

Achieving Equality and Equity in the Provision of Food and Nutrition Support in Early Childhood Education and Care Settings:

Opportunities and Actions for System Change in Australia

Opportunities and impact

Evidence-based interventions are effective in:

- **promoting and achieving practice improvements and change in Early Childhood Education and Care (ECEC) settings, and**
- **improving nutritional health outcomes**

Poor dietary behaviours are the leading modifiable risk factors for the development of non-communicable diseases (Afshin et al., 2017). Over 900,000 Australian children under 5 years of age attend centre based Early Childhood Education and Care (ECEC) services, with 48% of children attending by age 2 years (ABS, 2017). ECEC settings are an ideal place for targeted, evidence-based interventions to reach young children and improve nutritional health, awareness and behaviors.

Evidence-based interventions are effective in promoting improved nutritional health outcomes and practice change in ECEC settings. They have been shown to be effective in improving children's food and nutrient intakes at a critical time point when dietary habits and preferences are established (Bell et al., 2015).

Practice improvement and change in ECEC settings

- Nutrition interventions have been shown to improve long day care nutrition policies (Matwiejczyk et al., 2007), and menus (Pollard et al., 2001)
- Interventions have also been shown to support the development and improvement of eating environments (Pollard et al., 2001).

- Expert-led, long term interventions have supported cooks to maintain a focus on healthy eating and provide a healthy food environment (Matwiejczyk et al., 2021)
- Improved mealtime practice guidelines have helped centers build and model a positive food environment (Golley et al., 2012).

Improved Nutritional Health Outcomes

Service-level changes to menus in line with dietary guidelines have been shown to result in improvements to children's dietary intake and support practice change (Seward et al., 2018)

Children's dietary intake of core food groups and micronutrients and food choices have been found to be significantly improved across multiple evidence-based interventions in ECEC settings (Yoong et al., 2019; Matwiejczyk et al., 2018; Bell et al., 2015)

