marketing restrictions are not the answer to obesity prevention and this is backed by international evidence; and iv) unintended consequences – the policy will negatively impact jobs, the economy, government advertising revenue and charity philanthropic support. This analysis highlights that strong opposition to marketing policies stems not just from the food industry but also from the advertising industry who appeared to co-opt cancer agencies to also resist policy development and adoption. Key arguments are identified, which are matched to evidence-based counter-points, and can be used for advocacy in this policy area.

*Analysis of nutrient profile models for front-of-package (FOP) warning labels*

**Giovanna Calixto Andrade<sup>1</sup>, Mariana Ribeiro<sup>2</sup>, Patricia Chaves Gentil<sup>2</sup>, Janine Coutinho Giuberti<sup>2</sup>, Ana Paula Bortoletto Martins<sup>1,2</sup>, Laís Amaral Mais<sup>2</sup>**

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**Abstract:**

The packaging of processed foods and beverages is the main communication tool at the point and the moment of purchase. The packaging is responsible for transmitting the characteristics of the product to the consumers, influencing the decision-making process. The packaging also brings important information, such as the list of ingredients and the nutrition facts panel, which should help consumers to make healthier food choices. The nutrition information in food packaging, however, is not much used by the population due to the difficulty of identifying and interpreting it. Considering the influence of the food label on food choices and the limitation of consumers in interpreting nutrition information, different Latin American countries have implemented or are discussing the implementation of front-of-package (FoP) warning labels. The FoP warning labels are informative symbols inserted on the front of the packaging of food products with the objective of informing the consumer, in a clear and simple way, about the high contents of nutrients associated to the development of noncommunicable diseases (NCDs), such as sugars, saturated fat and sodium. Countries such as Chile, Mexico and Uruguay adopted the use of FoP warning labels and others such as Argentina are discussing the implementation of this label. In Brazil it was approved a high-in model, but without the warning perspective. Although the use of FoP labels has been implemented, each country selected different criteria to establish the warnings. Thus, this study aimed to compare different nutrient profile models for FoP warning labels adopted or under discussion in Latin American countries. For this purpose, nutrition composition information on the label of 11,070 packaged foods and beverages sold in the five largest retail chains in Brazil was used. Seven nutrient profile models for FoP warning labels were applied: the Brazilian model proposed by the Brazilian Institute for Consumer Defense (Idec) based on the Pan-American Health Organization (PAHO) model, the Brazilian model approved by the National Health Surveillance Agency (Anvisa) to be implemented in 2022, the models implemented in Chile, Mexico and Uruguay, and the model proposed by Argentina within the scope of the working subgroup 3 (SGT 3) of the Southern Common Market (MERCOSUL) to be applied in two stages. The eligibility criteria used in each of the proposals and the prevalence of products with high critical nutrients content alerts were compared. Levels of agreement between nutrient profile models were estimated using the Kappa coefficient. The models evaluated adopt different nutrients, cutoff points and eligibility criteria, which contributes to the low level of agreement between them. The models based on the addition of critical ingredients such as sugars, fats and salt seem to



be more complex to implement than those based on a list of excluded food subgroups. Results point to the need to review the models to achieve the harmonization recommended by MERCOSUL and to ensure clear information to consumers. Therefore, it is necessary that the models assess the presence of food additives, use stricter cutoff points and adopt eligibility criteria based on the exclusion of food subgroups.

*Cutting through commercial influence in multisectoral governance: reaching policy coherence to address the commercial determinants of NCDs*

**Patay, Dori (1); Friel, Sharon (1); Townsend, Belinda (1); Cullerton, Katherine (2); Baum, Fran (3); Collin, Jeff (4); Ralston, Rob (4); Martin, Jane (5); Holmes, Rodney (6); Dain, Katie (7); Westerman, Lucie (7)**

1 Patay, Dori: Research Fellow, 1. Menzies Centre for Health Governance, School of Regulation and Global Governance, The Australian National University. 2. School of Public Health, The University of Queensland. 3. Southgate Institute for Health, Society and Equity, Flinders University. 4. School of Social and Political Science, University of Edinburgh. 5. Obesity Policy Coalition. 6. Foundation for Alcohol Research and Education. 7. NCD Alliance

## **Abstract:**

**Objective:** Non-government organisations (NGOs) receive increasing attention as important actors in the governance of harmful commodity industries (HCIs). While studies have begun to examine the ways in which NGOs play a governance role via lobbying for greater regulation by government, their role as surrogate regulators of HCIs directly has been understudied. NGOs participation in Australian food and alcohol governance is even less understood. This study aimed to expand the understanding about NGOs and their roles in governing highly processed foods and alcohol industries in Australia.

**Methods:** The research questions are: (i) Which NGOs are engaged in food and alcohol issues in Australia? (ii) What governance functions do the NGOs currently perform? To answer these questions, we developed a typology of NGOs and undertook a descriptive analysis of information obtained about NGOs via an extensive online search of their websites.

**Results:** Altogether, 133 Australian NGOs were identified for inclusion in the study: 72 organisations are active exclusively in food issues, 96 in alcohol issues, and 35 NGOs work across both areas. In the food domain, 29 NGOs operate as non-statutory organisations, 19 as professional associations, 17 as coalitions, five as statutory organisations, and two as private philanthropies. In the alcohol space, 48 NGOs are non-statutory organisations, followed by 23 coalitions, 19 professional associations, four statutory organisations, one industry-funded NGOs and one private philanthropy.

The most common governance function undertaken by NGOs is agenda setting. In the food domain, 88% of NGOs engage in agenda setting, while in the alcohol space 92% of organisations do so. Capacity building activities were performed by 88% and 72% of NGOs working in food and alcohol issues respectively. In contrast, implementation and monitoring activities are less often practiced: 22% of food related and 35% of alcohol related NGOs implement any initiatives (other than capacity building), and monitoring and accountability measures are conducted only by 13% of NGOs active in the food space and 8% of organisations working on alcohol issues. Only a few industry-funded public

interest NGOs were identified, indicating that HCIs are likely to use other avenues to influence regulation.

Conclusions: The academic literature describes an important role for NGOs in regulating HCIs. This analysis provides a 'who's who in the zoo' of Australian NGOs and their organisational governance functions. There are many opportunities for the NGOs, working in tandem with government actors, to shape the practices of HCIs. Further research is needed to understand the strategies used by the NGOs to most effectively regulate the commercial determinants of noncommunicable diseases.

*Exploring the potential impact of the new UK TV and online food advertising policies: a group concept mapping study, 2021*

**Hannah Forde, Emma Boyland, Peter Scarborough, Richard Smith, Martin White, Jean Adams**

1 Research Associate, Centre for Diet and Activity Research (CEDAR), University of Cambridge (for corresponding author, HF)

## **Abstract:**

Evidence consistently demonstrates the relationship between marketing and preferences for, and sales and consumption of, foods and beverages. Products high in fat, salt and sugar (HFSS) are more heavily marketed than healthier alternatives. To minimise the impact of marketing on children's health, the World Health Organization recommends that children have limited exposure to marketing for HFSS products. In July 2020 the UK Government announced an intention to restrict HFSS advertisements on television before 9pm and online as part of its evolving obesity strategy. As the new policies will be some of the most restrictive worldwide, little is known about their potential effects. We developed a concept map to illustrate the potential impacts of the policies on the commercial food system, health and society. A concept map is a diagram of hypothesised relationships about a particular question that can help demarcate an area of interest, predict positive or negative responses to an intervention, and plan evaluations.

We used an adapted group concept mapping method in four workshops with food marketing and regulation experts: one with people from industry, and three with a mix of people from academia, civil society and government organisations (total N=14). We recruited participants purposively using a seed contact list of the study team's network of contacts. Workshops were conducted via Zoom and online whiteboard software, Miro, was used to capture participants' inputs and develop one map per workshop. After the workshops, we merged concepts from the four maps and invited feedback from participants on the integrated concept map via email.

The final map shows how stakeholder reactions to the policies may reinforce or undermine the intended impact of the policies on obesity prevalence and related outcomes. We use the map to illustrate three potential scenarios: (i) adaptations to the policies reinforce positive impacts on obesity prevalence (e.g., reformulation of individual products and companies rebalancing of their portfolios); (ii) adaptations to the policies have negative impacts on obesity prevalence (e.g. increasing marketing in unregulated media); and (iii) the technicalities and details of the policies cover too few products and advertising opportunities to make substantial difference to obesity prevalence.

As the policies are not yet implemented, their design could be altered to maximise the potential for reinforcing adaptations, minimise the potential for undermining adaptations, and ensure they cover a wide range of advertising opportunities and foods. This could

include ensuring technical definitions of eligible product categories are consistent with other childhood obesity policies, ensuring the policies consider portion size, concurrently implementing restrictions on other forms of food marketing, and incentivising the promotion of healthier products. As well as helping to inform policy refinement at this stage, the concept map will inform the design of an evaluation of the policies. The map was developed and verified by a wide range of experts and is theoretical by nature, so it may also inform the design and evaluation of similar policies elsewhere.

*Piloting a Framework for assessing policy coherence between international trade and investment agreements and priority population nutrition regulations: results from Vanuatu*

**Kelly Garton, Bethany Langton, Amerita Ravuvu, Judith McCool**

<sup>1</sup> Research Fellow, Healthy & Sustainable Food Systems, The University of Auckland

**Abstract:**

**Background & Aims**

Binding international trade and investment agreements (TIAs) can impinge in real and perceived ways upon policy space for food regulations aiming to improve population nutrition. 'Policy space' refers to the freedom, scope, and mechanisms that governments have to choose, design, and implement public policies to fulfil their aims. Previous research has highlighted how powerful economic interests can use TIAs to raise technical challenges to oppose public health nutrition policies. Health policy makers often have limited capacity to interpret TIAs in response to such threats. This study sought to identify potential barriers posed by existing international trade agreements to policy space for priority food environment regulatory domains in Vanuatu.

