

Food relief providers as care infrastructures: Sydney during the pandemic

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Abstract

Australia has a hidden but growing problem with household food insecurity, revealing the failure of conventional food infrastructures to support human flourishing. Disruptions to employment and livelihoods due to pandemic lockdowns have exacerbated household food insecurity, evincing the uneven geography of food access in countries globally, including Australia. Increasing demand for food relief had been observed prior to the COVID-19 pandemic and has been met by food relief providers, which we consider as infrastructures of care addressing growing levels of hunger. This paper reveals COVID-19's many impacts on the food relief sector across Metropolitan Sydney, New South Wales. It analyses both a questionnaire of food relief providers in 2022 and media articles, social media posts, reports, and websites. It provides much-needed insights into the impacts of pandemic lockdowns on the demand for food, interruptions to food provisioning, changes to food supply, and alterations made to suppliers' ways of operating. Those insights show how infrastructures of care are place-based, responsive, dynamic, and constrained by caring capacities. Such insights are increasingly important for understanding infrastructural failures, documenting the real extent of household food insecurity, and challenging dominant discourses of Australia as a food-secure nation.

KEYWORDS

care infrastructures, cities, COVID-19 pandemic, food relief, household food insecurity, hunger, New South Wales, Sydney

1 | INTRODUCTION

“Don't Panic. Australia has truly excellent food security” (Hatfield-Dodds & Gooday, 2020). This *Conversation* piece had been published by representatives from the Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) at the peak of super-market food shortages arising from panic buying at the onset of the COVID-19 pandemic (hereafter, the pandemic). The authors explained that “Australia is one of the most food-secure countries in the world ... “Australians are wealthy.” What we are now

experiencing is a “... disruption to stocks of some basic food items [that are] ... temporary and not an indication of food shortages ... [but] a result of logistics.” They noted that we export 71% of agricultural production. They argued “the concerns are understandable, but they are misplaced.”

Dominant narratives of food security such as those illustrated above are founded on statistical measures of agricultural production. Such discourses legitimate the claim that Australia is a food-secure nation (Smith, 2019). The Food and Agriculture Organization (FAO) definition of food security is largely

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absent in such definitions of food security. The FAO defines food security as the ability for “all people at all times to have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 2001, cited in Godrich et al., 2022, p. 1). However, as Smith (2019, p. 137) has noted, “the language of ‘hunger’ is mostly absent from national food policy debates, with food security discourse centred on producing food for export to a growing Asian middle-class.” In Australia, dominant government discourses continue to cast the nation as “food secure” based on a mainstream measurement of the availability of food rather than on reliable access to food (Smith, 2019).

According to Hatfield-Dodds and Gooday (2020), “Australia has the world’s equal-lowest level of undernourishment,” yet without national and state-level data collection (Bowden, 2020) how can such claims about the prevalence of hunger be made? Chappell (2018, p. 12) has noted that “there is more than enough food in the world to feed everyone full, healthy diets,” yet there are rising numbers of people experiencing food insecurity. As Drèze and Sen (1991) have explained, food insecurity is largely an issue of inequality and inaccessibility to the financial means to purchase food, or the capacity to grow food rather than an issue of food availability. Food insecurity exists at multiple scales and Australia’s status as a food-secure nation is at odds with lived experiences among the members of food-insecure households or people in remote and rural regions in Australia, where access to affordable, healthy fresh fruit and vegetables is unreliable (Bowden, 2020).

Household food insecurity exists when people’s ability to obtain nutritious and safe foods to meet dietary needs is either limited or uncertain (Dombroski et al., 2020). Since 2016, a burgeoning body of research has documented increases in household food insecurity (McKay et al., 2019), which has intensified since the onset of the pandemic (Louie et al., 2022). Gallegos et al. (2023, p. 10) have conducted a Delphi consensus study in which they consulted with food security experts in high-income countries further refining the FAO definition and explaining that:

Food security exists when all people, at all times, have regular and reliable physical, social and economic access to sufficient safe, nutritious and culturally relevant food that meets their dietary needs and food preferences. This [food security] is supported by an environment of ecological sustainability, adequate sanitation, health services and care for an active and healthy life. This [food security] includes the assured ability to acquire acceptable,

Key insights

Household food insecurity is predominantly addressed by food relief providers as infrastructures of care. In Australia, food relief providers across Metropolitan Sydney, New South Wales, have noted increased demand, shocks to food supply, and changes to the characteristics of those seeking food relief during the COVID-19 pandemic and sought to respond accordingly. Those actions suggest that infrastructures of care are place-based and can be responsive, dynamic, and shaped by compassion.

affordable foods in socially acceptable ways without resorting to charitable food supplies scavenging, stealing, and other coping strategies.

Thus, for Australia to be food secure, all people need to have access to sufficient food and need not be reliant upon food charity, a point that challenges the dependence on charitable food relief rather than addressing a root cause of hunger—poverty (Gallegos et al., 2023).

Food relief, also known as emergency food relief, has become the dominant response to food insecurity in Australia. Food relief providers include food banks or pantries, soup kitchens, school breakfast programs, and other organisations offering hampers or vouchers. They seek to address the failures of dominant modes of food provisioning from supermarkets and food retailers in meeting the need for food. The normalised role food relief providers play has motivated Lindberg et al. (2022) and Pollard et al. (2019) to ask whether the sector can still be considered an “emergency” food relief sector or is it now more realistically considered part of the landscape of food provisioning in post-welfare Australia? Either way, many people accessing food relief remain food insecure for significant periods (Bazerghi et al., 2016; McKay et al., 2019), leading some academics to claim food relief acts as a “band aid” solution that fails to address the complex causes of chronic hunger (Isola & Laiho, 2020). Food relief organisations are reliant upon the surplus food produced in conventional food systems and integrated into the design of systems to minimise the impacts of food waste arising from supermarket standards and overproduction (Turner, 2019). Yet, without food relief, people would remain hungry (McKay et al., 2019). Food insecurity has physical effects including nutritional deficiencies, psychological stress, and poor mental health outcomes (McKay et al., 2019).

The existence of household food insecurity is evidence of the brokenness of conventional food infrastructure meant to facilitate access to food (Deener, 2017; Williams & Tait, 2022). Food relief providers have become what Power et al. (2022, p. 2) have referred to as “shadow care infrastructures” that fill the gaps left by inadequate welfare regimes. Care infrastructures are socio-technical systems (Alam & Houston, 2020) such as housing or food, which facilitate care for self and others and enable survival (Power & Mee, 2020; Williams & Tait, 2022). In contrast, shadow care infrastructures operate outside dominant state-based welfare regimes to “sustain and organise the care practices of people living in poverty in post-welfare cities” (Power et al., 2022, p. 2). Food relief can be considered a shadow care infrastructure, often obscured and hidden by dominant modes of food provisioning, yet central to people’s capacities to meet their needs for food in contexts of poverty.