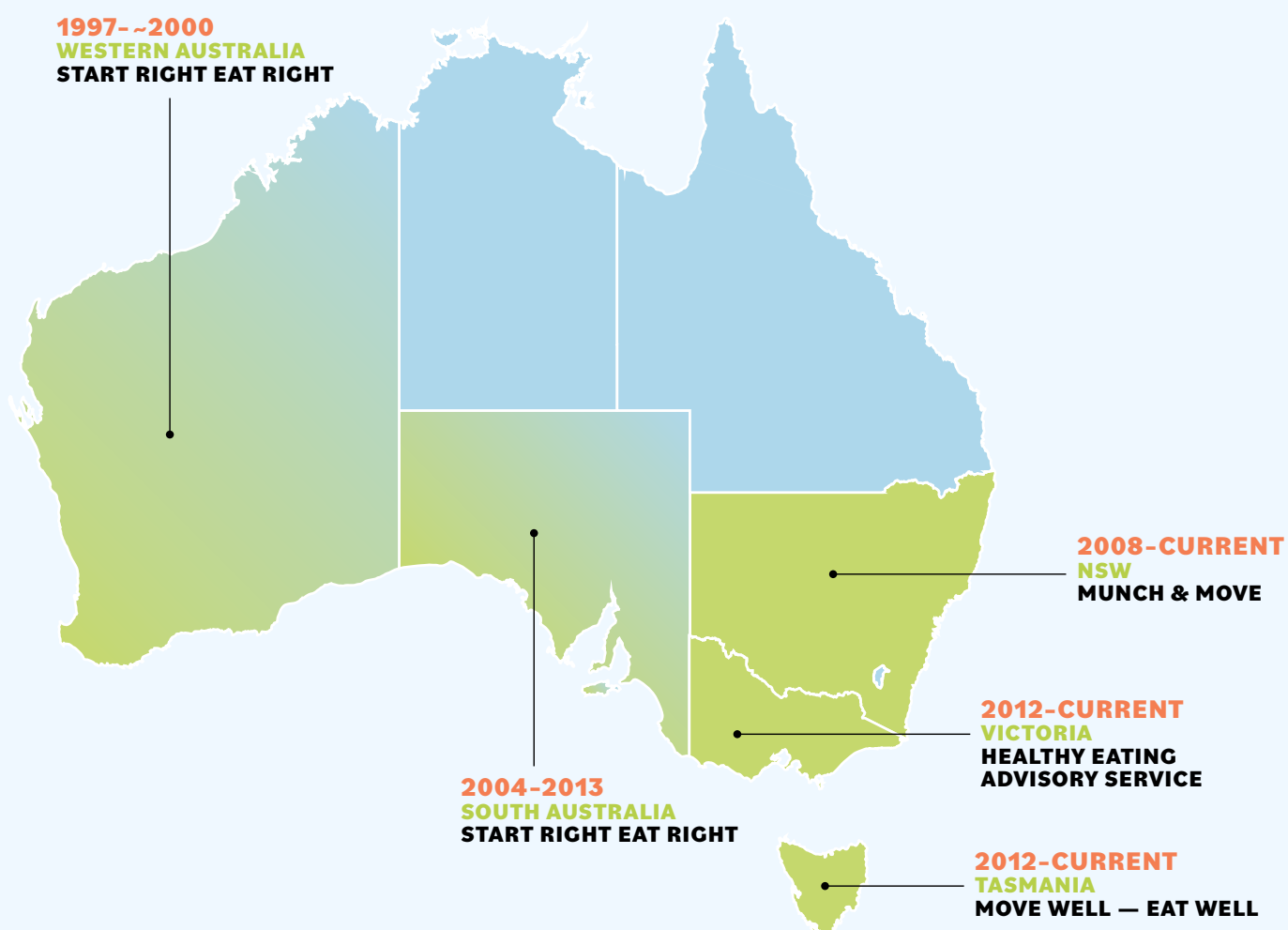
Opportunities are not being realised

A brief historical overview demonstrates how the number of states delivering support services has decreased over the past decade. Currently there is unequal access across Australia to support services for ECEC settings with only NSW, Victoria and Tasmania funding and delivering such programs.

OVERVIEW

A BRIEF HISTORY OF STATE WIDE FUNDED AND DELIVERED INITIATIVES

2002-2022



Recommendation

- ★ Ensure that funded state-wide interventions supporting food environments and food provision are available in every jurisdiction across Australia and are responsive to the diversity of local needs across the whole jurisdiction.

EQUALITY BY JURISDICTION

Whilst evidence-based interventions have been shown to be effective in promoting improved nutritional health outcomes and practice change in ECEC settings that consequently improve children's food and nutrient intakes, there are currently only three jurisdictions within Australia that provide state-wide free support services for ECEC settings in the areas of healthy eating.

REACH, RELEVANCE AND ACCESS OF VARIOUS TYPES OF INTERVENTIONS, PROGRAMS AND SUPPORT SERVICES AND RESOURCES

Initiatives and Programs focusing on developing and improving healthy food environments across various ECEC settings tend to adopt multiple strategies and approaches simultaneously when working with services. Whilst all ECEC services and settings have access to some form of support aimed at improving food environments, there are generally three different ways that support services have been offered to ECEC services:

- Generic and free to services
- Customised and free to services
- Customised and cost to services

The problem with paying for resources and services is that most services cannot afford the cost, therefore the cost is prohibitive to services accessing support.

Even though it can be claimed that generic and free resources are available to all, when viewed through an equity lens the gap in support services across jurisdictions becomes even wider.

Recommendation

- ★ **Ensure that newly developed support initiatives, programs, services and resources supporting food environments and food provision fill identified needs and gaps in support service provisions to avoid duplication.**

A BRIEF HISTORY OF STATE WIDE FUNDED AND DELIVERED INITIATIVES—2002-2022

→ 1997-2000

WESTERN AUSTRALIA START RIGHT EAT RIGHT

About

The Start Right Eat Right program (SRER), was a nutrition award scheme in Western Australia which ran between 1997 and 2000. It was funded by the Health Promotion Foundation of Western Australia (Healthway).

Approach and Focus

Incentive-based interventions which focused on ECEC service level changes in policies and menus. Participation in SRER involved nutrition training for centre directors and cooks plus support for staff to improve the LDCC menus, policies and eating environment in line with the nutrition award criteria.

Effectiveness and Impact

- **Practice improvements and change**—The evaluation of the Start Right-Eat Right award scheme showed that most centres registered for the award had to change their menus to meet the award standards (Pollard et al., 2001).

→ 2004-2013

SOUTH AUSTRALIA START RIGHT EAT RIGHT

About

The Start Right Eat Right program (SRER), was a nutrition award scheme in South Australia which ran between 2004 and 2013, rolled out by the government state-wide and aimed at increasing long day care centre (LDCC) capacity to provide safe, healthy food choices and positive eating environment for children. Funded by SA Health initially then a Federal national prevention grant, it was one of 18 priority programs in the State's health prevention policy 2011-2016.

Approach and Focus

Incentive-based interventions which focused on ECEC service level changes in policies and menus. Participation in SRER involved nutrition training for centre directors and cooks plus support for staff to improve the LDCC menus, policies and eating environment in line with the nutrition award criteria.