**Methods**

Priority food environment interventions for Vanuatu were identified from the results of a Healthy Food Environment Policy Index (Food-EPI) study carried out by the Pacific Community in Vanuatu in 2020, which included: regulating unhealthy food promotion (marketing) to children, mandatory interpretive nutrition labelling, and food composition (nutrient limit) standards/targets for salt, sugar, and trans-fat in foods. Using a conceptual framework for TIA provisions with potential to influence nutrition policy space based on empirical evidence (previously published), we analysed the content of 8 existing TIAs to which Vanuatu is a Member to assess areas of potential conflict or incoherence with the population nutrition regulatory imperatives.

**Results**

Key areas for caution in nutrition policy design with respect to trade challenges included non-discrimination, necessity and justification, and adherence to international standards; all three were present across Vanuatu's TIAs. However, such risk could be largely mitigated through strategic policy design in terms of framing regulatory objectives and defining regulatory distinctions. Our analysis also highlighted key areas for concern in future trade policy negotiation, including commitments related to fair and equitable treatment, transparency, and regulatory coherence. These contained vague language, leaving them open to interpretive capture by powerful industry/economic stakeholders.

**Conclusions**

Our analysis indicates that pursuing regulation of unhealthy food marketing to children, mandatory interpretive nutrition labelling, and setting nutrient limits for salt, sugar, and trans-fat in foods is unlikely to encounter substantive barriers on the grounds of TIAs, provided that regulatory design strategically accounts for key TIA provisions. However, there remain elements of TIAs that are open to interpretative capture by powerful economic interests. While not a legal analysis, use of this framework for assessment may help to guide health and nutrition policy makers with limited capacity to interpret the intersections with international economic policy. Better understanding of the intersections between health and trade policy can help to design more robust nutrition regulations, and to anticipate and identify 'hollow threats' put forward by those vested interests who would oppose such regulations.

*Discursive framing in policies for restricting the marketing of food and non-alcoholic beverages*

**Yandisa Ngqangashe, Sharon Friel**

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**Abstract:**

The restriction of marketing of unhealthy food and non-alcoholic beverages is a key policy option for preventing noncommunicable diseases. The development of such policies involves many actors including governments, the food and advertising industries, researchers, and non-government organizations who seek to shape policies to align with their interests. These actors use various approaches to influence policy development including discursive strategies such as framing problems and policy solutions through language, images or labels. The aim of this study was to examine the frames and underlying discourses that shape food marketing policies.

We examined N=41 government and industry policy documents from high and low to middle-income countries. Each policy document was assessed for the frames and discourses used in relation to i) Policy objectives (intent or purpose of the policy), which presents how the problem and proposed solutions were defined, (ii) Policy terms (definitions that specify the parameters of policies including what foods can or cannot be marketed), and (iii) Standards used to set the parameters of the policies in relation to what food can or cannot be marketed.

The framing used in these food marketing policies resonates with five paradigms: neoliberalism, nutritionism, public health, vulnerability and levels of processing. The frames are used differently across industry versus government policies, and across types of policies (communication/broadcasting policies versus nutrition/public health policies). For example, neoliberal frames dominate the objectives of industry policies while public health framing is more prevalent in government policies. In industry policies there is a strong theme of commodification where food is only referred to as products and the policies often reiterate common industry rhetoric on the causes of obesity and what the solutions should be. Nutrient profiles are the main standard used to set policy parameters across the different types of policies in both industry and government policies. Only one of the 41 policies considers levels of processing and uses the NOVA classification to set policy standards.

This analysis expands the understanding of framing that occurs during policy development, and different actor interests are advanced through these frames. Further research that examines how policy objectives, terms and standards are interpreted by different policy actors is needed to further explore the influence of framing on policy implementation.



Key words: Food marketing, discursive, framing, policies, industry, government

*Pre-emption strategies to block taxes on sugar-sweetened beverages: A framing analysis of Facebook political advertising in support of Washington State Initiative-1634*

**Marco Zenone**

<sup>1</sup> PhD Student, London School of Hygiene and Tropical Medicine

**Abstract:**

In 2018, the sugar-sweetened beverage (SSB) industry introduced a ballot measure (I-1634) in Washington State of the United States to prevent further local taxes on groceries. The measure, which passed, is emblematic of new pre-emptive legislative strategies by the SSB industry to block soda taxes and conceal those strategies under the guise of preventing burdensome 'grocery taxes.' This paper uses qualitative framing analysis to examine a public archive of 1218 Facebook advertisements to understand how I-1634 proponents shaped public discourse and engaged in misinformation efforts online during the lead up to the passage of I-1634. Coding strategies identified 7 compelling and inter-related framing strategies used by the campaign. These included strategies that misinformed the public about the threat of grocery taxation and the economic impacts it would have on the region. Strategies to conceal the true intent of the ballot measure and the sponsors of the campaign were aided by Facebook's advertising platform, which does not moderate misinformation in advertising and allows advertisers to conceal their sponsors. We urge public health researchers and advocates to pay more attention to how Facebook and other social media platforms can be used by industries to target voters, misinform publics, and misconstrue industry support.

## *Potential of a policy solution to create healthier food retail environments in NSW hospitals*

**Leonie Cranney**

1 Research Associate, The University of Sydney, Faculty of Medicine and Health, Sydney School of Public Health, Prevention Research Collaboration and the Charles Perkins Centre

### **Abstract:**

**Issue:** The widespread availability and promotion of unhealthy food and drink in our food environment has contributed substantially to an unhealthy diet, characterised by high intake of discretionary food and drinks. Population- and evidence-based policies that make healthy food and drinks the easiest choice are an important component of effective, sustainable action to prevent overweight and obesity. Health promoting settings such as public hospitals have an opportunity to lead the way, being recognised as role models for health-promoting environments and have the potential for broad and sustainable reach.

**Policy:** NSW Health introduced the Healthy Food and Drink in NSW Health Facilities for Staff and Visitors Framework (the Framework) in 2017.

**Aim & Methods:** This research describes the acceptability, feasibility and effectiveness of the Framework. It comprises three inter-related process and impact evaluation studies, conducted between 2017 and 2019 as part of a broader suite of Framework evaluation activities. During this time, implementation focused on achieving an initial sub-set of 13 Framework practices:

1. Semi-structured interviews were conducted with 99 stakeholders (NSW Local Health District executives, implementers and retailers) in 2019, to examine their experiences of implementation and how they responded to the Framework.
2. Two repeated cross-sectional intercept surveys (2018 and 2019) were conducted with 4,808 hospital staff and visitors in 10 randomly selected NSW hospitals. These included 2,687 observations of food and drink purchases in 13 cafeterias or cafes and assessed changes in acceptability and purchasing behaviours.
3. Drinks audit data (2017 and 2018) from a convenience sample of hospital food retail outlets was analysed to assess changes in availability of sugar-sweetened beverages.

**Results:** Food outlet audits and stakeholder interviews indicated successful state-wide implementation was achieved, irrespective of varied local implementation pathways. Almost all (96%) outlets removed sugar-sweetened beverages after the target date for practice implementation. Having specific targets for recommended practices, state-wide annual monitoring of practice achievement, strong executive commitment and a flexible approach to implementation at the local level facilitated implementation. Most

stakeholders accepted the principle of the policy, including retailers. However, retailer responses varied – while some were motivated to succeed, others resisted changes or found it difficult to achieve practices in their context.

Hospital staff and visitor intercept surveys showed significant increases in policy awareness (23% to 42%;  $p < 0.0001$ ) and support for increased healthier food choices (89% to 92%;  $p = 0.01$ ). Support for the removal of sugar-sweetened beverages was also high (79.5%). There was a slight but non-significant increase in the proportion of healthy food purchases (56% to 59%;  $p = 0.22$ ) and findings varied substantially by cafeteria/cafe ( $p = 0.0008$ ).

Conclusion: Together these studies illustrate the consumer desire for healthier food and drink choices in the hospital retail environment, and the feasibility of policy implementation at-scale. Positive impacts in a relatively early phase of implementation are promising. They indicate that policy approaches providing specific targets for recommended practices, a flexible approach to locally tailored implementation and annual monitoring of practice achievement can be effective. Framework implementation is ongoing, and follow-up of purchasing behaviour is recommended.

*Partially hydrogenated oil (PHO) market mapping: Conducting and applying research to create effective trans-fat measures*

**Kyra Berasi, Carmen Washington**

1 Legal Advisor, Associate Director Research, Global Health Advocacy Incubator

**Abstract:**

Background: Countries around the world are taking up the World Health Organization's call to eliminate industrially produced trans-fatty acids (iTFA) from their food supplies. Partially hydrogenated oil (PHO) is the most significant source of iTFA, yet there is significant variation in how PHO enters and moves through countries' food-supply chains. Mapping sources of PHO can inform policymaking, helping to ensure that an iTFA measure is tailored to the national context and enforceable.

Aim: Provide guidance about how to map countries' PHO markets, and then use such research to inform the design of effective iTFA measures, particularly in low-and middle-income countries (LMIC).

Methods: To guide PHO market-mapping research, we developed guidance about identifying key potential players and products related to PHO throughout the food-supply chain. Complementarily, we have created guidance on how to use PHO market mapping to inform the drafting of effective iTFA measures.

Policy implications: As more LMIC around the world prioritize iTFA elimination, guidance about mapping the PHO market and using the information to inform policymaking can help countries craft effective measures that are tailored to national contexts.

*Strengthening NCD-prevention policy in the Pacific: a comparative political economy analysis of Fiji and Tonga*

**Ms Sarah Mounsey**

<sup>1</sup> PhD Candidate, Menzies Centre for Health Policy and Economics

**Abstract:**

**Background:** Diet-related fiscal policy is an effective NCD prevention strategy. However, current sugar-sweetened beverages (SSBs) taxes in Fiji and Tonga have not had the desired effect; SSB consumption in Fiji, for example, contributes to mortality more than double global rates and is highest in the WHO Western Pacific Region. We therefore aimed to better understand the perceived underlying political economy drivers that have and continue to affect change in each country.

