

Feeding Children Well

The importance of school lunches to education, health, and social outcomes, and impact on local food economies.

By Julie Dunbabin

Churchill Fellow 2018

Key Terms: nutrition, education, school meals system, universal school meals

Most countries recognise school meals as a vital investment in children, and a positive impact on national and local economies. Our current food-based interventions in Australian schools are not achieving their public health and education objectives. Our child obesity rates and school academic results rate poorly when compared with other developed countries. A national approach to universal school meals is needed for our children's health and educational potential, and to positively impact on our agrifood sector.

Australian governments have recognised the importance of good childhood nutrition through a number of national policies. The recently released *National Obesity Strategy*¹ identified that healthy policies and practices in schools and promotion of healthy behaviours in the Australian curriculum would help to prevent obesity. Strategy 1.10 highlighted the need for healthy school

canteens and menus. The importance of schools contributing to the success of these policies was recognised in 2019, when the Australian Government released *The Good Practice Guide: Supporting healthy eating and drinking at school.*² The guide noted that:

'Australian children are growing up in an environment where food and drink high in added sugars, saturated fats, and added salt are readily available, heavily promoted, and perceived as low cost. This trend results in the low intake of essential nutrients, poor oral health, sub optimal educational performance, and a higher risk of children being overweight or obese.'

While these strategies exist, there is little to no investment in their implementation through action planning, collaboration, implementation, or evaluation. Strong government policy on school food implementation at the national, state,

and territory level is needed to withstand food industry activity that encourages the consumption of highly processed foods. While reformulation efforts to reduce salt or increase fibre in foods to meet school canteen nutrient criteria is important, these changes have not resulted in children eating more fruit and vegetables and fewer foods high in sugar, saturated fat, and salt.

Internationally, school meals have been the norm since the end of World War II. This was instigated to entice children back to school after a long absence and the malnourished status of the population. For the past 75 years, these countries have seen extensive benefits of having a school lunch program – educationally, economically, socially and environmentally.

International experiences

In 2019, I visited seven countries (USA, England, Scotland, Finland, Italy, France and Japan) on a Churchill Fellowship³ to identify the factors that enable school lunch programs to impact positively on student health and wellbeing. I found:

- All students ate a school prepared lunch.
- Children sat down to eat for at least 20 minutes.
- Plain milk and water were the only drink options.
- Confectionary was not an option.
- Meals were prepared by a skilled workforce who enjoyed cooking for children.
- Local and seasonal produce were proudly used.
- School members and dietitians were involved in menu planning.
- Culturally and dietary diverse food was served.
- Menus and food language were based on the five food groups.
- Appropriate infrastructure was used to prepare and service food.

All seven countries I visited had national policies in place accompanied by resourcing to implement and achieve the objectives to feed all children while at school using sustainability practices. These ranged from cost recovery modelling to the use of local and seasonal produce on the menu.

These countries' school lunch programs have been established to provide an important opportunity for teaching children about nutrition and healthy eating habits. Reported outcomes of well-balanced school meals were improved concentration in class, improved academic outcomes, and fewer sick days. These programs also addressed food insecurity, supported student health and wellbeing through connectedness, and reduced overweight and obesity rates.

In the countries that I visited there was evidence that all levels of government had a role to play in the delivery of effective school lunch programs. In Italy, regional mayors were re-elected on the quality of school lunches provided. They were judged by parents, who had a very strong voice. There was also a regional economic benefit created for the agrifood sector through local sourcing and procurement by the schools.

Countries that developed and implemented dietary guidelines and nutrition standards at a national level utilised α multi-governance approach, with states being responsible for the provision of infrastructure and program monitoring, and local governments responsible for supporting employment and overseeing local schools.



Consideration of the issues

Australian children consume at least one-third of their daily food intake at school.⁴ This is potentially 2,400 meals over their school years. However, foods consumed during school hours are too often not consistent with *Australian Dietary Guidelines (2013)*.⁵ Around 44% of energy is consumed from discretionary foods⁶ (foods and drinks not necessary to provide nutrients the human body needs), less than 10% of children meet recommended vegetable serves,⁷ and one in four children aged 5 to 14 years are overweight (17%) or experiencing obesity (7.7%).⁸

A robust, universal school meals system is necessary to meet the appropriate food needs of children so that they can learn to the best of their ability, and be nourished appropriately to be able to grow physically and mentally. Schools are charged with providing access to quality curricula and to support physical, social, mental, and emotional health and wellbeing.⁹

The current Australian school meals system is complex, comprising of multiple delivery methods – packed lunches, school canteens/tuckshops, breakfast programs, fruit and vegetable recess programs, and other emergency food relief programs. Governance of these food delivery methods lacks coherence and a universal overview.