In this paper, we offer insights into the experiences of food relief providers as infrastructures of care during the pandemic in Australia’s largest city, Sydney. These insights provide a way to grasp the extent of household food insecurity. In Section 2, we engage with the literature on care, caring capacities, and care infrastructures drawing on Power et al. (2022) to position food relief initiatives as shadow care infrastructures. Then in Section 3, we discuss food insecurity and emergency food relief provisioning. We outline the methods in Section 4, those involving mapping using QGIS (an open source Geographical Information System software), conducting a qualitative questionnaire with food relief providers, and doing supplementary qualitative analysis of 128 media articles, social media posts, reports, and websites. In Section 5, we provide insights into the impacts of the pandemic on the demand for food relief across Metropolitan Sydney,¹ interruptions to food provisioning, changes to supply, and alterations made to ways of operating. We develop an understanding of infrastructures of care as place-based, responsive, dynamic, and constrained by caring capacities. Such insights are increasingly important as noted by Power et al. (2022, p.3), as we seek to understand the role of food relief “in post- COVID-19, post-welfare cities.”

Ultimately, the paper reveals the hidden geographies, spatialities, and temporalities of food insecurity and the ways in which caring capacities were restricted by the pandemic. We make visible the complexities of relying upon food relief as a response to food insecurity as the organisations are constrained by caring capacities. By challenging the dominant discourses of Australia as food secure we emphasise there is work to be done to ensure there is truly “no need to panic” (Hatfield-Dodds & Gooday, 2020).

2 | CARING CAPACITIES AND INFRASTRUCTURES

Food provisioning can be considered a practice of care, with the connection between care and food well documented (Abbots et al., 2015; Kneafsey et al., 2008; Sharp, 2020; Williams, 2022; Williams & Tait, 2022). As a practice, politics, and ethics care have been of key interest to geographers in urban and food geographies (see, for example, Kneafsey et al., 2008; Lawson, 2007; McEwan & Goodman, 2010; Power & Williams, 2019). Care is understood to be a:

species activity that includes everything that we do to maintain, continue, and repair our “world” so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment.
(Fisher & Tronto, 1990, p. 40)

Care is an everyday, context-dependent, and relational practice that is responsive and attentive to diverse needs (Lawson, 2007; Williams, 2017). Care can be practiced by individuals, groups, and organisations through the individual and collective ethos and affective orientations of volunteers, staff, and members (Conradson, 2011; Williams, 2017). There is, however, no guarantee that a particular space, site, or practice will be experienced as caring because care is a dynamic practice shaped by relations between the competencies of care givers and receivers, temporalities, and materialities (Power & Williams, 2019; Tronto, 1993; Williams, 2017).

Caring practices sustain life, yet people’s capacities to care are constrained by many factors including punitive welfare regimes, substandard housing, and broken infrastructures (Power, 2019; Power & Bergen, 2018; Power & Mee, 2020; Power & Williams, 2019). Power (2019, p. 766) has explained that care is practiced in unequal worlds. Developing the concept of caring-with, Power argues that care is always practiced in socio-material, temporal and spatial relations; enabled or constrained by caring capacities. Caring capacities, or “the factors and relations that make care possible” (p. 763), are connected to food insecurity, limiting individual, and organisational capacities to care.

Recently, geographers have become increasingly interested in infrastructures of care, paying attention to the “dynamic patterns that are the foundation of social organization” (Power & Mee, 2020, p. 485) that shape care. Infrastructures of care relationally, spatially, and temporally shape caring capacities as performative “sociotechnical systems” (Power & Mee, 2020, p. 485). Such systems configure how care might be enacted through practices, materialities, governance, and markets (Power & Mee, 2020).

Housing (Power & Mee, 2020), food systems (Williams & Tait, 2022), roadside fruit and vegetable stalls, environmental coalitions, and migrant networks (Alam & Houston, 2020) have been studied as infrastructures of care. Infrastructures of care are relational, and are shaped by:

material and immaterial elements [that] ... variously intervene in or are enrolled into practices of care and become foundations that give shape to how care is practiced. Tracing care infrastructures requires recognising how various elements come together, even if uncomfortably, to organise the possibilities of care.

(Power et al., 2022, p.10)

As noted in the introduction, Power et al. (2022) have developed the concept of shadow care infrastructures, recognising how dominant infrastructures of care may not support the survival of people on the margins such as those on income support payments. Shadow care infrastructures include food relief and social service organisations that allow people to “get by” (Power et al., 2022, p.12). On that basis, in the next section, we highlight the role of food relief organisations as shadow infrastructures of care, attending to the literature on household food insecurity and food relief during the pandemic.

3 | INFRASTRUCTURAL FAILURE: HOUSEHOLD FOOD INSECURITY AND FOOD RELIEF DURING THE PANDEMIC

Food infrastructures comprise multiple actors including manufacturers, growers, wholesalers, retailers, and corporations whose abilities to ensure all people have access to affordable, healthy, culturally appropriate food are shaped by a complex interplay of housing systems, planning, welfare policies, and geopolitical contexts (Williams & Tait, 2022). The pandemic exacerbated existing inequalities that led to rising numbers of people experiencing hunger. Research has shown the effects of the pandemic on food insecurity globally (see, for example, Barker & Russell, 2020; Clapp & Moseley, 2020; Healy et al., 2020); in Victoria (McKay et al., 2021); and among international students (Mihirshahi et al., 2022), people living in rural and remote areas (Godrich et al., 2022), women (Kleve et al., 2021), and food insecure households more broadly (Kent et al., 2020; Kent et al., 2022; Louie et al., 2022). In this section, we provide an overview of the literature on household food insecurity and emergency food relief, attending to the progression of food insecurity as evidence of infrastructural failure. We also examine literature documenting the temporalities of food insecurity,

the impacts of the pandemic on food access and supply, and the spaces of food relief that addressed the need for food prior to and during the pandemic. Such work emphasises the hidden geographies of household food insecurity across Australia contributing to a growing body of work providing insight into the impacts on food insecurity of the pandemic globally (Barker & Russell, 2020).