**Methodology:** Our study design utilised a comparative case study that triangulated documentary policy and stakeholder analysis with semi-structured stakeholder interviews in both countries and an in-depth corporate political activity analysis in Fiji. We drew from policy theoretical frameworks to collect and analyse policy and stakeholder content and utilised established corporate political activity frameworks as a platform for identifying industry activity in Fiji.

**Results:** Common findings to both Fiji and Tonga suggested increased multi-sectoral engagement, embracing a whole-of-society approach, strengthened institutional structures, and leveraging off competing priorities across sectors towards more common goals would significantly strengthen policy impact.

**Conclusion:** These and other important findings provide opportunities and lessons for Fiji and Tonga as well as other similar settings seeking to strengthen or upscale the impact of diet-related fiscal policy.

*Monitoring self-regulation of food and beverage marketing in Malaysia: A pilot benchmarking with the WHO nutrient profiling models*

**Ong Gild Rick<sup>1</sup>, SeeHoe Ng<sup>1</sup>, Sameeha Mohd Jamil<sup>2</sup>, Sally Mackay<sup>3</sup>, Bridget Kelly<sup>4</sup>, Boyd Swinburn<sup>3</sup>, Tilakavati Karupiah<sup>1\*</sup>**

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**Abstract:**

Malaysia faces an alarming obesity burden concomitant with the diet-related non-communicable diseases. Promotion of healthier diets is advocated as one solution, but this requires conducive food environments within the broader food system. Food marketing is part of the food environment and influences children by creating product awareness, establishing food preferences and fostering purchase and consumption, as well as generating brand loyalty. Food marketing mostly promotes ultra-processed food and beverage products that are high in fat, sugar and salt (HFSS). The World Health Organization (WHO) has developed regional nutrient profiling models to support the classification of foods and beverages for which marketing should not be permitted. This includes separate models for the WHO Western Pacific (WPRO) and Southeast Asia (SEARO) Regions. These models comprise thresholds for energy and nutrients of concern (fat, total sugars, added sugars, non-sugar sweetener, trans-fat and sodium) per 100g/ml. Good governance in food marketing involves regulations with sanctions to restrict unhealthy food promotion to children but many countries opted for self-regulatory industry codes with weak commitments. In Malaysia, despite the government's stated intentions to restrict HFSS food and beverage advertising to children on TV, marketing is currently controlled by fast food advertising guideline and industry self-regulatory pledge. For the latter, it applies industry's own definitions of foods to be restricted from marketing and no government-led nutrient profiling model to guide this policy action is available. This study aimed to test the application of WPRO and SEARO nutrient profiling models in classifying advertised food and beverage products on children's popular TV channels. The INFORMAS television food marketing protocol was adapted for this study. Nielsen television audience viewership data determined three popular television channels for children aged <18 years old. A trained coder first performed the content analysis of the live television recordings (3 top-rated channels X 18 hours recording) and this was verified by other researchers for data accuracy. Online search and market survey methods were used to retrieve nutrition information for product classifications. The majority of advertised

food and beverage products were 'not permitted' to be advertised under the WPRO and SEARO models. Sugar sweetened beverages, sweet bakery products and convenience or prepared foods were the most frequently advertised food categories on children's popular TV channels. Both models detected low 'permitted' food and beverage products, although the SEARO model indicated a relatively higher proportion. To our knowledge, this is the first study to apply the two models and confirm their usability to evaluate television food advertising in Asia. Given the alarming number of non-permitted food and beverage products, the finding will inform policy makers on the need for sustained monitoring and legislation to regulate unhealthy food marketing to children. In addition, a government-led nutrient profiling model that aligns with the WHO models is required in Malaysia.



**Patay, Dori; Friel, Sharon; Schram, Ashley; Sell, Susan**

1 Research Fellow, Menzies Centre for Health Governance, School of Regulation and Global Governance, The Australian National University

**Abstract:**

**Objective:** The consumption of unhealthy commodities drives the global noncommunicable disease (NCD) crisis. There has been little empirical research done on how states achieve policy coherence for health when strong commercial and political influence is present, and there is even less understanding on how low- and middle-income countries respond to this challenge. This study aimed to improve the understanding of the conditions that influence the ways governments address the commercial determinants of NCDs in Pacific Small Island Developing States (PSIDS) and offers insights for reaching policy coherence for health despite commercial and political influence.

**Methods:** An exploratory methodology was applied, with Fiji and Vanuatu as case studies, where in-depth interviews and document analysis was conducted. A qualitative analysis was guided by our analytical framework developed to assess interests, ideas, and institutions that influence the multisectoral governance of tobacco.

**Results:** This study found that Fiji and Vanuatu struggle with developing and implementing coherent policies to regulate tobacco; it sheds light to the reasons behind this incoherence and offers lessons transferable to food and alcohol governance. The results demonstrate that institutional mechanisms are not enough to ensure the implementation of multisectoral policies, when the government is politicized, its performance management and accountability is limited, and non-health government agencies are effectively excused from contributing to the fight against NCDs because the dominant idea of individual responsibility relieves them of any responsibility.

**Conclusions:** Without moving away from the idea of individual responsibility fuelled by neoliberal ideologies, governance actors needed to control unhealthy commodity industries are unlikely to engage effectively in coherent, multisectoral policies. The dominant causal ideas must be altered to recognize the commercial determinants of NCDs. However, this requires capacity building and governance strengthening, especially in the particular context of PSIDS.

## *Developing a prioritised regulatory agenda to prevent NCDs – a South Australian case study*

**Maddie Heenan**

*1 Research Associate & PhD Candidate, The George Institute for Global Health*

### Abstract:

South Australia (SA) is the first and only jurisdiction in Australia to include non-communicable disease (NCD) prevention provisions in their Public Health Act. These provisions empower the Minister to declare an NCD and/or issue a code of practice (a set of written rules) in relation to preventing or reducing the incidence of that NCD. However, a code of practice to prevent NCDs has never been designed or implemented before. This study aims to do that. Using an 'action research' methodology, a multidisciplinary Technical Advisory Group (TAG) was established to guide the design and implementation of model codes of practice. The Technical Advisory Group consists of government policymakers and experts in public health law, nutrition and economics. The mode of research was iterative, using a co-production process through surveys and workshops.

Members of the Technical Advisory Group rated 33 policy options drawn from key World Health Organization (WHO) and United Nations (UN) reports. Due to Australia's significant progress in tobacco control, the focus was on unhealthy food and drink, including alcohol, and creating healthy and active environments. A priority setting framework was created that considered the evidence-base, cost-effectiveness, ease of implementation, community support, unmet needs or gaps, equity, political feasibility and legal compatibility. From the 33 interventions we identified the top 10 policies overall using the nationally relevant priority indicators and the top 10 policies for SA using the nationally relevant and context specific priority indicators.

Through workshops and deliberative dialogues we used the priority setting framework to eliminate policy options that were incompatible with the SA Public Health Act or required changes to other legislation (e.g. Planning Act), were not considered politically feasible at the time, were already implemented, and/ or could be implemented through government policy (e.g. did not require the Public Health Act). Policy areas relating to restrictions on in-store availability and price of unhealthy food and drinks, marketing of alcohol and junkfood, availability of unhealthy food and drinks in public institutions, and enhancing data systems were identified as priorities. The list was further refined by discussing the key contextual factors that would impact the relevance, feasibility and influence of specific policies.

This presentation will discuss the opportunities of using Public Health Acts and supporting regulatory instruments to promote healthier diets, using a combination of co-creation, evidence synthesis and expert opinion to inform policy. It will also outline the key

considerations in the priority setting process and the benefits of co-producing a prioritised regulatory agenda with government. Lessons will be drawn out that may be relevant to other jurisdictions.

*Pre-emption strategies to block taxes on sugar-sweetened beverages: A framing analysis of Facebook political advertising in support of Washington State Initiative-1634*

**Marco Zenone**

1 PhD Student, London School of Hygiene and Tropical Medicine

**Abstract:**

Sugar-sweetened beverages (SSBs) are the leading global source of added sugar intake and their consumption is associated with negative health outcomes, such as diabetes, cancers, cardiovascular diseases, and overall mortality. Despite consensus within the public health community about the need to reduce sugar intake, the non-alcoholic beverage industry engages in efforts to publicly undermine the evidence base surrounding the harmful effects of SSBs. There has been limited investigation of how SSB industry actors engage in public debates to challenge public health research and policy on SSBs. To address this gap, we thematically analyzed the public comments and press releases of the British Soft Drinks Association (BSDA) since May 2014. A total of 175 news articles and 7 press releases were identified where the BSDA commented upon new SSB research in public settings. In these comments, four strategies were observed to undermine new research. First, the BSDA challenged study rigour and research design (n = 150). They challenged the policy implications of research by stating observational studies do not demonstrate causation, refuted data sources, questioned researcher motivations, and claimed research design did not account for confounding factors. Second, the BSDA positioned themselves as an altruistic public health partner (n = 52) intent on improving population-level nutrition citing their voluntary industry commitments. Third, the BSDA promoted concepts of safety that align with industry interests (n = 47). Lastly, the BSDA argued that the lifestyle of individual consumers should be the focus of public health interventions rather than the industry (n = 61). The findings illustrate the BSDA reliance on arguments of causation to discredit research and avoid policy interventions. Given the attention by the BSDA regarding the purported lack of evidence of causation between SSBs and non-communicable diseases, it is imperative that members of the public health community try to educate policy makers about (a) the complex nature of causation; (b) that evidence in favour of public health interventions cannot, and do not, solely rely on causation studies; and (c) that public health must sometimes abide by the precautionary principle in instituting interventions.