Effectiveness and Impact

- **Practice improvements and change**—Engaged centres reported significant changes to food policy, higher frequencies of staff role modelling and high frequencies of positive feeding practices, including encouraging children to taste foods offered using nutritious foods (Golley et al., 2012; Matwiejczyk et al., 2007).
- **Nutritional Health outcomes**—Participating ECEC services observed increased uptake by children in all core food groups, except vegetables, and increased intake of essential nutrients (Bell et al., 2015). The program finished with 80% of all LDCC in South Australia involved and accredited.

In 2020, qualitative interviews assessed sustainability with positive findings but these have not been published yet.

→ 2008-CURRENT

NSW MUNCH & MOVE

About

Munch & Move aims to promote and support healthy food and physical activity environments in ECECS and Family Day Care services in NSW which is delivered by a dedicated health promotion workforce based in Local Health Districts in New South Wales (NSW), Australia, delivering locally tailored programs. Launched in 2008 targeting children 3 to 5 years of age attending preschools and scaled-up in 2010 to be state-wide and inclusive of long day care and occasional care services covering children aged from birth to 5 years.

Approach and Focus

Munch & Move uses a “whole of service” health promotion approach which includes:

- Professional development training for early childhood educators
- Cooks' workshops and in-service healthy eating and active play conferences for educators.
- Practical resources to support service policies and practices
- Face to Face support visits and regular contact from Local Health District (LHD) health professionals
- Fact sheets to communicate the key messages with families
- NESA accredited online learning for educators

Effectiveness and Impact

- **Practice Improvement Change**—88% of centre-based services and 62% of Family Day Care services are participating in Munch & Move, and health information provided to families and physical activity policies in both LDC and FDC settings (Green et al., 2020; Innes-Hughes et al., 2019; Kerr et al., 2021).

TASMANIA MOVE WELL — EAT WELL

About

Move Well Eat Well (MWEW) began in Tasmania in the ECEC settings in 2012, building on the MWEW in primary schools, which was established in 2009. MWEW is delivered by the Tasmanian Department of Health.

Approach and Focus

MWEW is a Tasmanian Award Program that takes a whole of service approach to food, nutrition and physical activity. In addition to help with menu assessment and planning, NWEW provides:

- Support with policy development and review
- A website with printable resources and links
- An online newsletter and social media updates
- Hardcopy resources, including fact sheets to communicate with families.
- Training Sessions
- Face to Face meetings, and
- Email and phone support

MWEW also provides feedback to services that provide extra meals (e.g. breakfast, dinner).

Effectiveness and Impact

- **Practice Improvement Change—** Program evaluation outlined a significant impact specifically in increasing the health behaviours of children and their families and the knowledge and skills of educators.

VICTORIA HEALTHY EATING ADVISORY SERVICE

About

The Healthy Eating Advisory Service (HEAS) is a government funded service that assists organisations in key public settings to implement Victorian Government healthy food and drink guidelines, this also includes ECEC services and settings.

Approach and Focus

HEAS provides free and tailored support including:

- Online menu, vending and product assessment tool—FoodChecker
- Training and resources to support the implementation of relevant guidelines
- Free advice via an infoline and email
- Coaching and support to health promoters; support key settings to implement change
- One-to-one targeted support for organisations in the most disadvantaged areas
- Website with free resources

Effectiveness and Impact

- **Practice Improvement Change—** The web-based menu planning tool, FoodChecker was perceived as useful for cooks and directors in childcare services (Kempner et al., 2022). A program evaluation (unpublished) showed support to ECECs was effective in reaching organisations in almost all local government areas and building capacity and providing continuous support for change. ECEC specific government support services are an important public health nutrition strategy, specifically for 'knowledge/awareness', optimism/intent' and 'skills/role' in menu planning (Elford et al., 2022).

QUEENSLAND, AUSTRALIAN CAPITAL TERRITORY & NORTHERN TERRITORY

These states have funded specific support projects but currently do not have state wide government funded support programs. Past projects that have been delivered in these states include:

ACT

- **ACT Nutrition Support Service for Early Childhood Settings** 2015-2017
- **Nourishing Little Minds** 2021-2022

QLD

- **Learning Eating Active Play and Sleep Project—LEAPS** 2013-2016

These programs focused on staff training and support resources but did not include menu assessments and planning advice.



REACH, RELEVANCE AND ACCESS OF VARIOUS TYPES OF INTERVENTIONS, PROGRAMS AND SUPPORT SERVICES AND RESOURCES

Recommendation

- ★ Ensure that newly developed support initiatives, programs, services and resources for improving the food environment and food provision fill identified needs and gaps and avoid duplication.