3.1 | Struggling to “get by”: household food insecurity in Australia

People have varied capacities to access safe, affordable, and nutritious food. O’Kane (2020) has suggested food security is shaped by four pillars: (a) food availability; (b) food access; (c) food utilisation; and (d) the stability of the food supply. Food security is fragile, with food availability disrupted by supply chain shocks or, in the case of some remote communities, by lack of access to sufficient produce due to food supply instability. Food access can be diminished due to poverty or insufficient income, which might also affect food use, or people’s ability to cook or prepare food. These pillars can be temporarily or permanently disrupted (Louie et al., 2022, p. 29).

Household food insecurity is characterised by “episodic and/or chronic experiences of stress, anxiety, concern, social isolation and compromise,” which have cascading impacts on physical and mental health (Kleve et al., 2021, p. 1). According to O’Kane (2020), the prevalence of household food insecurity in Australia varies from 4% to 14%. However, such percentages are incomplete, with only one question in an Australian population-level survey used to determine the national prevalence of household food insecurity, leading researchers to stress the point that the prevalence of food insecurity is likely greater (Louie et al., 2022, p. 29). The most regular data collection undertaken in Australia is completed by Food Bank,² Australia’s largest distributor of food relief. In 2022, 21% of households across Australia and 23% of households in New South Wales (NSW) could be classified as experiencing severe food insecurity, while 12% were moderately food insecure across both the country and the state (Food Bank Australia, 2022).

Food insecurity is connected to the uneven geographies of socio-spatial disadvantage and inequality. Household food insecurity is experienced unevenly and historically has “been associated with food prices and socioeconomic or cultural disadvantage” (Louie et al., 2022, p. 29), because some households are more able to care for themselves and others due to their caring capacities (Power, 2019). As Warin and Zivkovic (2019, p. 36) have noted, “Australian women living in low socioeconomic households are less likely to be able to afford healthy foods due to food

insecurity.” Australia’s welfare regime does not provide adequate payments to support people, leaving them “on incomes below the poverty line” (Lindberg et al., 2022, p. 3). Those in remote and rural areas, Aboriginal and Torres Strait Islander populations, low-income earners, linguistically diverse groups, refugees, single parents, younger adults, students, the elderly, the homeless, and those with a disability are more likely to experience food insecurity (Bowden, 2020; Godrich et al., 2022; Jones et al., 2022; Kent et al., 2020; Louie et al., 2022).

How people respond to food insecurity is geographically varied and often hidden due to the stigma and shame attached. Coping tactics include “purchasing food in small quantities, relying on a limited number of staple foods to satisfy dietary needs, or seeking out emergency or community food for occasional or regular food supply” (McKay et al., 2021, p. 1). There is growing evidence that unhealthy foods are priced more cheaply than healthy foods, leading people to purchase less nutritious food, which has significant impacts on long-term health and well-being outcomes (Barosh et al., 2014; Warin & Zivkovic, 2019). Food prices are also geographically dependent, with a study of the cost of a food basket by Crawford et al. (2017) finding there is less quality and variety of fruit and vegetables available in areas with lower socio-economic advantage (Crawford et al., 2017). The pandemic exacerbated household food insecurity for particular groups, as discussed in the following section.

3.2 | Temporalities of household food insecurity

As the opening discussion of panic buying and disruptions to supply chains attests, the issue of household food insecurity has been given increasing attention since the pandemic. Estimates of household food insecurity documented in Food Bank Hunger Reports (2019, 2020, 2022) reveal changes to the numbers of Australian households experiencing either moderate or severe food insecurity with 21% in 2019, 28% in 2021, and 33% in 2022. Household food insecurity in Australia was already at unprecedented levels before the onset of the pandemic (McKay et al., 2021). The pandemic did, however, exacerbate food insecurity for households already experiencing significant disadvantage and led to the emergence of newly food insecure groups such as international students and casual workers (Food Bank Australia, 2020, 2021, 2022; Mhrshahi et al., 2022). In this section, we provide a brief overview of key moments of infrastructural disruption affecting household food security and pay attention to disrupted food supply and access as infrastructural failure, increasing rates of unemployment, and temporary changes made to welfare payments that have led

people to rely upon shadow care infrastructures to cope.

Disruptions to the stability, availability, and accessibility of food had significant effects on Australian households. From mid-to-end of March 2020, Australia first closed its international and then state borders, which had reverberating impacts on food distribution (Jones et al., 2022, p. 7). Clapp and Moseley (2020) have identified three areas of disruptions in 2020: (1) lockdowns and worker illnesses; (2) the global recession triggered by the pandemic; and (3) compounding factors that have led to uneven and increased food prices affecting households’ abilities to reliably purchase food. In addition, food hoarding led to a decrease in available food quantity, type, and quality and such impacts were unevenly distributed (Godrich et al., 2022, p. 7). Public health responses to the pandemic resulted in “sudden and significant loss of employment, underemployment, and income reductions for a considerable proportion of the population” (Kent et al., 2020, p. 2), affecting householders’ capacities to purchase food. In 2021, unemployment in Australia reached almost 14% with “the equivalent of 1.8 million people working reduced hours or becoming unemployed” (Louie et al., 2022, p. 29). Kent et al. (2020) have also noted that 49% of Australians turned to short-term financial resources to manage household costs, thereby diminishing money available for food.

In general terms, people living on federal government support payments experience food insecurity, revealing the punitive nature of current welfare regimes—despite the important role welfare plays in enabling people to survive (Power et al., 2022). For example, Louie et al. (2022, p. 43) have found that those receiving JobSeeker³ were 3.5 times more likely to be food insecure than people with stable employment. In 2020, the federal government reclassified NewStart Allowance⁴ as “JobSeeker” and provided people on JobSeeker, Youth Allowance Parenting, Special Benefit, AusStudy, and ABSTUDY payments,⁵ an additional AU\$550 fortnightly supplement from 27 April 2020 to 23 September 2020 (Australian Council of Social Services Organisations, 2020). These temporary changes fostered an increased ability for food-insecure households to buy fruit and vegetables (Australian Council of Social Services Organisations, 2020). Before its introduction, the Australian Council of Social Services Organisations (2020, p. 1) conducted a survey with NewStart Allowance recipients that found there were high rates of financial and personal distress, with 66% of people having “less than \$14 to live on, after paying their rent or mortgage” and “75% of people [saying] ... they skipped meals because of lack of funds.” Nonetheless, the payment increases were temporary, with people returning to living below the poverty line once they ceased (Lindberg et al., 2022).