The Australian school meals system is ready for an overhaul. While what is currently done in the school food space is based on *Australian Dietary Guidelines*¹⁰ and *National Healthy School Canteen Guidelines (2011)*,¹¹ where children have broad choice, they choose what they know and what is on offer, and unfortunately this is too often pies, sausage rolls, and chicken nuggets. Or they are going hungry through being unable to access food.

The Good Practice Guide must become national policy and be adequately funded to support a food systems approach to feeding children well while at school, where lunch time provides time for a sit down meal as well as time for play. National and state food and nutrition policies must be resourced and implemented nationally to support a food system approach.

Like other countries that have established a school lunch program for all children, there needs to be a shift in Australia to provide school lunches that are nutritionally balanced, flavoursome, and cooked from locally sourced foods with minimal processing. International school food history shows that children fed well while at school reach their best educational and social potential. Schools cannot fulfill their educational mandate if students have inadequate access to healthy food during their school day. Children cannot learn on empty tummies.

School food programs can provide access to food for many of those who are currently vulnerable to food insecurity. There is often stigma experienced by children who are most in need to access food. It is also the case that regardless of parental income, the inclusion of high fat, sugar and/or salty foods on the school canteen menu (often at low price points) impacts on children's intake of nutritious food during their school day. Therefore, a successful school meals system needs to be universal, meaning that all children and youth, rather than targeted children and youth, are able to access nutritious and tasty food.

Who supports this call to action?

The World Health Organisation has identified schools as an important setting to enable children to understand what a healthy diet is and understand the importance of nutrition.¹²

A 2020 study conducted by Flinders University¹³ engaged a diverse range of stakeholders to generate and rank ideas on how the school meals system could be changed. Of the nine options generated, provision of a school lunch prepared on site was the highest ranked option for both impact and achievability. This school food model was described as 'food prepared onsite by a cook or team of kitchen staff for a sit-down meal, based on a rotational menu reflecting seasonal produce, minimally processed foods, and dishes representing different cultures'. The school food model was considered to reach the greatest number of students.

Numerous NGOs that support schools to provide nutritional food options for children have indicated that our current school food model is not working. There is a growing desire from schools to improve the food that children eat while at school to enable each child to achieve their best potential. This is from an academic, mental, and social perspective. Local sourcing through the procurement of nutritional food also enhances the economic opportunities for our Australian food growers and producers to be consumed by Australian children.

Case Study: a 2020 school lunch trial in Tasmania

The findings from my Churchill Fellowship informed the 2020 school lunch trial in Tasmania, which was funded through a Healthy Tasmania grant and implemented by School Food Matters Inc (formally the Tasmanian School Canteen Association) and evaluated by the Menzies Institute of Medical Research, University of Tasmania.

The pilot occurred in three schools and aimed to determine the feasibility of providing cooked lunches in Tasmania. Due to limited funding, year levels were selected and were provided with free, nutritious, cooked lunches for 20 days. The lunches were prepared from scratch using seasonal produce where possible.



The following findings were made:

- A sit-down cooked meal from scratch at school is possible with the right mix of staff and resources.
- The average food cost was \$1.91 per student for ingredients only (without any procurement factored in) and \$4.72 for ingredients and labour costs. The cost per lunch would decrease if more students were involved in the lunch program.
- Children enjoyed sitting down with their friends to eat.
- · Children enjoyed eating vegetables in the dishes.
- Children were able to concentrate better in class before lunch and after lunch.
- There was a reduced number of behavioural issues after lunch.
- There was an increase in student attendance during the pilot period of a month.
- There was a decrease in food packaging litter.
- Most (89%) parents were willing to pay \$3 to \$5 for a school lunch, with a discount for families with multiple children.
- Most parents (90%) would like a cooked lunch available every day.
- Use of local and seasonal produce connected with growers and school garden programs.

As a consequence to the 2020 feasibility study, in 2022 the Tasmanian Government provided \$1.87 million to expand the school lunch pilot to 15 schools and to a total of 30 schools by 2023. Factored in to this funding is a focus on infrastructure. This is a pilot and therefore identifying what is needed to run a successful lunch program will be paramount and will be useful for informing government at state and federal level about the scaling up to a universal, national school lunch program.







Top: School kids sitting down to lasagna for lunch. Left: Tofu salad. Middle: serving lunch. Right: meatballs, salad and cous cous. Image credit: Courtesy of Julie Dunbabin.