Initiatives and Programs focusing on developing and improving healthy food environments across various ECEC settings tend to adopt multiple strategies and approaches simultaneously when working with services.

Whilst all ECEC services and settings have access to some form of support aimed at improving food environments, there are generally three different ways that support services have been offered to ECEC services:

- Generic and free to services
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The problem with paying for resources and services is that most services cannot afford the cost, therefore the cost is prohibitive to services accessing support.

Type of Intervention and Efficiency, Effectiveness and Reach

In recent years much of the predominantly Federal funding aimed at improving healthy food environments has been provided to web based interventions such as menu planning tools or web-based information resources. Indeed one of the longest standing resources available to ECEC services are the Federal Government's Get Up and Grow Guidelines (released in 2009) with companion resources released in 2013 and not updated since.

Evidence suggests that online menu planning to support implementation of dietary guidelines resulted in improved healthy eating and has the potential to be implemented at scale efficiently and effectively (Yoong et al., 2020). Similarly, a web-based menu planning intervention was found to improve the quality of foods provided in ECEC settings (Grady et al., 2020). However, whilst online interventions are presumed to be efficient, with a claimed potential for broad reach, on-the-ground interventions are more effective particularly if undertaken in collaboration with external experts (Matwiejczyk et al., 2018). Indeed state wide on the ground interventions have the potential to cater to specific needs of services as well as employ strategies to ensure reach across a state.

An important consideration however which tends to be overlooked is that menu planning web tools for example are only relevant to those services which offer food provision as part of their service in the first place.

Taking QLD as an example Thorpe et al. (2020) assessed the association of meal provision in ECEC services, child developmental vulnerability, geographic and social disadvantage, ECEC fee structure and market competition across communities in QLD. This study found children living in disadvantaged communities where food



insecurity is inevitably higher, are least likely to have meals provided by their ECEC service. However, whilst services in the most disadvantaged areas were less likely to provide food, those services located in metropolitan areas were associated with increased likelihood of meal provision in disadvantaged communities, due to higher market competition

The QLD example, shows that generically funded initiatives which claim to have potential in terms of reach overlooks the fact that the intervention itself, in this example menu planning, cannot be utilized by a substantial number of services because they do not offer food provision. Furthermore ECEC services within the two larger populous states (NSW and VIC) already have access to a free customized version of menu planning through specialised Dietitian support initiatives (Munch & Move and Healthy Eating Advisory Service).

- National generic resources on one hand do not address existing gaps and needs and are not equally relevant to all services.
- New initiatives have been shown to double up on existing services.

It has been shown that in settings where food was family-provided, educators were significantly more likely to use controlling feeding practices, including pressuring children to eat, restricting food choices and rushing children into finishing meals (Searle et al., 2022). Given the potential impact on child dietary intake, strategies to support implementation of healthy eating practices are required and interventions should focus on improving the availability of foods packed within children's lunchboxes, in combination with targeting educator-related healthy eating practices to improve child dietary intake within lunchbox centres (Barnes et al., 2021). And thus support the development of appropriate eating behaviours such as not restricting time to consumer food.

MOVING FROM EQUALITY TO EQUITY

Recommendation

- ★ Ensure that funded food environments and food provision interventions are based on principles of accessibility, greatest need and equitable access.

Whilst equality of access to support services and resources is important to ensure opportunity for all, it is insufficient to overcome all the inequalities faced by many children, parents and carers and communities wishing to access the ECEC sector. There is much more that can and should be done to improve the reach, relevance and consequently effectiveness and efficiency of such support services to target and help those most in need. For example one limitation of support services focused on equality of access is they tend to provide generalised support, which overlooks the variety of specific needs and experiences across different service providers and the families and communities that access them.

The remainder of the evidence brief provides a signposting to existing evidence to address a range of equity considerations in support service provision and resources ensuring that support services are not only equally accessed but equitable as well.

Equity Need

SES and Rural or Remote Locations

The *Dropping off the Edge Report (2021)* finds persistent and multilayered disadvantage across Australia and shows clearly that complex and entrenched disadvantage is experienced in a small but persistent number of locations in each state and territory. Thorpe et al. (2020) assess the way in which the competitive economic market of ECEC is associated with food provision across communities in Queensland. They found that children living in disadvantaged communities, where food insecurity is higher, are least likely to have meals provided by their ECEC service. Also services in the most disadvantaged areas were less likely to provide food and more likely to have lower fees. Food Insecurity is also a barrier to attendance, with a recent report highlighting that families unable to provide food may simply not send their child to ECEC for this reason. However, whilst

services in the most disadvantaged areas were less likely to provide food, in disadvantaged metropolitan areas, higher market competition was associated with increased likelihood of meal provision. Research found metropolitan long daycare services were spending on average \$2.00 per child per day, where food was provided (two snacks and one main meal) (Sambell et al., 2020).