In 2022, Australia reported spikes in household food insecurity due to rising inflation and increased food prices (Botha & Payne, 2022). In April, a survey conducted by Botha and Payne (2022) found:

Close to 45 percent of young adults aged 18 to 24 report some level of food insecurity ... Of this [cohort], more than half stated that they have been eating less and have also skipped at least one meal over the past three months.

Almost 25% of adults in NSW were reported as being food insecure, with most being young adults and women aged between 18 and 44 (Botha & Payne, 2022). Emergency food relief has become the dominant solution to household food insecurity, despite studies reporting people are not asking for help because of the shame and stigma attached to doing so or because they have difficulty travelling to access food relief (Botha & Payne, 2022; Food Bank Australia, 2022).

3.3 | Spaces of food relief

Food relief is an infrastructure of care responding to infrastructural failures in the conventional food system which fails to provide healthy food to all people (Williams & Tait, 2022). Food relief is increasingly positioned as the solution to household food insecurity (Lindberg et al., 2022; Pollard et al., 2019) and attending food relief initiatives has become a key survival practice (Power et al., 2022). These initiatives are often precariously funded and dependent upon government grants, donations, philanthropic relationships, and corporate sponsorship (Barker & Russell, 2020; Williams & Tait, 2022). The type, suitability, diversity, and appropriateness of foods that are supplied to emergency relief providers are often unreliable and may not meet recipients' nutritional needs (Barker & Russell, 2020; Bazerghi et al., 2016). Food relief providers rarely have a choice about the foods donated to them because they rely on redistributed surplus food from organisations such as Food Bank,⁶ Secondbite,⁷ and OzHarvest⁸ (Turner, 2019).

The pandemic resulted in record numbers of Australians coming to rely on emergency food relief (Jones et al., 2022). Food Bank (2020) has reported for that year a “sharp increase in demand for emergency food aid, up from 15% of Australians in 2019 to 31%.” Other Australian studies have also identified that many people accessing food relief during the pandemic were food insecure for the first time, with casual workers and international students particularly vulnerable (Jones et al., 2022; Mhrshahi et al., 2022). In addition, women and children are increasingly seeking food relief, with a

study by Kleve et al. (2021) identifying 20% of women experienced greater food insecurity than before the pandemic while McKay et al. (2021, p. 9) found a 41% increase in food requests by households with children being taught remotely at home.

Pandemic public health measures in Australia also resulted in alterations to how food relief was provided—with organisations having to close, shift to take away food options, or deliver hampers to meet public health requirements to minimise transmission of the virus (Louie et al., 2022, p. 41). Food relief providers in Victoria experienced volunteer shortages, increased demand, and a lack of supplies (McKay et al., 2021). Many food charities managed to expand rapidly to respond to the growing demand for food relief, illustrated by the example of Addison Road Food Pantry, discussed by Williams (2022), which showed how the pantry was able to increase their operations and quickly develop an emergency food relief hub to support growing numbers of individuals and food charity organisations. Other studies have shown the emergence of new food relief initiatives, including informally between some businesses and households (Jones et al., 2022). With the number of people experiencing food insecurity increasing and documented exacerbation of existing vulnerabilities to food insecurity evident in the literature, the next section provides details of the research conducted for this paper into the experiences of food relief providers across Metropolitan Sydney to complement the Australian-based research covered above.

4 | METHODS

This paper developed out of a research project focused on documenting community food provisioning initiatives across Metropolitan Sydney, including community-run food relief initiatives, food waste reduction initiatives, initiatives with a focus on ethical consumption such as food cooperatives and farmer direct food box schemes, and community gardens (Williams, 2022; Williams & Tait, 2022). The project drew on an existing database of food relief initiatives created using internet searches in 2019. The database was updated in March 2022, again using internet searches involving Ask Izzy—an interactive map of services, council websites, NSW health district websites, large service provider websites—specifically Oz Harvest, Food Bank, Mission Australia, and a list of food relief providers available via the NSW Department of Communities and Justice. We recorded the name, location, and latitude and longitude coordinates of the organisations in an Excel spreadsheet for analysis. Miriam used the coordinates to create a map of food relief organisation locations using QGIS.

Following ethics clearances, a qualitative questionnaire composed using Qualtrics was sent out via email

to coordinators of 103 food relief providers, was posted on social media, and was circulated to those on the Australian Right to Food Coalition⁹ mailing list. The questionnaire asked organisation coordinators to answer closed and open-ended questions on their goals, resourcing, size of operations, type of food relief provided, eligibility requirements, suppliers, demand for food relief, impacts of the pandemic on demand and supply of food, numbers of volunteers and staff, and challenges, and invited them to reflect on the impacts of the pandemic. A total of 13 questionnaire responses were received, which included two organisations that supported over 500 people per week and one of the largest food relief providers across Metropolitan Sydney. Questionnaire data were analysed using Qualtrics and open-ended responses were coded by theme.

Questionnaire data were supplemented with an analysis of media articles sourced via Factiva. A search of media articles published between 1 March 2020 and 30 April 2022 was conducted for the term “food insecurity” and restricted to outlets available in NSW. The search generated 173 media articles, which were analysed using NVivo. Of those, 128 articles were about food insecurity in the state. The articles were searched for key terms from the literature: “unemployment,” “demand,” “panic buying,” “supply chain,” “volunteer,” “family,” “elderly,” “job seeker,” “meals,” “groceries,” “hampers,” and “casual.” Indicative quotations were selected to show media representations of the impacts of the pandemic on food relief providers and household food insecurity. These insights were supplemented by analysis of social media posts, reports, and websites from food relief providers.

5 | EXPERIENCES OF FOOD RELIEF PROVIDERS DURING THE PANDEMIC IN SYDNEY

This section provides an overview of the impacts of pandemic lockdowns on food relief providers across Metropolitan Sydney. We discuss the ways in which food relief organisations, as shadow infrastructures of care, are place-based and responsive (to particular values, histories, and organisational structures), dynamic (shaped by changes within and beyond organisations), and constrained by caring capacities.

5.1 | Place-based and responsive: providing food relief in Sydney

Our main goal is to help ease the pressure on families and individuals who are experiencing food insecurity which is a major concern within the community.

(Participant 2)

Sydney’s food relief sector comprises diverse initiatives. When asked to explain the goals of their organisations, participants explained it was “ensuring people have meals/food to eat [so that] children aren’t going without meals” (Participant 13), “to assist those in need who are having financial difficulty” (Participant 12), and to provide “a friendly face without judgement or question to anyone in need” (Participant 10).

