A Rapid Review of Australia's Food Culture

Reference ID: Health 19/20-E20132099



Prepared for

The Australian Government Department of Health

Healthy Food Partnership

by

Eithne Cahill (PhD)
Nutrition Insights Consulting

July 2020

CONTENTS

1.0 EXECUTIVE SUMMARY	3
2.0 BACKGROUND	5
2.1 SCOPE	5
2.2 METHODS	7
3.0 RESULTS	
3.1 CURRENT INITIATIVES IN AUSTRALIA	9
3.2 CURRENT RESEARCH IN AUSTRALIA	21
3.3 CURRENT PROGRAMS INTERNATIONAL	24
3.4 CURRENT EVIDENCE	26
4.0 DISCUSSION	34
5.0 THE FUTURE	37
APPENDIX	38

ACKNOWLEDGEMENTS: The author would like to acknowledge and thank all those who were approached and who generously gave of their time to assist with information to inform this report.

1.0 EXECUTIVE SUMMARY

The overarching vision of the Healthy Food Partnership (The Partnership) is to improve the dietary habits of all Australians by making healthier food choices easier and more accessible and by raising awareness of better food choices and portion sizes. Australian food culture has seen significant changes in recent decades as a result of dramatic lifestyle, workplace, technological, economic and societal changes. Many of these changes have negatively impacted our food choices and food behaviours and are associated with poor quality diets and weight gain. Concerns around the rates of overweight and obesity in Australia, in particular amongst children have potentially over time impacted the narrative around healthy eating.

Improving Australia's Food Culture will support healthier dietary habits more consistent with Australian Dietary Guidelines, thus encouraging Australians to eat well and live healthier lives. A new and unique piece of work to improve Australia's food culture is being considered which will draw on a number of elements already in play through the Healthy Food Partnership. A key aim of this work is to re-shape the narrative about healthy eating.

To inform this new work to Improve Australia's Food Culture, The Department of Health on behalf of the Healthy Food Partnership (The Partnership) commissioned this **Rapid Review of Australia's Food Culture.** Its' purpose is to gain a greater understanding of potential approaches to establish a more positive healthy eating narrative, one that promotes food enjoyment and the social, emotional and health benefits of eating with friends and family, to positively influence our food culture. The scope of this review is to:

- understand how current healthy eating initiatives talk to the value of enjoying eating together and eating context
- to understand the evidence base that supports this approach.

There are many programs across Australia (including food education, food literacy, food security, childhood obesity and general healthy eating initiatives) which encourage enjoyment of healthy eating together. Evaluation of comprehensive food education programs delivered through schools and in local communities demonstrate improved food enjoyment, food skills and healthy eating behaviours that can be sustained. These programs provide useful insights to inform approaches to improve our food culture. The role of food culture in supporting healthier eating is gaining traction in Australia as evidenced by some of the newer food and healthy eating strategies that talk directly to its importance.

Research on healthy 'eating together' has largely focussed on the family setting. Overall, it tells us eating together not only helps improve the quality of our diets, it can benefit our overall wellbeing and social connection. Strategies are needed to support busy families and households navigate the day to day stress of mealtime. These need to address the many barriers (e.g. time, energy and motivation) to make it easier, less stressful and more sustainable to enjoy healthy meals together.

While on the one hand family meals have been identified as an opportunity for health promotion, sociology researchers at Monash have cautioned "against promoting the evening family meal as an

imperative; a straightforward solution to complex social problems such as childhood obesity, family breakdown and depression."

With projected numbers of single households in Australia on the rise, dietary messaging also needs to consider the nature of dietary advice suitable for those living alone.

The drivers of food choice are complex. Messaging that only communicates about the benefits to health of healthier food choices may not be enough to motivate behaviour change – evidence suggests that reference to enjoyment, taste and social connection may be more fruitful motivators. These elements align with a more positive food culture. Including messaging about the positive benefits of enjoying eating together may help to nudge people towards achieving a healthy diet. Eat Well Tasmania uses healthy eating messaging that talks to the enjoyment of eating locally produced food, rather than to health benefits.