*Nutrition related non-communicable diseases and sugar sweetened beverage policies: a landscape analysis in Zambia*

**Mulenga Mary Mukanu**

1 PhD Research Fellow, University of the Western Cape/University of Zambia School of Public Health

**Abstract:**

**Background:** Taxation on unhealthy products is recommended as a cost-effective intervention to address the global burden of non-communicable diseases. Taxation of sugar-sweetened beverages dis-incentivizes consumption of unhealthy products. Implementation of such policies is difficult in Sub-Saharan African countries, which are targets for global corporate expansion by the sugar-sweetened beverages industry.

**Objective:** To identify opportunities to strengthen policies relating to sugar-sweetened beverage taxation in Zambia, through: (1) understanding the policy landscape and political context in which policies for nutrition-related non-communicable diseases are being developed, particularly sugar-sweetened beverage taxation, and exploring the potential use of revenue arising from sugar-sweetened beverage taxation to support improved nutrition.

**Methods:** We conducted a retrospective qualitative policy analysis with a review of nutrition-related non-communicable diseases policies and key informant interviews (n = 10) with policy actors. Data were coded and analyzed data using pre-constructed matrices based on the Kingdon's Policy Agenda Framework.

**Results:** Government responses to nutrition-related non-communicable diseases were developed in an incoherent policy environment. The health sector's commitment to regulate sugar-sweetened beverages conflicted with the manufacturing sector's priorities for economic growth. Increased regulation of sugar-sweetened beverages was a priority for the health sector. Economic interests sought to grow the manufacturing sector, including the food and beverage industries. Consequently, incoherent policy objectives might have contributed to the adoption of a weakened excise tax. The general public were poorly informed about nutrition-related non-communicable diseases.

**Conclusions:** The tension between the Government's economic and public health priorities is a barrier for strengthening fiscal measures to address nutrition-related non-communicable diseases. However, this did not prevent the introduction of a differential sugar tax on sugar-sweetened beverages. Opportunities exist to strengthen the existing taxation of sugar-sweetened beverages in Zambia. These include a more inclusive consultation process for policy formulation and comprehensive monitoring of risk factors.

*The human rights approach in the promotion of a comprehensive front-of-package warning label policy in Argentina.*

**Berenice Cerra**

1 Legal Advisor, IC Argentina

**Abstract:**

Argentina is one of the countries with the highest rates of obesity and overweight in Latin America. 66.1% of adults are overweight, while 41.1% of children and adolescents between 5 and 17 years of age are overweight and obese, while in children under 5 years of age, overweight reaches 13.6% (Ministerio de Salud y Desarrollo Social de la Nación, 2019). At the same time, the pandemic mainly affects the most vulnerable population in the country: those adolescents whose mothers/fathers have a lower level of education are 31% more likely to suffer from obesity than those with parents with a higher level (FIC Argentina and UNICEF, 2016).

This context has revealed the need to implement effective public policies based on the best standards of scientific evidence to prevent the epidemic, such as the front-of-package warning label, a measure recommended by the World Health Organization. In Argentina, the promotion of the front warning label policy has integrated not only a public health perspective, but also a broad perspective of protection and promotion of human rights. Thus, for several years, civil society has been advocating for the enactment of a labeling law that would not only guarantee the State's compliance with its constitutional human rights obligations, but also with its obligations to the International Human Rights Committees.

In this regard, civil society has shown that the current regulatory framework for food labeling does not guarantee consumers access to accurate and concrete information on the content of unhealthy food and beverages in order to prevent their consumption. Furthermore, this legal framework does not promote the human rights to health and access to food, recognized in various international human rights treaties ratified by Argentina. In this context, and through the use of the human rights framework, the sanction of a front warning labeling policy has been demanded and promoted as a comprehensive strategy to protect human rights. The purpose of the presentation will be to analyze the Argentine case and how the normative analysis and the human rights perspective have allowed framing the debate on the front warning labeling policy and influencing political decision making.

The National Congress is currently debating the "Promotion of Healthy Diet" bill on front-of-package warning label, which has adopted a comprehensive approach to human rights protection: it not only labels unhealthy foods, but also prohibits the advertising of those unhealthy foods containing seals to minors, as well as restricting their marketing and

availability in school environments. If this draft is approved, Argentina would achieve a policy of front-of-package warning labeling that promotes healthier diets and guarantees human rights.

**Abstract:**

Healthy taxes are those that affect products that are harmful to health. This is the case of sweetened beverages, which are those industrialized and ultra-processed with added sugar and/or sweetener. The adoption of these taxes prevents consumption, promotes the health of the population, improves health indicators and increases tax collection. Furthermore, they can correct market failures. From the production, sale and consumption of these products, in addition to the individual damages, negative externalities are generated that result in environmental and public health costs aimed at treating diseases related to consumption. A study by the Instituto de Efectividad Clínica y Sanitaria reveals that the consumption of sugary drinks costs the Brazilian health system almost R\$ 3 billion per year in the care of patients with diseases caused by the consumption of these drinks. The Food Guide for the Brazilian Population recommends avoiding the consumption of sweetened beverages, as it is associated with obesity and other non-communicable chronic diseases (NCDs), responsible for more than 70% of deaths in Brazil and in the world, and contribute to the forms most serious of Covid-19. There is an overlap of public health pandemics in the country, which severely aggravates the resulting social and economic damage. Increased taxation is an effective public policy to reduce the consumption of sweetened beverages, as recommended by the WHO, PAHO, the 2019 International Task Force and the World Bank, and it is an instrument for health financing and universal access to health. In Brazil, however, there are excessive tax benefits granted to sweetened beverage manufacturers, which generate distortions and tax injustices, and allow the final price of these products to be very accessible to the population, contributing to obesity and other NCDs. Thus, the article addresses the proposal for a more onerous taxation on sweetened beverages, without the permission of tax benefits and with the earmarking taxation, allocation of resources to the National Health Fund, of the Ministry of Health, for actions to prevent, control and treat obesity and other NCDs. Healthy taxes burden consumption, but contribute to the progressiveness of taxation as they fall on products that are not essential to human life. By making access difficult, healthy taxes discourage behavior and induce choices for healthier products, which benefits the population's health and reduces the loss of productivity due to premature death and disability, which mainly affects low-income people. The apparent regressiveness is outweighed by the long-term progressive benefits of improved health, by reducing illness, public and family spending on health and medicines, and by gaining years of productive life. This taxation contributes to achieving the goals of the Sustainable Development Goals related to ensuring healthy lives, universal health coverage and



reducing premature mortality from non-communicable diseases with prevention and treatment.

## *Transitioning to Healthy and Sustainable Food Systems in Latin America*

**Janine Giuberti Coutinho, Alan Azevedo, Ana Paula Bortoletto Martins, Rafael Rioja, Lorenza Longhi**

1Healthy and Sustainable Diets Program, IDEC - Brazilian Institute for Consumers Defense

### **Abstract:**

Idec, the Brazilian Institute for Consumer Protection, works to defend sustainable and healthy Food Systems, by promoting science, advocacy, communication initiatives and the mobilization of civil society to support an agenda that transforms current corporate food systems into structures that contribute to the future of the planet and to the well-being of future generations.

The objective of this experience is to present an agenda of action for the transition for sustainable and healthy food systems in Latin America and to skill-share the process of mobilization, articulation, liaising in order to promote the future of life and the planet in course.

Part of Idec's work has been dedicated to challenging the UN Food Systems Summit. Idec and its partners in Latin America defend that the global forum has been captured by large corporations' interests, in particular by the food industry and the agribusiness.

The Institute produced two academic articles mapping the political-economic reality of Brazil and a broad literature review that summarizes the aspects related to food systems domestically. These valuable inputs will set up one of the basis for the creation of an agenda for action to shift to sustainable and healthy food systems in Latin America. The initiative has the support of the International Development Research Center, and partners from Chile and Argentina with a view to establishing a joint agenda.

To challenge the UNFSS, Idec took part in the People's Counter Mobilization to Transform Corporate Food Systems, which happened from 25 to July 28. On July 22nd and 23rd, a preliminary stage for Latin America was carried out with the support of the Institute. The movement is the result of the union of more than 300 civil society organizations from around the world to face the food production and consumption models dominated by large corporations in the food industry and agribusiness. With a broad program, the mobilization had the participation of peasants, small producers, indigenous and traditional peoples, consumers and public administrators.

IDEC participation in these and other spaces of incidence is guided by the defense of the human right to adequate food and by the continuous improvement of structuring policies

that promote healthy diets, such as the Food Based Dietary Guidelines (FBDG) for the Brazilian Population.

In addition to several communications products, such as blogs, press releases, stories and position papers, Idec promotes an outreach campaign for the FBDG. The material brings necessary points for the transition of Food Systems and uses clear and direct recommendations about which foods should be part of a healthy diet and which should be avoided to prevent damage to health.

On this front, Idec also promotes clear food labeling policies, denounces the dangers of consumption of pesticides and ultra-processed products, and builds paths to fight the global syndemic characterized by simultaneous pandemics of hunger, obesity and climate change – challenges that are now further aggravated by the Covid-19 pandemic.

Considering the obstacles for the food systems transformation around the world, the sharing of experiences under course by civil society is crucial to articulate and learn from them.

*Framing civil society participation in Zero Hunger (SDG2) governance: A document and policy analysis*

**Joanna Horton and Kiah Smith**

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**Abstract:**

The UN Sustainable Development Goals (SDGs) – and particularly SDG2 Zero Hunger – represent a large-scale attempt to address critical global problems of hunger and food insecurity. Furthermore, the SDG framework makes explicit the need for broad participatory governance in localising and implementing the Goals, advocating for “an unprecedented level of cooperation and collaboration among civil society, business, government, NGOs, foundations, academia, and others”. This inclusive approach is welcome, as civil society participation in food system governance has been shown to contribute to reductions in hunger and food insecurity, as well as improving efficiency, transparency, and democracy in the food system. However, research on SDG governance has raised questions about the influence afforded to civic actors in formulating, localising, and implementing the Goals, especially relative to the significant influence of large corporations.