Previous work by Miriam (Williams, 2022; Williams & Tait, 2022) documented 210 food relief organisation locations in 2019 via internet searches, with updates in 2022 seeing this number increase to 239 locations where people could access either groceries, meals, or both. Figure 1 maps these initiatives across Metropolitan Sydney. Many are in the southwest and west of Sydney, which have higher levels of socio-spatial disadvantage (Williams & Tait, 2022). There is also a clustering of organisations in the central city where many organisations are located historically to feed the homeless. However, initiatives are more geographically spread than documented in 2019, revealing the spatial extensiveness of these shadow care infrastructures and new initiatives that emerged (see Williams & Tait, 2022 for a map of the 2019 locations mapped to the Index of Relative Socio-economic Disadvantage).

Organisations vary in terms of their goals. The top 50 words used by organisations in the questionnaire to describe their goals is depicted in Figure 2. Among them are “community,” “food,” “meal,” “people,” and “family.” The word “Christian” also featured, with a substantial number of initiatives run by faith-based organisations which range in size from local Christian congregations and churches to Jewish, Muslim, and Hindu groups, to large social service organisations such as Anglicare, St Vincent DePaul, and Mission Australia that are operating across multiple locations. They also provide more than just food, with 53% of organisations delivering other services or goods, including youth support and youth/child activities; hygiene, sanitary, and personal care items; warm and low-cost clothing and bedding, and a referral service to other organisations.

The size of food relief organisations and their resourcing varies. Two participating organisations supported over 500 people per week and the majority (five) supported between 50 and 100 people per week. Half of the participant organisations provided food once a week, four were providing food daily, two provided food two to three times per week, and one once a fortnight. Organisations rely heavily on volunteers to assist them function, with half having under 10 volunteers and 38% having over 20 volunteers. Four out of 13 organisations employed no staff, while eight (62%) employed between one and five staff. Only one organisation employed over 20 staff.

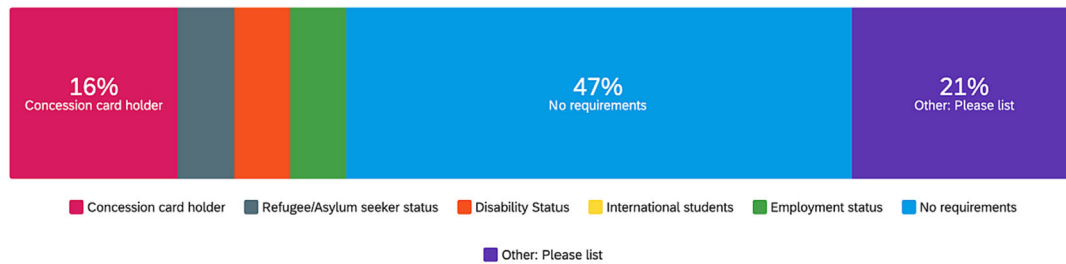


FIGURE 3 Eligibility requirements.

In July 2021, the City of Sydney invested \$1 million to support food relief during the lockdown, as well as donations to OzHarvest, Foodbank and SecondBite to help address increasing demand. Since August, these donations have resulted in the delivery of more than 28,000 hampers and 13,800 meals to the local community.

(City Reporter, 2021)

Meals are also available to people in different formats including at drop-in-centres such as Meals Plus, or soup kitchens such as Canice's Kitchen which supplies over 50,000 meals per year (Canice's Kitchen, 2022), via mobile soup kitchens such as The Dish, and take away options which were made available during the pandemic in order to meet public health safety requirements. A total of 15% of organisation provided food relief as meals while 15% of participants indicated they provided food relief as groceries.

Organisations found it important that food was nutritious (77%), low cost (75%), prevented food waste (58%), and free (50%). Most respondents found it slightly important that the food is culturally appropriate (75%) rather than important (15%). Qualitative responses from one participant suggested this was a key focus and challenge during the pandemic when new groups of food-insecure people sought assistance. A significant majority (92%) of providers agreed that the food provided cares for customers/members, while over half (54%) indicated that they provide food that is healthy, revealing the complexities of food relief provisioning in a time of crisis where demand may exceed supply.

Sydney's food relief sector is diverse. The emergence of new food initiatives during the pandemic reveals the spatial distribution and availability of food relief across Metropolitan Sydney. As a shadow infrastructure of care, food relief initiatives are place-based and diverse with particular ways of operating. As shown in this section, the ways food is provided and the goals of the organisations vary, shaping how care might be mediated through food relief. Moreover, food relief providers are dynamic and adapt to infrastructural failures, as discussed in the following section.

5.2 | Dynamic: interruptions to food provisioning increasing demand for food relief

Infrastructures of care are dynamic, responding to internal and external changes in needs for care. The pandemic led to an increased demand for food relief providers in Sydney, with 92% of organisations participating in our research noticing an increased number of people seeking assistance (that proportion represents all but one organisation). One respondent observed that "people who otherwise wouldn't ask for help are now asking!" (Participant 6). Another noted that "requests for food increased 400-fold ... The numbers have stabilised now, but donations have dropped a lot too" (Participant 1). These observations reinforce insights from the 2020 Food Bank Hunger (2020) report, which found an increase of 16% in demand for emergency food aid between 2019 and 2020. Another survey found that 28% of food insecure Australians had experienced food insecurity for the first time and 58% were seeking food relief more often (Food Bank Australia, 2021). Our analysis of media articles has revealed that the term "demand" was mentioned in 120 articles. For example, an article by Fulloon (2021) for SBS News noted:

Thousands of emergency food relief hampers are now being packed and delivered every day in New South Wales, with a leading charity saying demand has surged by more than 200 per cent during the Greater Sydney lockdown. Foodbank say it has helped provide more than 10,000 emergency relief hampers for people in areas across Greater Sydney, the Blue Mountains, the Central Coast, and Wollongong since the lockdown was announced on 26 June – an increase of 210 per cent. Between 2,500 and 3,500 hampers are being packed each day.

The number of people accessing food relief during the pandemic increased for 92% of respondents and decreased for one service who had to cease operations.

Several reasons were reported for the increase in demand for food relief in Australia more broadly. For example, Kent et al. (2020, p. 2) have documented the importance of abrupt loss of employment, underemployment, and decreased income as factors driving the demand for food relief. A study by Jones et al. (2022, p. 9) has found that casual workers, the elderly, young people, culturally and linguistically diverse groups, single parents, newly unemployed, and international students were the most significantly impacted by pandemic lockdowns. One of our respondents indicated that groups accessing food relief during the pandemic included “those who earned too much for a concession card but were still [having] trouble making ends meet” (Participant 7).