There are a number of research projects underway across Australia of relevance to this review. Having a greater understanding of the complex influences on our food behaviours of where, how and with whom we eat and enjoy food, will help to inform future approaches and messaging that successfully nudge us towards healthier eating. New dietary survey methodology allows future dietary surveys to capture more information on eating context to address our current knowledge gaps, where and how Australians are eating. This will also help to inform dietary guidelines to provide more practical guidance around the 'how' not just the 'what' of healthy eating. There has been a positive shift in this direction with international dietary guidelines e.g. the latest Canadian guidelines advise "Healthy eating is more than the foods you eat. It is also about where, when, why and how you eat." There is an opportunity for the Australian Dietary Guidelines to provide more guidance on eating context when they are reviewed. This would support clear consistent messaging around eating context to support healthier food and drink choices. We also need to better understand how the use of digital technology impacts how, where, what and with whom we eat.

Eating together facilitates social connection. The increase in social isolation and loneliness brought about by the introduction of physical distancing measures during the COVID-19 pandemic has highlighted the fundamental importance of social connection to our wellbeing.

Food security is a significant and growing issue which impacts our ability to enjoy healthy eating. In the last year, more than one in five Australians (21%) i.e. 5 million Australians have run out of food and have been unable to buy more. With the COVID crisis these numbers will significantly increase. Food literacy has been described as "A collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat foods to meet needs and determine food intake." More research is needed to examine the relationship between food literacy and healthy eating more broadly including food security, social connectedness and ecological sustainability.

Beyond the remit of The Partnership, it is worthwhile exploring the collective vision for Australia's Food Culture. Ideally efforts to improve Australia's food culture could be led at a higher policy level across government (food, agriculture, health and education).

2.0 BACKGROUND

The overarching vision of the Healthy Food Partnership (The Partnership) is to improve the dietary habits of all Australians by making healthier food choices easier and more accessible and by raising awareness of better food choices and portion sizes. Australian food culture has seen significant changes in recent decades result from a combination of lifestyle, employment, technological and societal changes. Food culture refers to the practices, attitudes, and beliefs as well as the networks and institutions surrounding the production, distribution, and consumption of food.¹ Improving Australia's food culture will support healthier dietary habits more consistent with Australian Dietary Guidelines, thus helping Australians to eat well and live healthier lives.

The Department of Health has proposed a new and unique piece of work to improve Australia's food culture which will draw on a number of elements already in play through the Healthy Food Partnership Initiative. A key aim of this work is to reshape the narrative around healthy eating. There is an opportunity for the partnership to contribute to building a more positive food culture that promotes food, food enjoyment and wellbeing. To inform this new piece of work, The Department of Health on behalf of the Healthy Food Partnership commissioned this **Rapid Review of Australia's Food Culture**.

2.1 SCOPE

Food is extremely complex. "Food is the expression of values, cultures, social relations and people's self-determination, and the act of feeding oneself and others embodies our sovereignty, ownership and empowerment. When nourishing oneself and eating with one's family, friends and community, we reaffirm our cultural identities, our ownership over our life course and our human dignity.

Nutrition is foundational for personal development and essential for overall well-being." (FAO, 2014).²

The term food culture captures a wide range of diverse and interrelated elements that span across food behaviours, food systems and the food environment. Modern food culture has seen a significant shift in eating behaviours associated with undesirable dietary patterns such as immediate consumption, eating alone and snacking.³ These behaviours are associated with weight gain and poor dietary choices.⁴ Concerns around the rates of overweight and obesity in Australia, in particular amongst children have potentially over time impacted the narrative around healthy eating. Prof John Coveney, Professor of Global Food Culture and Health at Flinders University (South Australia) has described and compared the school food cultures of Australia with those of France.⁵ In Australia school food and health programs are focussed on addressing obesity, while in sharp contrast in

¹ What is food culture and how does it impact health? Available at: https://www.thewellessentials.com/blog/what-is-food-culture-and-what-does-it-have-to-do-with-our-health?rq=food%20culture [accessed June 28, 2020].