In light of these questions, this paper applies a food justice perspective – emphasising the role of grassroots organisations and civil society in realising fairer food systems – to the issue of SDG governance in the food system, examining the extent to which governance models prescribed for implementing the SDGs facilitate the full participation of civic food actors. Following a systematic global literature review on civil society participation in the SDGs and particularly SDG2, we use a critical frame analysis to reveal the multiple and sometimes conflicting approaches to governance (and civil society participation therein) as presented in official SDG policy documents. We critique these approaches from a food justice perspective, arguing that the SDG framework lacks a) a cohesive approach to governance and b) concrete measures to ensure the meaningful participation of civic food movements in localising and implementing the SDGs. As such, we argue that stronger efforts towards enabling civil society participation are needed for the SDGs to deliver progressive and equitable food system transformation.

*Public Health surveillance of commercial practices: insights and reflections from a pilot study*

**Jennifer Lacy-Nichols**

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**Abstract:**

Some of the most effective policies to foster healthy and equitable food systems threaten the business models of powerful commercial actors. In response, commercial entities have sought to block, delay, dilute or otherwise impede these policies through a wide range of strategies. Indeed, the rapidly growing academic field of the commercial determinants of health documents the myriad of ways that commercial entities promote and protect their interests, often at the expense of human and planetary health. It is now clear that commercial entities, like other ‘vectors of disease’, require similar levels of monitoring and surveillance. Yet commercial political practices such as lobbying or campaign contributions are often poorly documented and are thus challenging to systematically monitor. In this pilot study, we tested the feasibility of a surveillance model to systematically collate, report and disseminate intelligence on the commercial determinants of health across eight domains. We discuss insights from two domains here.

**Methods:** As part of a VicHealth funded pilot project, publicly available data on annual donor filings and ministerial meetings were sourced from the Australian Electoral Commission and the New South Wales (NSW) state government websites respectively. Data was cleaned and coded to identify four ‘harmful industries’ (food and drink, alcohol, tobacco and gambling) as well as details about political parties and ministerial portfolios. Google Data Studio was used to develop interactive charts and visuals. Information was also collected on data availability and quality as well as the human resources needed for data ingestion and analysis.

**Results:** The AEC recorded a total of 54,616 disclosed political donations between 1998 and 2020, totalling \$576,519,472. The four ‘harmful industries’ donated \$35,823,937, of which the alcohol industry was the largest donor. The Liberal and Labor parties received the vast majority of harmful industry donations. NSW ministerial diaries were available from July 2014. 20,607 meetings were documented, of which 634 were with harmful industries. The gambling industry had the most active lobbying presence, and the deputy premier had the most meetings with harmful industries. In contrast, health advocates met with ministers 156 times.

Conclusions: The pilot study demonstrates the potential to develop tools to systematically monitor commercial political practices. Key challenges include: poor quality and delayed access to data; coding complex commercial actors affiliated with more than one industry; and the human resources used in manual extraction, cleaning and coding of data. There are many opportunities to scale and improve systematic monitoring of commercial practices to ensure better transparency and accountability of political systems.

## *Cost and Affordability of Healthy, Equitable and Sustainable Diets in Low Socioeconomic Groups in Australia*

**Meron Lewis, Sarah A. McNaughton, Lucie Rychetnik, Amanda J. Lee**

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### **Abstract:**

**Introduction:** Few Australians (<4%) consume a healthy, equitable and sustainable diet consistent with Australian Dietary Guidelines (ADGs), and poor diet is a leading contributor to the burden of disease. A major problem is high intakes of discretionary choices (i.e. those foods and drinks not needed for health and high in saturated fat, added sugar, salt and/or alcohol). Low socioeconomic groups (SEGs) suffer particularly poor diet-related health. However, granular information on dietary intakes and affordability of recommended diets was lacking for low SEGs. This study investigated cost and affordability of habitual and recommended diets in low SEGs. It provides better evidence to support policies to improve food environments and help drive healthier diets in low SEGs in Australia.

**Methods:** The Healthy Diets Australian Standardised Affordability and Pricing (ASAP) protocol was modified to align with relevant dietary intakes reported in the National Nutrition Survey 2011-2012, household structures, food purchasing habits, and incomes of low SEGs. Cost and affordability of habitual and recommended diets of three low SEG reference households were calculated using prices of 'standard brands' and 'cheapest options'; the latter reflects a common budgeting strategy used by low SEGs. Household A included two adults and two children; Household B one adult and two children; and Household C two older, retired adults. Household incomes were calculated from minimum wage rates and welfare entitlements.

**Results & Discussion:** While total energy intake was similar, habitual diets of low SEGs included less healthy, and more discretionary choices (particularly takeaway foods and sugar sweetened beverages), than the broader population. When 'standard brands' were purchased, habitual diets were more expensive than recommended diets for all three reference households. However, when the 'cheapest options' were purchased, habitual diets were less expensive than recommended diets for Household B, and cost the same as recommended diets for Household C. This may contribute to perceptions that healthy food is more expensive than unhealthy options, and lead to increased consumption of

unhealthy packaged foods over basic, healthy foods in low SEGs. In Households A and B, reliance on unemployment benefits resulted in both habitual and recommended diets being unaffordable (>30% of household income) unless the cheapest available options (usually 'own brands') were purchased.

Conclusion: The study confirmed the need to better target nutrition policies to support low SEGs. Policy action is urgently needed to help improve affordability of recommended diets by ensuring adequate incomes in low SEGs, and keeping healthy food costs as low as possible, both in absolute terms and relative to the cost of unhealthy food. The current exemption of basic, healthy foods from the Goods and Services Tax (GST) must be maintained; an increase of the GST on unhealthy foods would help improve relative affordability of recommended diets. Further application of the low SEG Healthy Diets ASAP protocol should provide additional data to inform policy and practice to support low SEGs to purchase and consume healthy diets.



## *Public-Private Partnerships in Mexico: Implications for Public Health Nutrition Governance*

**Angela Carriedo**

<sup>1</sup> Policy Secretary, World Public Health Nutrition Association

### **Abstract:**

The Mexican government has adopted public health policies to tackle non-communicable diseases. Public-private partnerships (PPPs) aiming to improve the disease burden were agreed upon between the government and transnational food and beverage industries (TF&BI) in the past decades as a key method for public institutions to implement public policies. However, at the global level, research has questioned the benefits and exposed limitations and performance issues of PPPs as suitable institutional mechanism to improve public health and nutrition.

We conducted an exploratory study using a qualitative methodology to explore four PPPs conducted in Mexico between TF&BI and the government, aiming to implement programs to control obesity, improve water sanitation and increase physical activity levels. The study is based on 26 interviews with key actors, 172 publicly available documents and 52 freedom of information (FOI) requests regarding these PPPs in Mexico. The aim was to determine whether these arrangements are effective ways to design, implement, monitor and evaluate public health nutrition programs and to explore the main governance challenges, risks, and benefits of these arrangements.

At both national and sub-national levels, all PPPs studied were found to have minimal public information available on the length, impact, and governance models used to implement programs conducted under these arrangements. The governance around such PPPs was weak, and discrepancies of data were found between public and private sources. No clear governance principles were followed transversally by partners including accountability, transparency, fairness, participation, integrity, and anti-promotion of soft drinks or ultra-processed foods, or did followed a human right approach to nutritious food and water access. We found there was marginal participation of the beneficiaries, and the private partners led the programs' design, implementation, and data management. The government (either federal or local) relies on private sector support to complete their public health aims, and such aid is perceived as necessary. At the same time, some implementers ignored that TNF&BI were involved. Framing the problems and the solutions to public health nutrition programs in ways that would portray the industry as a solution-oriented partner are strategies that could perpetuate the use of PPPs. This study

confirms that these PPPs have led to minimal gain for public health while increasing credibility for the TNF&BI.

This study confirms that, at the country level, these PPPs have led to minimal gain for public health however continue to maintain TF&BI closely involved. Existing PPPs with TNF&BI should be carefully assessed, particularly if these partnerships lack clear governance principles such as transparency and public accountability. Based on our results we provided a few key recommendations to improve public health nutrition programs currently conducted under PPPs: (i) Improving financial transparency, (ii) Developing tools to protect public policy from conflict of interests and undue corporate influence, (iii) Avoiding partnerships at any level of government with national or transnational F&BI; and (iv) Engaging with non-conflicted civil society groups to develop, evaluate programs and that would hold accountable all partners in on-going PPPs. In particular, groups supporting the human rights approach to food and water access.

*Agroecological food production in Rio de Janeiro's urban area as sustainable development goals tool*

**Felipe Jardim**

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Scientific reports diagnose increasing destabilization in food production due to climate change. Furthermore, the world's growing (urban) population demands more food. Responding to the worsening food crisis in a sustainable, healthy and democratic way while protecting workers' rights is one of the challenges of all the world for next decades. Among pertinent experiments in local action, the urban agriculture of the Hortas Cariocas Program stands out as a socio-environmental resilience public policy project of the city of Rio de Janeiro, since 2006. Parts of its sustainable urban production of fruit and vegetables are donated to schools and Rio's residents, while another part is sold to generate income for the workers involved. Since the onset of the Covid-19 pandemic, the program has begun donating its full production volume (about 82 tons of food in 2020) to contribute to the right to healthy food for the poorest. The paper presents a case study on this project elaborated from documentary analysis (legislation and scientific/public reports), field observation and the collection and analysis of data provided by the City Hall, with the goal of monitoring the cited public policy in its legal dimension as part of a doctoral thesis research. It 145analyses the program's contributions to the realization of human rights as well as to the achievement of the Sustainable Development Goals, finding that such schemes have the potential to make the development of cities more socially resilient using low-cost actions and tools, despite some flaws in data transparency and possible legal uncertainty. It presents the legal status, social functions and contributions to sustainable development and human rights of urban agriculture, indicating possible avenues for legislative support.