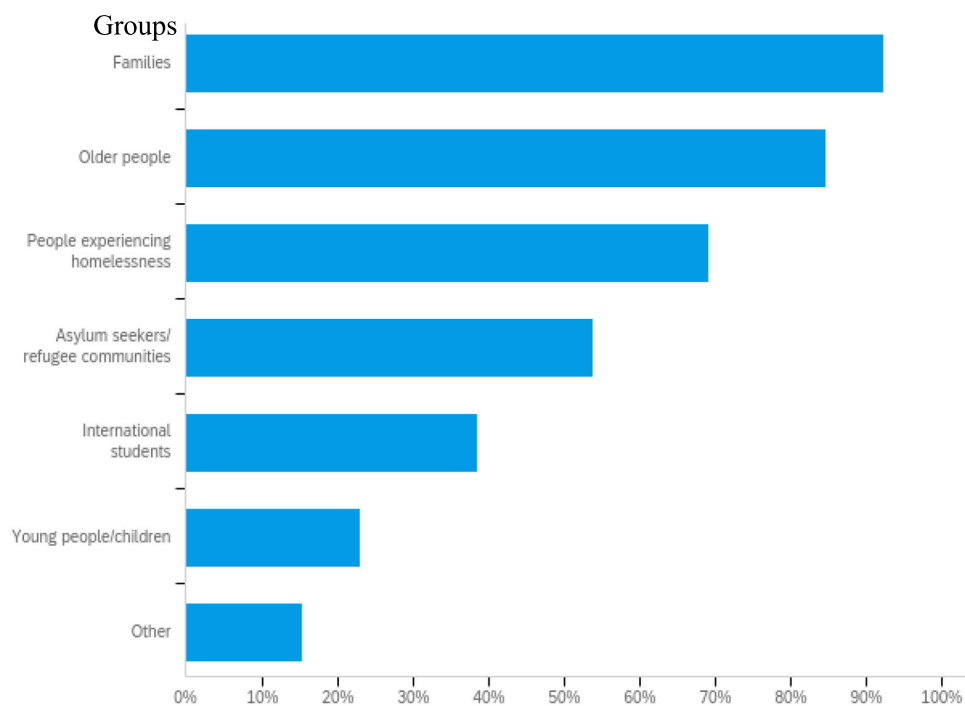
Questionnaire participants noted that the pandemic led to a change in the groups of people seeking food relief. Groups that accessed food services included families (90%), older people (80%), homeless people (70%), asylum seekers/refugees (55%), international students (40%), young people/children (25%), and people with mental and physical disabilities (8%). People living alone and on income support payments were also accessing food relief (Figure 4), with one respondent noting they saw “more newly unemployed” come to their service. These results parallel a study by Godrich et al. (2022, p. 2), who found that “younger adults, older adults, refugees, Aboriginal people, females and university students” were among the primary groups needing food relief. A third of food

relief providers noticed a difference in demand for food relief during the period when the fortnightly supplement payment was available to people receiving JobSeeker payments. One respondent noted that “fewer people on benefits when allowances were increased” were accessing their food relief service (Participant 6). However, 58% of respondents found it hard to say whether there was any difference and one reported no change.

Organisations had varying capacities to respond to infrastructural failure, with 11 able to meet the demand for food *most of the time*, one *always* able, and one only *sometimes* able. Participant 4 noted:

We had more demand for food and not being able to be opened for a period of time made it very difficult. We were able to refer to other agencies where we could. When we did make up the food parcels it was a lot more expensive as we needed to buy from Coles and Woolworths and sometimes, they didn't have what we needed.

Half of the participants changed where they sourced food from because of the impacts of the pandemic on food availability. The questionnaire found the most common supplier was Food Bank (21%), followed by supermarkets (19%), individual and business food donations (16% each), OzHarvest (14%), and Second-Bite (7%) as shown in Figure 5. In addition, participants



% of participants indicating which groups of people are accessing food relief at their service

FIGURE 4 Groups accessing food relief during the COVID-19 pandemic.