The authors raise the question with regards to decisions that offset costs—such as is the quality of food poorer? Whilst there is a need for further evidence, another important question is can generic support address the diverse and specific needs of services operating in these contexts or are additional support services needed in these areas, such as food budgeting, strategies for working with families, or even supporting ECEC staff who themselves may be experiencing food insecurity.

Equity Need

Aboriginal and Torres Strait Islander Communities

Research has identified major gaps in service delivery for Aboriginal families with young children and points to the need for a coordinated, culturally responsive systems approach to providing support for breastfeeding and child nutrition advice and support for Aboriginal families, including capacity building for staff, and supportive systems and policies in both regional (Myers et al., 2014) and remote settings. Tailored programs have been shown to increase participants' knowledge and confidence regarding nutrition and physical activity in ECEC settings. The importance of community consultation, building relationships and face-to-face delivery of training being highlighted as key enablers (Murtha et al., 2021).

Equity Need

Infants and young children

In Australia, there are increasing numbers of infants and young children (IYC) in ECEC services, with around one-third of all children of birth to two-years age in formal care (Baxter, 2015). In spite of this, guidance, support, policies and legislation for IYC feeding in ECEC settings is lagging, increasing ambiguity and health and safety risks to this vulnerable age group (McGuire et al., 2018). Opportunities exist for leadership in promoting and achieving best practice to foster nurturing care for IYC feeding in ECEC settings. Increasing educator knowledge, efficacy and agency in IYC feeding is important in rectifying inequities (McGuire et al., 2020). Provision of quality practice in ECEC settings will promote short-term and long-term optimal health of infants, with potential health benefits throughout the lifespan (McGuire et al., 2020).

Equity Need

Rebalancing the focus on all key staff

Diversified interventions are needed to ensure all ECEC service provision staff are adequately supported to promote optimal health outcomes in ECEC settings. To date there has been a strong focus on educators' roles within a service, however the vital role of the cook tends to be less well supported. Children in ECEC benefit from cooks' commitment to providing safe

and nutritious foods; however, the requirements to extend their role to respond to increasing demands without relevant system-level support and training puts the children at risk of not being exposed to health-promoting menus and possible errors in providing dietary modifications. ECEC cooks urgently need access to system-level support and food and nutrition training, noting that NSW already delivers training workshops for cooks (Matwiejczyk et al., 2021).

Equity Need—Type of Service

Family Day Care

There is a need to support family day care (FDC) schemes to improve their nutrition environments, particularly those related to policies (Lum et al., 2021) and promoting safe and healthy eating and meeting dietary guidelines (Kerr et al., 2021). A systematic review of interventions to improve the dietary intake, physical activity and weight status of children attending FDC services aged 0–6 highlighted few existing interventions in family day care services and a need for high-quality controlled trials to identify effective interventions to improve children's diet, activity and weight in this setting (Yoong et al., 2020). Research however suggests that FDC services have substantial scope to improve the implementation of recommended healthy eating, physical activity and obesity prevention policies, practices and programs (Wolfenden et al., 2020; Lum et al., 2021).

Improvements

There is a need for more specialised support targeted to those most in need, such as:

✔ Support services and resources that address and reflect the diverse needs of different types of services in relation to food environments—Long Day Care, Family Day Care and Home Care.

✔ Focus on both lunch box services and food provision services, including external food service providers.

✔ Ensure the needs of children and families who have food allergies are considered in all elements of support services from policy and training to learning and engagement activities for children.

✔ Acknowledge and support the specific dietary needs of infants and young children, and increase educator efficacy to support through up to date training and professional development.

✔ Provide advice and support on inclusion of children with a disability.

✔ Acknowledge and reflect the diverse experiences of families such as families who may be food insecure.

✔ Food environments and supporting services and resources reflect and represent a variety of cultural and linguistically diverse backgrounds.

✔ Reflect and represent the needs and experiences of Aboriginal and Torres Strait Islander families and communities with respect to food environments and supporting services and resources.

✔ Reflect the range of contexts and lived experiences found across all services, the staff that work within the services and the communities they operate in when responding to healthy food environments.

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The National Nutrition Network—ECEC

The National Nutrition Network—ECEC is made up of individuals working in research, policy and practice across Australia and internationally and with a public health and ECEC focus, specifically in the areas of nutrition and public health and with most major programs, initiatives and organisations represented in its membership.



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