Keywords: Climate change. Public policy. Rio de Janeiro. Sustainable Development Goals. Urban agriculture.

*Monitoring and addressing market power in ultra-processed food markets: an illustrative example of the global carbonated soft drink market*

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**Abstract:**

Excessive market power and high market concentration can perpetuate socio-economic inequality in many ways. In the food manufacturing sector, they can act as important barriers to efforts to protect and promote healthy and environmentally sustainable diets. In many countries, ultra-processed food (UPF) markets are dominated by only a few global corporations. These dominant firms use their considerable market power to influence the availability and affordability of their products, as well as shape consumer behaviour, thereby driving the consumption of UPFs over healthier alternatives. The market power of global UPF manufacturers also acts as an important source of political power, which is often used to prevent or delay public policy and regulation. Moreover, most shareholders of these corporations are based in high-income countries (HICs), meaning that wealth transfers deprive low and middle-income countries (LMICs) of wealth required to address the escalating costs associated with UPF production and consumption.

In this paper, we aimed to examine aspects of the structure, conduct and performance of the global carbonated soft drink industry, which produces and sells UPFs known to be detrimental to population health. Specifically, we examined the extent and nature of market concentration in 98 national carbonated soft drink markets, and explored how market power mediates the distribution of harms and benefits generated by the market. Our goal was to inform discussion on the need for current competition policy frameworks to recognise a broader range of impacts of market power and market concentration.

**Methods:** We defined markets using Euromonitor International's categorisation of product and geographic markets as part of their Passport database. Quantitative analysis was employed to examine: the Herfindahl-Hirschman Index (market concentration); the modified Herfindahl-Hirschman Index (effect of common ownership on market concentration); profitability and market capitalisation (financial performance); allocation to non-productive and potentially harmful practices; transfer of wealth to shareholders and investors (wealth distribution); and investor location (ownership structure). Quantitative data were sourced from Compustat, Passport, Orbis, and Eikon databases.

Results: Our findings revealed that the global carbonated soft drink market is made up of many different, albeit interconnected, oligopolistic market structures at the national level. The lack of competition in many national-level markets is compounded by a high degree of common ownership. A 'double burden of maldistribution' pattern was identified in which the harms of concentrated market power increasingly impact the consumers of LMICs and lower-socio-economic groups in HICs; whereas generated wealth is disproportionately transferred to a small and privileged elite largely based in HICs.

Contribution to literature: The research provides evidence of how traditional approaches to market analysis (e.g. those used by competition authorities as part of competition enforcement) can facilitate (rather than address) growing socio-economic inequality when applied to unhealthy commodity markets, such as UPF markets. We outline some of the ways in which reformed competition policy could contribute to non-communicable disease prevention efforts (especially in LMICs), and, more broadly, could help address socio-economic inequality and enhance human rights.

## *An impossible task? Food law and the challenges of novel meat analogues*

**Hope Johnson**

1 Senior Lecturer, QUT, School of Law

### **Abstract:**

This paper explores the discourses about, and regulatory responses to, novel meat analogues, and considers the implications for sustainable, healthy diets and the future of food systems. Novel meat analogues are also called alternative proteins or cell and plant-based products. This food category includes products designed to mimic the sensory and nutritional qualities of meat and dairy products and often come about through the application of novel processes or technologies. Proponents claim that novel meat analogues are the solution to the resource-intensive nature of meat and dairy production and to the public health issues associated with both the production of meat and the over-consumption of meat, especially red and processed meat. Others argue that novel proteins are ultra-processed, unsafe foods that will only aggravate existing food systems issues from corporate consolidation through to diet-related non-communicable diseases.

This paper presents findings from a socio-legal analysis of Food Standards Australia and New Zealand's (FSANZ) assessment of the recent application by Californian technology company Impossible Foods Inc to sell products that contain a genetically modified protein. Through discourse and legal analysis, this research shows that FSANZ's assessment process is narrow, not only in the legislative framework that underpins it, but also through the decisions made by regulators during deliberative processes. The pre-approval process for foods in Australia is mostly unable to engage with broader and long-term implications raised by novel meat analogues at the intersection of social, ecological and public health. Consequently, the big questions that underlie debates over novel meat analogues are left to the market and consumer choice. For comparison, this paper considers the regulatory debates and responses in the US over cell-based novel meat analogues. It draws on a discourse analysis of the USDA-FDA public hearing on cell-based products in 2018 and recent regulatory developments. This comparison shows that the debates and regulatory responses in the US follow a broadly similar approach to Australia. The effect is that both regulators are, by design, reinforcing dominant food systems rather than enabling a more transformative approach to food systems governance.

*In the land of the “fair go”: global food policy lessons beyond the charity model.*

**Omar Elkharouf**

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**Abstract:**

Food insecurity in Australia is on the rise, yet it remains a serious and under-appreciated policy issue. The demand for and expansion of food banks, community agencies, and school breakfast programmes in Australia has led to the emergency food relief system being referred to as an “industry” in itself. The COVID-19 pandemic, and the associated financial crisis, have only exacerbated the challenge of putting food onto the table. These unprecedented challenges expose the vulnerabilities of addressing the problem of food insecurity solely through a charity-based approach. Through key case studies (Belo Horizonte, Brazil; Toronto, Canada; Detroit, United States of America) of innovative local food governance models across the globe, this paper calls attention to the need to break down the disconnected, siloed, and fragmented policies and responses across public and private spheres in order to design more comprehensive interventions that better address the complex reality of food insecurity in Australia. We see lessons for Australian food governance arising from each of these case studies. While clearly differing in their approaches to governance models, common to these case studies is partnership building, network development, creating space for innovation and incubation, and a multi-pronged approach to food insecurity. That is, not only are diverse actors operating across movements, markets and governments, but they act to bring multiple policy areas together to break from siloed modes of policy development. We conclude with an argument that FoodLab Sydney – a local government-community-university partnership programme that aims to address food insecurity by empowering individual and community participation in the food ecosystem – illustrates a multifaceted approach to food systems change.

*Constitutionalism and the Right to Food: Towards transformative accountability in shaping food and nutrition policy in South Africa.*

**Busiso Moyo**

<sup>1</sup> Doctoral Candidate, University of the Western Cape, South Africa

**Abstract:**

**Objective:** To transform the discourse of the right to food in South Africa into practical policies and programmes that can address the multiple burden of malnutrition.

**Design:** Policy analysis designed to examine how accountability for fulfilling the right to food could be effectively promoted, to the benefit of food and nutrition security in South Africa. This included analysis of policy content and in-depth interviews with key stakeholders involved in South Africa's food and nutrition policy sphere.

**Setting:** South Africa

**Participants:** Stakeholders from government sectors relevant to food systems (Health, Agriculture, Trade and Industry, Finance) (n=21), the private sector (n=4), academia (n=10), NGOs (n=11) and farmers (n=2).

**Results:** The content of the 'right to food' and the multiple contributors to poor food access and malnutrition in South Africa makes the right to food very difficult to operationalise. In particular, nutrition was not regarded as a right in itself but as an element of health or an outcome of lack of access to food. Further, the issue of access to affordable 'healthy' food is necessary to ensure that the right to food does not simply ensure access to calorie-dense but nutrient deficient food, with negative health implications. More effort is needed in South Africa to align the right to food with the pursuit of food security/sovereignty with nutrition security and improved nutritional outcomes. A food system that works for the country must be anchored on resilient livelihoods that are underpinned by comprehensive and sustainable approaches with strong linkages between social development sectors such as agriculture and health.

**Conclusions:** To approach food systems transformation holistically, policy-makers in particular must democratise planning and invite all actors working-in and alongside food systems to be part of the effort. A myriad of factors including state disinterest, poverty and misallocation of resources keeps the full potential of a nourishing food system from being realised. There is also an opportunity for a reframing of the constitutionally codified 'access to sufficient food' as food justice, and to place increased attention on social dimensions of existing food policies, including making nutrition outcomes more visible and



in advocating for a human rights based framework to addressing South Africa's multiple burden of malnutrition.

*The role of corruption in global food systems and the food system transition: a systematic scoping review*

**Anastassia Demeshko**

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**Abstract:**

**Background:** The current state of the food system is failing to provide nutritious foods for all. In aims to create a sustainable and equitable system, and given the food system's complexity, the importance of taking a food systems approach has been emphasized by the international community. This is because it recognizes the totality of the food system's components and drivers, addressing the limitations of past efforts to improve food security and nutrition. Though, while attempts are being made to implement this holistic perspective, specific associated systemic flaws and unintended consequences are still being overlooked. One that has received little attention in the food systems context is corruption.

Corruption is a complex phenomenon that takes on many forms. The spread and nature of corruption differ depending on the wealth of a nation, and its causes are rooted in the long-term development processes of a society and its politico-economic dynamics. Although we know that corruption is omnipresent throughout society, there is a knowledge gap relating to its role in the global food system. Having the potential to threaten food security, safety, equity, and social justice, it is critical we understand corruption in this context. Therefore, our aim was to systematically identify and synthesize academic literature focused on corruption in the food system to understand how corruption impacts the global food system; how it is defined and measured; where corruption exists in the food system; and whether there are any proposed solutions for addressing corruption in this context through policy measures and governance structures.

**Methods:** A systematic scoping review was undertaken. **Identification:** We searched Scopus, PubMed, Web of Science, PsychInfo and Econlit using search terms combining corruption and the food system. **Selection:** We screened titles and abstracts and extracted data according to published guidelines for scoping reviews. All literature focused on corruption in the food system was included. **Synthesis:** We summarized key data from each study, mapping forms of corruption throughout the food system and capturing measures and definitions of corruption in use in the food system literature. We conducted thematic analysis to understand the causes and consequences of food system corruption, as well as proposed solutions.