Stakeholder consultation

School meals have been shown internationally to be associated with a breadth of benefits for children, families, schools, the economy, and society. As found on my Churchill Fellowship, all of these elements were underpinned by policy commitments and implementation from governments that had strong connections to agricultural industries and a focus on sustainable food systems. Health and education departments were also key stakeholders to the delivery of school meals.

Preliminary consultations as part of the 2020 Tasmanian feasibility study (case study) and the results of the study's expansion in 2022 have been circulated widely in Australia. Consultations since have included:

- meetings/discussions with Tasmanian politicians from Liberal and Labor parties
- discussions with state canteen associations in WA, NSW, and Queensland
- discussion with the Director Health Promotion, Department of Education, ACT
- discussions with staff from the Office of the Children Commissioner in SA and
- liaising with Caring Futures Institute, Flinders University.

Policy recommendations

- 1. The National Cabinet should establish and facilitate a key stakeholder roundtable to:
 - · identify the benefits and challenges of a universal school lunch program through a whole-of-government policy approach, particularly education, health, community, and agriculture
 - explore extending the Tasmanian School Lunch Project (2020-23) from a state project to a national program, serving nutritionally balanced, safely prepared meals on every school day to all students.
- 2. The National Cabinet should resource the implementation of current national policies, such as the National Obesity Strategy (2022-2032) and guides such as the Good Practice Guide (2019) that relate to school meals, through action plans and adequate funding.
- 3. The Federal Government should resource the implementation of the 2019 Good Practice Guide, to shape the development, monitoring, and evaluation of a national school lunch program where food is procured locally and seasonally, increasing employment opportunities for our farmers.

'A universal school-provided lunch model could help to ensure ALL children have access to food at school, reduce stigma of children not having lunch or having different types of foods to their peers, and help to ensure children are provided with healthy lunch options.'

- Professor Golley, Flinders University.14

Acknowledgements

I would like to thank Monique Reardon -Senior Public Health Nutritionist, Public Health Services, Department of Health, Tasmania and Leah Galvin, Food Systems Consultant, BAppSci (Hons), CF, Public Health Nutrition Consultant, who provided invaluable expertise, advice and insight through their peer reviewing of this article. Any errors or omissions are my own.

Julie Dunbabin is a teacher and health promotion advocate specialising in child and adolescent nutrition. As School Lunch Project Manager of non-government organisation School Food Matters, she takes a whole school approach to improving school food culture, focusing on the important relationships between children. school meals systems, communities, and local food growers and producers.

References and endnotes

- Commonwealth of Australia, National Obesity Strategy 2022-2032, Health Ministers meeting, 2022.
- Commonwealth of Australia, *National Preventive Health Strategy 2021–2030*, Department of Health, 2021.
- Dunbabin, J. The Elvie Munday Churchill Fellowship to investigate the factors that enable school lunch programs to impact positively on student health and wellbeing. Churchill Fellowship Report: The Winston Churchill Memorial Trust, 2020. https://www.churchilltrust.com. au/project/the-elvie-munday-churchill-fellowship-to-investigate-factors-that-enable-school-lunch-programsto-impact-positively-on-student-health-and-wellbeing/
- COAG Health Council and Education Council, The Good Practice Guide: Supporting healthy eating and drinking at school, COAG Health Council and COAG Education Council, 2019.
- National Health and Medical Research Council (NHMRC), Australian Dietary Guidelines. Canberra: NHMRC, 2013. NHMRC, Australian Dietary Guidelines. NHMRC, Australian Dietary Guidelines.

- Australian Institute of Health and Wellbeing (AIHW), Australia's health 2022: in brief, catalogue number AUS 241. Australia's health series number 18, AIHW, Australian Government, 2022
- AIHW, Australia's health 2022.
- Roeser, R, Eccles, J, and Sameroff, A, 'School as a context of early adolescents' academic and social-emotional development: A summary of research findings. *Th. Elementary School Journal*, 100, 5 (2000), 443–71.
- World Health Organization, 'Health promoting schools.' Accessed 12 August 2022. https://www.who. int/health-topics/health-promoting-schools
- NHMRC, Australian Dietary Guidelines. Johnson BJ, Zarnowiecki D, Hutchinson CL, Golley RK. Stakeholder Generated Ideas for Alternative School Food Provision Models in Australia Using the Nominal Group Technique. Int J Environ Res Public Health.
- 2020 Oct 29;17(21):7935. doi: 10.3390/ijerph17217935. Golley, RK. School-provided lunches a recipe for better nutrition? Flinders Caring Futures Institute News. January 29, 2021. https://blogs.flinders.edu.au/caring-futures-institute/2021/01/29/school-providedlunches-a-recipe-for-better-nutrition/