² Food and Agriculture Organisation WHO, editor Public Interest Civil Society Organizations' and Social Movements' Forum Declaration to the Second International Conference on Nutrition (ICN2). Second International Conference on Nutrition; 2014; Rome, Italy.

³ Fayet-Moore F et al (2017). Weekday snacking prevalence, frequency, and energy contribution have increased while foods consumed during snacking have shifted among Australian children and adolescents: 1995, 2007 and 2011-12 National Nutrition Surveys. *Nutr J*; Oct (1):65.

⁴ Ovaskainen ML et al (2006). Snacks as an element of energy intake and food consumption. Eur J Clin Nutr; 60(4): 494-501.

⁵ Food Sustaining Societies & Cultures. Prof John Coveney Presentation to Public Health Association of Australia (PHAA). Available at: https://www.phaa.net.au/documents/item/3187 [accessed June 8, 2020].

France the focus is on promoting taste and enjoyment. "Cultures are often invisible until one culture is compared with another."

The 2018 Senate Enquiry into Obesity examined in detail a number of issues around food behaviours and food environments e.g. high consumption of discretionary foods, food labelling, advertising, marketing and promotions, dieting, weight loss surgery and eating disorders. Specific recommendations were prepared in the accompanying report⁶ to address these through a National Obesity Strategy. Of relevance to the topic of Food Culture is Recommendation 14, which talks to the need for educational campaigns to be context dependent, build on cultural practices and improve nutrition literacy, food and lifestyle behaviours.

Recommendation 14

8.22 The committee recommends the proposed National Obesity Taskforce is funded to develop and oversee the implementation of a range of National Education Campaigns with different sectors of the Australian community. Educational campaigns will be context dependent and aimed at supporting individuals, families and communities to build on cultural practices and improve nutrition literacy and behaviours around diet, physical activity and well-being.

This review does not seek to duplicate these issues i.e. high consumption of discretionary foods, food labelling, advertising, marketing and promotions, dieting, weight loss surgery and eating disorders that were extensively considered by the Select Committee into the obesity epidemic in Australia. The scope for this rapid review of Australia's Food Culture is to:

- Assemble an overview of relevant work underway in Australia (campaigns, collaborations or research initiatives) where enjoyment of 'healthy' eating together*/eating context is a focus.
- Examine the evidence base that describes the impact of encouraging enjoyment of healthy eating together and how this might contribute to improving food culture
- Identify knowledge gaps, barriers, challenges etc.
- Provide insights that can inform future efforts to improve Australia's Food Culture.
 - * 'Eating together' does not of itself result in healthy food choices.
 - ** While 'eating together' often centres on family meals, this report intends this to also capture eating together in households/households with children.

To provide additional context, the review was conducted during the COVID-19 pandemic. An event that has impacted all aspects of our day to day living, with a significant impact on our eating habits e.g. food selection and availability, food preparation and purchase, affordability, eating out, eating take away and our ability to enjoy meals with family and friends. All of these factors are relevant in the consideration of Australia's current and future food culture.

Insights

- Eating together is a hugely important social activity. Eating together sits at the core of human evolution and is a ritual with commonality across cultures.
- Concerns around the rates of overweight and obesity in Australia, in particular amongst children have potentially over time impacted the narrative around healthy eating.
- "Cultures are often invisible until one culture is compared with another."

⁶ The Senate Select Committee into the Obesity Epidemic in Australia Final Report (2018). Available at: https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Obesity_epidemic_in_Australia/Obesity/Final_Report_[Accessed 28 June 2020].

2.2 METHODS

This rapid review was conducted between May 21 and June 30, 2020. An agile, iterative approach was adopted in the conduct of the rapid review⁷ with regular engagement with the Contact Officer to ensure a fit for purpose output was delivered for The Partnership in the available timeframe.