Preliminary findings: The literature documented numerous forms of corruption taking place throughout the global food system. We identified diverse and multi-level impacts of corruption, represented in research stemming from various disciplines. We also identified theories and evidence around the causes of food system corruption, and possible solutions to this problem.

Implications: The widespread nature of corruption in the food system highlights the need to integrate anti-corruption solutions in our efforts to transition the food system to one that is healthier, fairer, and more sustainable. By contributing to our understanding of how corruption impacts the global food system, as well as how it might be addressed through policy and governance, this review will assist policymakers and the international community in taking a food systems approach and support the transition to a food system that provides nutritious foods for all.

*Institutionalized multistakeholder food governance mechanisms: Potential and limitations for the promotion of sustainable food systems*

**Sérgio Pedro**

<sup>1</sup> Researcher, University of Coimbra

**Abstract:**

The contemporary food system is a central element of the debate on the socio-environmental sustainability of supply chains, a debate that increasingly involves more stakeholders and areas of knowledge in the search for answers to the multiple questions related to the attainment of more sustainable patterns for food systems. The proposed presentation intends to analyze the impact of participative multi-stakeholder and multilevel models of food governance, presenting the regional case of the Community of Portuguese Speaking Countries, in which stakeholders from different societal and expertise sectors participate in equal manners in the process of co-construction of institutional, technical, and financing measures for the functioning of a given food system. The presentation has the main goal of sharing and critically analyzing contribute of institutionalized multistakeholder food governance mechanisms for the promotion of sustainable food systems and as an integrated methodological approach to support the creation of coordinated public policies and institutional conditions to implement a transition to more sustainable food systems and diets.

## *Agroecological food production in Rio de Janeiro's urban area as sustainable development goals tool*

**Felipe Jardim**

1 Ph.D candidate, State University of Rio de Janeiro (Brazil) and Friedrich-Schiller Universität Jena (Germany)

### **Abstract:**

The Brazilian agricultural productivity tends to worsen the present processes related to soil (erosion, waterproofing, compaction, acidity, loss of biodiversity, salinization, and contamination by use of pesticides and fertilizers) – and the replacement of forest cover by more agricultural spaces. Climate risks also involve anomalies caused by increased temperature and reduced precipitation. As well, productive, and socioeconomic impacts on crops (soybean, corn, beans, etc.) is a scenario for Brazil until 2040. About the production (transport) and consume problems the food waste is also an issue (1.3 billion tons of wasted and lost food annually - 1/3 of what is produced on the planet). The consume has other related questions like the rising of Brazilian demand concentrated in urban areas and bad daily diet (ultra-processed food, reduced diversity of products offered; and food contamination ). Given the current, predominant, and problematic food system, research around the world focuses on new possibilities, among which stands out in this paper the urban agriculture of agroecological bases as a mechanism for reaching more sustainable cities and as a strategy for mitigating/adapting to climate change, with a special cutout in the occupation of idle properties as a form of public policy in the city of Rio de Janeiro.

The objective was to legally analyze the Hortas Cariocas Program as an agent for the realization of rights. The research was based on documents (municipal, state, federal legislation; international declarations, scientific/public reports); academic productions; empirical research (field visit to Morro da Formiga's garden in October 2020); and data collection (newspaper, Rio de Janeiro City Hall's website and in the Secretariat of Environment and Conservation – an interview in the October 2020 with Julio Barros, Staff for Agroecology and Organic Production and creator of the Program) on the period 2011-2021, considering that 2011 was the year of the promulgation of the Rio Master Plan, a law which is a milestone for the public policy. The paper has 06 axes: (i) theoretical-legal bases (ii) identification; (iii) motivation; (iv) legal framework; (v) inputs, outputs, and outcomes; (vi) monitoring. It was possible to perceive the Program as model for the realization of rights, as well as the development of cities environmentally and socially more sustainable and less unequal, despite some flaws in data transparency and possible legal uncertainty.

*Culturally appropriate fresh food provision during a state-enforced public housing estate COVID lockdown in Melbourne Australia 2020*

**Russell Shields**

1 CEO, The Community Grocer

**Abstract:**

The COVID-19 pandemic has impacted the stability of global food supply systems. Food insecurity around the world has been estimated to double during this period. In 2020, Melbourne, Victoria was impacted heavily by a COVID-19 second-wave which resulted in a state-enforced 112 consecutive day lockdown and closure of non-essential businesses. The pandemic has brought to the surface existing societal and income inequities, resulting in widespread reliance on social security payments and emergency food relief from government and charitable agencies.

At 4pm Saturday July 4th 2020, the Victorian State Government enforced lockdown orders for residents of two large public housing estates in Melbourne due to COVID-19 outbreaks. With no prior warning, residents were issued with stay at home orders and their housing estates were guarded by a large contingent of police officers. The State Department of Health and Human Services (DHHS) was appointed in charge of all activities across the two estates – including food provision for over 3,000 residents in 1,345 units, the majority of which come from a range of culturally and linguistically diverse backgrounds. This snap decision left no time for residents to source food in readiness for the lockdown, for community consultation or for tailoring a response to meet cultural needs.

The Community Grocer (TCG) is a not-for-profit social enterprise that runs fresh produce markets in four sites across Melbourne and programs to increase social, economic and physical access to fresh food. Due to a known long-standing presence at Melbourne public housing estates, DHHS placed an order with TCG for 1000 fruit and vegetable boxes which were delivered to residents within two days of the lockdown orders. With a focus on dignity, choice and nutrition, the fruit and vegetable boxes were tailored to the residents' cultural requirements with three different boxes on offer, a stir fry box, and roasting, and a mixed box. TCG drew upon existing community knowledge and connections to mobilise a rapid response to this public health nutrition crisis.

Climate change will continue to affect the stability of food supply chains and increase the need for rapid response measures to food relief. This presentation discusses how Governments rely on charitable emergency food relief as the frontline response

mechanism to food insecurity, and how in a time of crisis, social enterprise can rapidly respond with a dignified and nutritious focus tailored to community contexts. We pose the question: what does a governance framework for a rapid response to food relief look like? We share this case study as a practice example of the important roles of social enterprise, community inclusion and the human right to food.

*Who has a 'steak' in it? Understanding narratives and actor power in the food system: a case study in red and processed meat*

**Katherine Sievert**

1 PhD Candidate, Deakin University

**Abstract:**

Background: Reports and evidence from numerous international organizations and expert groups call for a significant reduction in global average meat production and consumption, focused especially in the advanced capitalist economies of Western Europe, North America and Australasia. Excessive red and processed meat (RPM) consumption is linked to poor health outcomes, including bowel cancer. Intensive production of RPM also contributes substantially to environmental degradation, greenhouse gas emissions (methane in particular), water and land overuse, and has further implications for human and animal exploitation. However, policy attention and priority for the issue appears to be low, as well as quite contentious in public discourse. The power of ideas and narratives surrounding RPM, as well as the role of actors with an interest in RPM and/or novel proteins, may be contributing to the inertia and confusion surrounding appropriate policy responses. This project investigates the global political challenge of meat reduction, by reporting on the beliefs and worldviews of major stakeholders, including their perceptions about the opportunities and barriers to policy reform and action on this issue.

Methods: This study followed a framing analysis design, using key informant interviews and document analysis to address the aims. Individuals with knowledge and expertise in, or an interest in, red and processed meat with relation to; global public health and nutrition policy and/or environmental sustainability OR commercial interests were considered eligible participants for the study.

Results: 30 participants were interviewed, spanning academia, civil society, intergovernmental organisations, and commercial organisations. Meat reduction as a concept was perceived to be polarising. Many participants cited a lack of nuance in public discourse, with narratives on harms and benefits of RPM being over-simplified and lacking in relevant contextual evidence. Many interest groups, particularly those from industry, felt that all forms of farming and processing were unfairly painted with the same brush and that the discourse was overlooking opportunities for positive environmental and health contributions from the meat sector. However, these participants were less likely to concede that levels of meat production and consumption were currently too high in some populations. Several academic participants noted that intensively produced meat and high consumption levels reflected corporatized and globalised supply chains, and that power relations were the most critical factor to address in efforts to attenuate the harms of RPM. This was further echoed by some civil society participants who observed the



prominence of technologically driven responses (i.e. novel proteins) as a means of capturing the health and sustainability narratives via a market driven solution.

Conclusion: Nuanced and context-dependent discourses are severely lacking regarding the impacts of RPM in relation to healthy and sustainable food systems. This is further complicated by the role of powerful actors such as the meat and alternative protein industries, and their structural influence in maintaining the market-driven status quo – whether it be through RPM or novel proteins. Addressing power asymmetry by utilising a more balanced and evidence driven discourse, as well as supporting movements that diffuse power in the food system, could ensure more effective policy responses in addressing the health and environmental harms associated with RPM.

*Community Based Fisheries Management and Rural Development strengthen the practice of indigenous food systems governance in Solomon Islands*

**Senoveva Maui**

<sup>1</sup> PhD Candidate, Department of Law, University of Wollongong

**Abstract:**

Community Based Fisheries Management and Rural Development strengthen the practice of indigenous food systems governance in Solomon Islands

Resource management efforts are practiced globally, with particular attention to govern the ocean space. The necessary policies, strategies and legal frameworks emerged as the policy response for addressing ocean governance. Similar to many countries, 80% of Solomon Islands population are rural based and they rely on their natural surrounding for their daily consumption and is a source of income.