Type of supplier

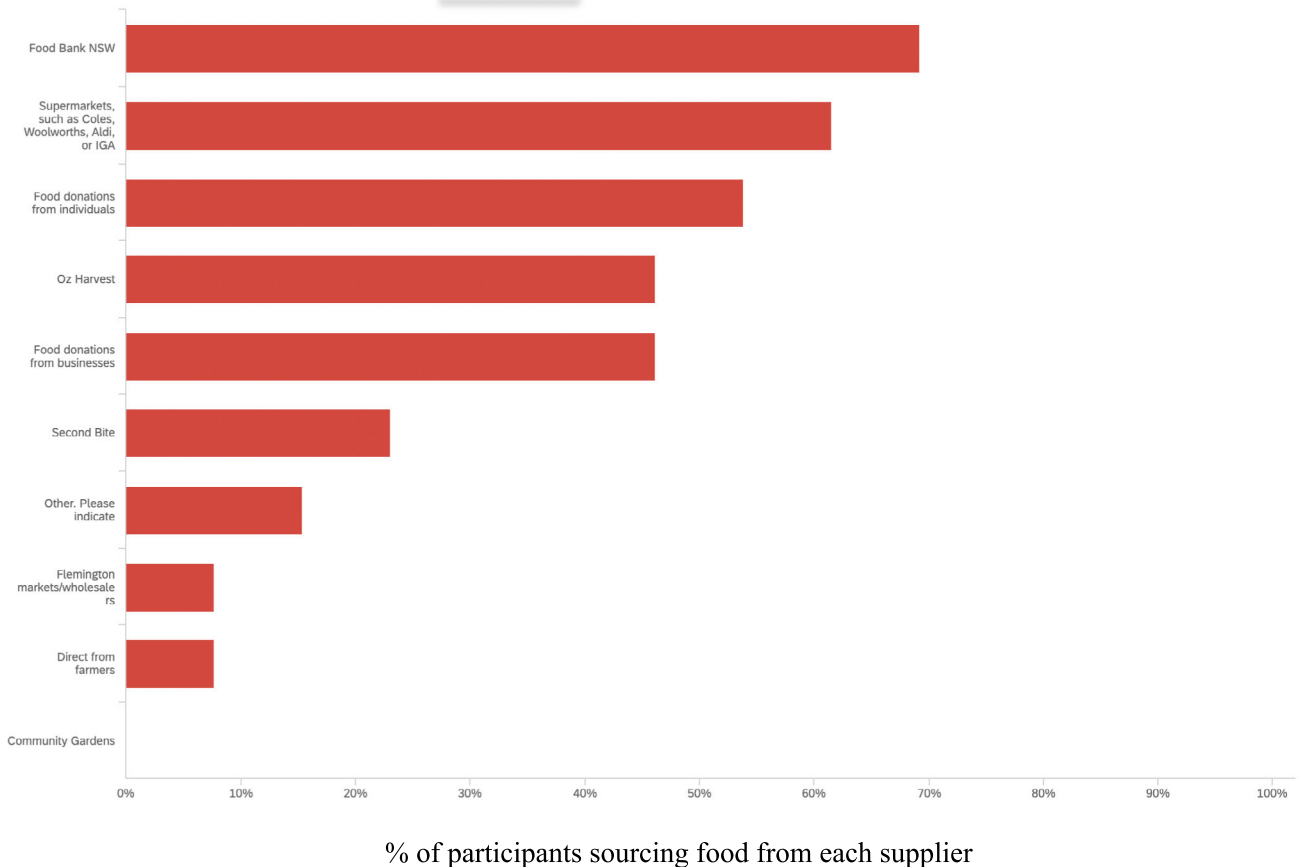


FIGURE 5 Source of food for food relief.

explained that they “purchased as needed” (Participant 12) and received “food donations from churches and schools” (Participant 9). One respondent explained that they saw an increase in donations from individuals who were more conscious of the impact of food insecurity in the broader community in 2020 and 2021. However, in 2022, food relief providers noted a decrease in donations due to cost-of-living pressures. A common response to the difficulty in accessing food is articulated by Participant 2, noting that “we had to use Coles and Woolworths, which is more expensive.” Others also “had to change who donated to us” (Participant 5), with the most significant challenge being “getting fresh food” (Participant 11) and determining “where the food was coming from” (Participant 5), indicating that reliable food supply was a key concern.

The pandemic also led to alterations to the demand for and supply of food relief in Sydney which was noted both by questionnaire responses and in media articles. Organisations reported an increase in demand for food relief with many new people seeking assistance. Supply chain disruptions coupled with increased demand meant organisations needed to change food supply. Such results align with those reported by McKay et al.

(2021), who studied the pandemic’s impact on the Victorian emergency food sector. Participants also discussed additional impacts to resourcing; those are elaborated upon next.

5.3 | Constrained by caring capacities: “Fewer people doing more”

Providing meals and essential support during these tough times. Whilst in-service visitor numbers have decreased due to the fear of being in public, well-being calls and home deliveries have increased. 50+ Breakfast meals provided per day. 140 – 150+ lunch meals provided per day. 30+ Hygiene Packs provided per day. 50+ Food Parcels provided per day. 15+ people utilising our laundry services. 10+ people utilising our shower facilities ... There are many new faces. People are anxious and frustrated. They want to know “when will it end” ... Bilingual volunteer translators have been a true asset in

helping us connect with more people ... Thanks to Meals Plus, people in need have a place to seek help. “Where would I go without this place?” “We are important here”. (Parramatta Mission, 2021)

Health measures put in place to limit the spread of COVID-19 affected food relief providers who had to adapt operations. As the quote above from a YouTube clip produced by Meals Plus (run by Parramatta Mission) illustrates, many organisations changed the ways they operated during the lockdown periods. Pandemic lockdowns reconfigured the caring capacities of food relief organisations.

Public health requirements such as social distancing had an impact on 10 of 13 respondents or 77% of questionnaire participants. One food relief initiative that regularly offered a community lunch had to close and at the time the questionnaire was administered during April and May 2022 had yet to re-open. A common response was to shift meal services to takeaways and grocery pick-ups to hampers that could be delivered. For example, Participant 13 explained they “had to deliver hampers as clients could not travel and/or had to isolate.” This shift was not always easy, with Participant 2 noting they “had to close for a period of time and when we were opened it was difficult to distribute the food parcels with the restrictions in place.” One larger organisation explained how they “changed policies and procedures, PPE [Personal Protective Equipment], introduced home delivery and closed indoor/office settings, some services closed/changed model, frequent changes and communication required” (Participant 9). Being able to respond to the evolving public health measures was important for organisations, as noted in the quote from Meals Plus, with some having local police checking compliance.

Due to the role organisations play as more than sites of food relief alone, questionnaire participants discussed how public health measures led to “less interaction with people, less opportunities to provide meals and social supports [and it was] harder to get food and deliveries of food” (Participant 12). One described how they attempted to adapt to changes, explaining that the biggest challenge was “community. We tried to speak to everyone outside as they collected their meals” (Participant 3). Similar alterations to how organisations interacted with people were noted in Victoria by McKay et al. (2021, p. 9) who have explained that “social distancing resulted in increased isolation for many clients. This was a particular concern for those who are already vulnerable.” As a site of social connection, constricting the sociality of food relief initiatives alters the types of care able to be practiced.

Infrastructures of care are also shaped by constraints to caregivers’ bodily capacities (Williams, 2020). A theme about “fewer people doing more” (Participant

10) was evident across responses with most experiencing a decrease in the number of people volunteering (69%) while 23% noted an increase. Similar results were recorded by McKay et al. (2021, p. 8), who found that 77% of Victorian organisations saw volunteer numbers reduce. Retaining volunteers is a key concern, with Participant 12 discussing how:

Volunteers were reluctant to help at times and also restricted from helping, staffing was a challenge and overcoming the social reluctances of people who need assistance to ask or come for help.

One organisation noted that they had “fewer people making more food” despite the increase in demand for food relief (Participant 10). Staff employed by organisations were also impacted, with one third of initiatives indicating that they experienced a change in staffing and 54% saw their opening hours increase. Some staff also worked from home, with one organisation explaining that this “put a stress on this initiatives’ staff to run the workplace” (Participant 1). Other challenges faced by food relief organisations included increased use of personal protective equipment and ways they had to adjust their operations as they were not:

able to access a lot of necessity foods from Foodbank and having to buy from normal retail shops. Distributing the food parcels was difficult so we would phone and give a time to pick up and place the food parcel outside for them to pick up. Sometimes we would deliver the food parcels and leave them on the veranda. At least this way we had no contact. (Participant 2)

Overall, many organisations experienced disruptions to normal operations and needed to alter their ways of operating to respond.