At the national level, Community based fisheries management (CBFM) is recognised as the approach for use in marine conservation and small-scale fisheries management, government agencies partner with non-government organizations who are the frontiers for community-based resource management efforts at the community level. The support for such initiatives are possible through donor funded projects and objectives to name a few are; to address food security, the impacts of climate-related and not climate related issues. CBFM builds on existing indigenous governance systems; though not seen as formal, the management measure has been around for generations. Most importantly, communities involved participate fully in its implementation.

This Research draws on policy analysis approaches to understand whether integration of CBFM into broader development initiatives could lead to more sustainable and effective management outcomes, with a focus on gender in decision making, governance structures and implementation. The overall aim is to inform policy and practice regarding important economic, social and environment drivers for policy implementation, aid in the management of indigenous food systems and development issues for Solomon Islands.

Data were collected via 50 in-depth interviews conducted at national, provincial and community level in Solomon Islands. The majority at the national level responded that when developing policies/strategies the overall intent is to develop the rural areas; however, this is not happening on the ground. The main constraints are i) during government documents review, it was evident that there was no mention of fisheries management with activities that are aimed to developing people at the rural area and ii) the relevant sector (Fisheries, Rural Development and Environment) lack the relevant

skills and knowledge to translate these policies into activities that would provide impact. And iii) FM and RD policies are not business-orientated, and there is no obvious link with those in the private sector.

Though these challenges, there are opportunities and a standout is the development of the National Ocean Policy. This is an integrated approach that combines all stakeholders in one policy space to discuss the management of our oceans. It is an opportunity where sector agencies such as Fisheries, Rural Development and Environment can connect more and integrate their respective work plans.

At the provincial level, an opportunity is to connect through existing mechanisms such as the Provincial Capacity Development Fund (PCDF). Communities have existing governance structures that need strengthening and this can accommodate this integrated approach through their indigenous governance setups for resource management and in turn support the indigenous food systems.

*Concerns and priorities of Aboriginal and Torres Strait Islander peoples regarding food and nutrition: a systematic review of qualitative evidence*

**Rebecca Christidis**

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**Abstract:**

Aboriginal and Torres Strait Islander Australians experience persistent health and social inequities. Chronic conditions, many of which are diet-related, are leading contributors to burden of disease and health inequity in Australia. Indigenous peoples have the right to be involved in all policy decisions affecting them. This review aimed to synthesise Aboriginal and Torres Strait Islander peoples' concerns and priorities related to food and nutrition, in order to inform policies and governance to improve health equity.

Methods: Six electronic databases were systematically searched to identify qualitative studies published from January 2008, that included data from Aboriginal and/or Torres Strait Islander peoples about their concerns and priorities related to food and nutrition. Data were extracted from included studies using a pre-determined template and study quality was assessed using the Aboriginal and Torres Strait Islander Quality Appraisal Tool. Qualitative findings were synthesised using inductive thematic analysis and categorised based on an ecological model of health.

Results: Twenty-one studies were included. Key factors influencing food and nutrition were identified across all levels of the ecological framework. These included interpersonal and institutional racism, junk food availability and marketing, food accessibility and affordability, housing conditions, food knowledge and cooking skills. Connection to family, culture and country was also found to be influential in shaping food environments. Specifically, disconnect from traditional Indigenous food practices and systems was described as a barrier to a nutrient dense diet.

Conclusions: Documenting Aboriginal and Torres Strait Islander peoples' lived experiences of the colonised food system is one step necessary for informing policy to tackle food and nutrition inequities. Based on existing qualitative research, priorities for Indigenous food system governance includes building a supportive food environment, focusing on self-determination and ensuring access to healthy, affordable food and safe housing. There is also a need for policymakers to focus on eliminating systemic racism in order to improve health equity.

## *The Hunger Paradox: The Challenges of Food Security in India*

**Najeed Naved Siddiqui**

1 Research Scholar, CHRIST (Deemed to be University) Delhi-NCR

### **Abstract:**

The Hunger Paradox: The Challenges of Food Security in India

The global concerns for hunger have crept their way back in to the mainstream discourse for food security. The recent pandemic has forced countries to question their well-established institutions and rethink their agendas for ensuring the global right to food. The Climate change and the recent pandemic has merely highlighted what nations throughout the world were already experiencing. The point to be considered here is that, once again, food crisis has highlighted the vulnerability of the world's already marginalised minorities. Issues over global hunger are mounting gradually, which could be attributed to population increase, rapid urbanisation, or technological advancements. The international society is tasked with eradicating hunger and food insecurity and achieving the Sustainable Development Goal (SDG-2) of a world free of hunger, food insecurity, and malnutrition.

India, since independence has struggled in maintaining the equitable standards of sufficient food. The present-day laws and policies are the result of an extensive socio-legal discourse, moreover an action-reaction policy has been adopted while addressing food conflicts and security. Local groups, civil societies and non-government organizations have been at the forefront of food security struggle in India. Researches and the recent trends of the Global Health Index suggest a remodeling of India's approach towards regulating and engaging the food security struggle.

Keywords: Hunger, Food Security, Health, Population, SDGs, Laws

*Indigenous superfood/traditional knowledge and geographic indications to ensure benefits remain within indigenous governance*

## **Christine Storry**

1 Alumni/Student, ANU/UoM

### **Abstract:**

“One of Kakadu’s few deciduous species, these trees lose their leaves during the dry season. The branches stay bare until they flower in Kurrung (August - October), while the tasty fruits appear towards the end of the tropical summer (March - May).” [parksaustralia.gov.au](http://parksaustralia.gov.au) (6/8/21)

The Kakadu Plum is an indigenous superfood endemic to northern Australia, the Kimberley, Arnhem Land and Kakadu in the Northern Territory. “Kakadu plums are an important food source for the Bininj/Mungguy. The ripe plums are usually eaten raw, although they can also be made into jam.”

“Indigenous Knowledges or TK includes a range of knowledge held and developed by Aboriginal and Torres Strait Islander peoples. It includes Traditional Knowledge (such as methods, skills and know-how) and Traditional Cultural Expressions (such as language, art, craft and dance).”

In 2018-19 the West Australian government initiated the Kakadu Plum Project, investing \$448,000 in the Indigenous Land and Sea Council, to establish a stable supply chain for the plum. The Kakadu Plum has a high concentration of vitamin C - the world’s highest - and is “full of antioxidants, folic acid and iron.” Commercially the plum is used for “gourmet jams, sauces, juices, ice cream, cosmetics, flavours and pharmaceuticals.”

The plum’s true commercial value to a global market is hard to estimate. The food governance question is: can a combination of protections under Traditional Knowledge (TKs) and Geographical Indications (GIs), ensure these benefits remain within indigenous governance?

*An Aboriginal Knowledges' perspective on the nutritional, health and wellbeing benefits of seafood*

**Beau Cubillo**

1 PhD Candidate, Monash University, Department of Nutrition, Dietetics and Food

**Abstract:**

Aboriginal Peoples in Australia have maintained important connection to their ancestral sea country including the provisions of seafood for nutritional, health and wellbeing. In the Northern Territory of Australia, Aboriginal Peoples have implemented and operate fishing enterprises that provide community members access to locally sourced customary and commercially important seafood species. Traditional owners who operate these enterprises are aiming to improve the livelihoods of community members and positively impact nutrition, health and wellbeing status, by providing access to a nutritious, diverse and culturally significant food supply. While the biochemical health benefits of seafood to human development and function are well documented in the scientific literature globally, this study will contribute empirical evidence on the link between Aboriginal fisheries and health and wellbeing from an interconnected perspective, that incorporates Aboriginal models of health and wellbeing.

This study is being undertaken in Maningrida Aboriginal community In the Northern Territory by an Aboriginal PhD student implementing Aboriginal research methodologies to articulate and present academic literature that represent Aboriginal voices and promote the continuation of Aboriginal governed fishing enterprises. This presentation will discuss the study and its components as well as present some preliminary results from a case study to provide a local perspective of Aboriginal health and wellbeing associated with commercially and customary caught seafood.

As requested by the Traditional Owner's, outputs of the research include the creation of educational resources to be used as tools to pass on inter-generational knowledge on the importance of seafood for nutrition, health and wellbeing and resources to promote Aboriginal fishing enterprises. The findings of the study will present an appropriate Aboriginal Knowledges' perspective on seafood and the connection to health and wellbeing. The research will also provide evidence that can inform policy makers, government, non-government organisations and Aboriginal communities on how to strengthen future policy to support Indigenous fisheries.

**Liesel Spencer**

1 Associate Professor, School of Law, Western Sydney University

**Abstract:**

Food insecurity is a significant public health problem in Australia and the United States. In both countries, people who depend upon welfare benefits are at increased risk of food insecurity, socioeconomic disadvantage, and adverse health outcomes – including malnutrition, obesity, and associated chronic disease. In Australia, welfare benefits are usually provided as cash transfers. In recent years, however, Australia has implemented trials of ‘income management’, which quarantines a proportion of welfare recipients’ benefits onto electronic benefits transfer cards and places restrictions on where people can shop and what they can buy. Prior to implementing these schemes, the Australian government failed to investigate whether alternatives to cash transfers have improved food security in other countries – despite citing other countries, including the US, as precedent. There was also no pre- or post-implementation normative evaluation of alternatives to cash transfers.

I argue that income management laws in Australia, and food welfare laws in the US, are not solely welfare laws but are also a form of de facto public health regulation of the risk of food insecurity, and should be normatively evaluated as such. I apply Lawrence Gostin and Lindsay Wiley’s systematic framework for the evaluation of public health regulation to US food welfare laws to assess whether those laws are a justifiable form of public health regulation. I find that the results are nuanced in relation to the various US food assistance programs, but that, regardless, it is important to consider the legitimacy and impact of onerous public health regulation – especially before imposing it on disadvantaged groups of people. I propose that Gostin and Wiley’s evaluation framework be extended to include an additional criterion of whether regulation is ‘place-sensitive’, or suitably adapted to the place or places where it is implemented.