Thus, we suggest that the food relief sector is a shadow infrastructure of care that enables people to meet their needs for food in ways that are constrained by caring capacities. This infrastructure provides more than just food but is fragile as it responds to the exacerbation of vulnerability and increased demand for food relief while needing to adapt to changes over time.

6 | CONCLUSION

The exacerbation of household food insecurity challenges dominant discourses about Australia being a food-secure nation, revealing the growing need to recognise the brokenness of the dominant food

infrastructure to provision food to all people. The increased demand for food relief suggests that the mainstream food system is an infrastructure of care that is only accessible to some. Food relief organisations have a complex relationship with the mainstream food system as they are reliant upon the surplus generated by over-production. Inspired by the work of Power et al. (2022), in this paper, we have analysed how, as a shadow care infrastructure, food relief is often hidden yet has become a dominant socio-technical system that enables survival for people experiencing food insecurity. Such work is important because of the precariousness and vulnerability of volunteer-run, grant-funded, and donation-dependent food initiatives. While we have drawn upon qualitative insights from a limited number of food relief providers, similar insights have been recorded in studies across Australia and the United Kingdom (Barker & Russell, 2020). We offer three key insights into food relief as shadow infrastructures of care.

First, we have discussed the ways in which food relief is place-based and responsive, an observation evinced by the emergence of new food initiatives during the pandemic. Often hidden by the dominant modes of food provisioning, Sydney's food relief sector is spatially extensive and occupies a growing geography. The values, goals, and ways of operating are varied, yet analysis of them highlights how organisations have responded to the crisis and sought to address the failure of conventional food provisioning infrastructures. Such insights point to the importance of understanding the multiplicity of shadow care infrastructures as noted by Power et al. (2022, p. 2) who note that “surviving poverty requires working across multiple, sometimes conflicting, incoherent and fractured systems and sets of resources that collectively organise care in situated and contextual ways.” More research could attend to how the material care provided by food relief organisations is received as (or not) caring and how the dominant food infrastructures and welfare system could be reconfigured for care.

Second, infrastructures of care are dynamic and relational (Power et al., 2022), responding to changes internally and externally that shape the demand for and supply of food. As we reveal, all four pillars of food security were disrupted by the pandemic, with associated lockdowns, inflationary pressures, increased rates of unemployment, and supply-chain shocks leading to an increased demand for food relief and a shift in the types of groups accessing food relief across Metropolitan Sydney. Growing numbers of people were reliant on food relief, some for the first time. Most organisations were able to adapt to the changes continuing to be able to meet the demand for food *most* of the time. With food relief shifting from an emergency solution to a core source of food for increasing numbers of people, there is an urgent need for the infrastructural failures of

conventional food provisioning to be addressed. The new definition of food security developed by Gallegos et al. (2023) directly challenges the reliance on food relief as a solution to food insecurity, signalling the importance of government action to address the root cause of poverty. The complex “erosion of the welfare state” signalled by Power et al. (2022, p. 2) was momentarily disrupted when governments decided to make it possible for some groups (not all) to meet their care needs by increasing welfare payments. In the future, research could explore more enduring solutions to food insecurity.

Third, we have reflected upon how, as a shadow care infrastructure, food relief is restricted and enabled by caring capacities—the factors that facilitate care (Power, 2019). Organisational caring capacities are affected by both the internal functioning including resourcing, donor relations, volunteering and staffing and by other external factors such as public health orders and food availability, which make care possible—or not. The pandemic public health orders shaped how food relief was provided, with organisations temporarily shifting to provide takeaway, food hampers, or deliver food and, in one instance, ceasing to operate. Many organisations experienced reductions in the number of volunteers supporting their operations, which highlights the vulnerabilities inherent in relying upon volunteers to facilitate food access. There is an important food provisioning role to be played by diverse food initiatives that respond to various care needs within our food systems (Williams, 2022), as the new definition of food security developed by Gallegos et al. (2023) notes. And yet, people are not food secure if they are reliant upon food charity.

In the final analysis, then, there is a need for governments to address the household food insecurity crisis facing households in Australia and other high-income nations experiencing an increasing prevalence of food insecurity. Refiguring welfare regimes and raising the rate of government support payments are important actions that would address the socio-economic causes of food insecurity. Developing comprehensive food plans where clear responsibilities and accountabilities for addressing food insecurity are set out is important for creating enduring solutions at a local, state, and national scale. Only when all people have access to healthy, affordable, sustainable, and culturally appropriate food will we be able to truly claim a nation is food secure.

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CONFLICT OF INTEREST STATEMENT

The authors report no conflict of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ETHICS STATEMENT

This research was approved by Macquarie University Human Research Ethics Committee of Macquarie University reference: 52022506337230.

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ENDNOTES

- ¹ Metropolitan Sydney includes 30 separate Local Government Areas (LGAs) or city councils and extends from Hornsby Council in the North to Penrith and Hawkesbury Councils in the West, to Campbelltown, Camden, and the Sutherland Shire in the South. It is distinct from Greater Sydney, which also includes the Central Coast and Blue Mountains regions.
- ² Such data collection is helpful but not representative as many people experiencing food insecurity do not seek assistance through emergency food relief.
- ³ JobSeeker is a government payment for people looking for work, who are sick or injured that is available to people over 22 who satisfy the eligibility requirements (Services Australia, 2023).
- ⁴ NewStart allowance was renamed JobSeeker.
- ⁵ Youth Allowance is available to students and people looking for work, who are 24 or younger and satisfy the eligibility requirements (Services Australia, 2023). Parenting payments are available to primary carers of young children (Services Australia, 2023). Special Benefit is for people experiencing hardship (Services Australia, 2023). AusStudy supports students and apprentices (Services Australia, 2023). ABSTUDY is a “group of payments for Aboriginal or Torres Strait Islander students or apprentices” (Services Australia, 2023).
- ⁶ Food Bank is Australia’s largest provider of redistributed food from businesses, wholesalers, supermarkets, manufacturers, and individuals to food charities (Food Bank Australia, 2019).
- ⁷ Secondbite redistributes surplus food to charities across Australia (Secondbite, 2023).
- ⁸ OzHarvest is “Australia’s leading food rescue organisation” (OzHarvest, 2023) redistributing food that would otherwise go to landfill to people in need directly and via charity partners.
- ⁹ The Australian Right to Food Coalition is a network of organisations, academics and practitioners seeking to achieve the human right to food in Australia.

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