- 1. Desktop research was conducted to identify relevant work currently underway in Australia (i.e. campaigns, initiatives, collaborations, research) which focus on the key food behaviour aspect of interest i.e. food enjoyment and the social, emotional and health benefits of eating together. (This included activities of State Health Departments, NGO's, Local Councils, Schools, Retailers, and Researchers).
 - With the Department's approval and using an agreed introduction a number of individuals and organisations were approached directly to assist with identification of relevant work.
 - Key findings and synthesis of relevant details including implementation and evaluations (where available) were captured. Any related publications or key references available to support this work was noted and screened as part of the evidence review (Step 2).
 - While the focus was on Australian based activities, any initiatives of note from overseas (in similar jurisdictions e.g. UK, US, Canada and NZ) were also captured.
- 2. A search of the published literature using PubMed database was conducted to review the evidence on these behavioural aspects of Food Culture in Australia to assist in understanding:
 - How the current food narrative impacts food behaviours, food consumption & health/wellbeing.
 - How food enjoyment and social connection impact food behaviours, food consumption
 & health/wellbeing.
 - Who's actively researching in this area, who are the key research and opinion leaders in this field?
 - What aspects on the above dimensions have been proven to positively impact on diet quality, health and wellbeing?

The literature was reviewed using the following search terms (informed by Step 1) using PubMED database: Family Meal, Shared Meal, Commensality (*refers to the positive social interactions that are associated with people eating together*) and Eating alone. The original scope of the search was limited to papers published in English between 2015-2020. Additionally, the literature search was supplemented by publications of interest identified in Step 1. Relevance to the Australian context and the quality of evidence was considered. Exclusion criteria included studies of infants under 12 months, studies involving subjects with disordered eating such as anorexia or bulimia and conditions such as metabolic

⁷ Tricco et al (2017). Rapid reviews to strengthen health policy and systems: a practical guide. Geneva: WHO. Available at: https://www.who.int/alliance-hpsr/resources/publications/rapid-review-guide/en/ [accessed May 30, 2020]

- syndrome, diabetes and autism. It was considered valuable to also capture relevant insights from qualitative data and the grey literature.
- 3. To complete the task within the timeframe available, data screening, extraction and synthesis was performed by a single reviewer. This informed the identification and discussion of key insights, discussion of knowledge gaps and challenges for The Partnership to consider for future work to improve Australia's Food Culture.

3.0 RESULTS

3.1 RESULTS - CURRENT INITIATIVES IN AUSTRALIA

Insights:

- A number of food and healthy eating strategies across Australia acknowledge the important role of food culture to support healthier eating.
- From the initiatives identified, encouraging the enjoyment of eating together is typically one of a number of elements within a program, rather than a key focus.
- Evaluation of food education programs delivered through schools and in local communities where enjoyment of eating together is a focus, demonstrate improved food enjoyment, skills and healthy eating behaviours.
- International initiatives tend to be more holistic and talk to the broader health and wellbeing benefits of eating together with family, friends or community.
- Food security is a significant and growing issue which impacts the ability to enjoy healthy eating. In the last year, more than one in five Australians (21%) i.e. 5 million people have run out of food and have been unable to buy more.
- Food Literacy is a term to describe "A collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat foods to meet needs and determine food intake."
- More research is needed to examine the relationship between food literacy and healthy eating more broadly including food security, social connectedness and ecological sustainability (all of which influence food culture).
- The emergence of the term 'food literacy' may relate to the inadequacy of existing measures to capture the complexity of knowledge, skills and behaviours used to meet day-to-day food needs.

A diverse range of initiatives that actively support or encourage enjoyment of 'healthy' eating together was identified from across Australia. These provide a valuable, but not exhaustive overview of relevant current work. Their focus is often on addressing broader issues such as food education and food literacy, food security, sustainable food systems, child obesity, heart health, while others promote general healthy eating. Encouraging the enjoyment of healthy eating together is typically one of numerous elements within a program, rather than a key focus.

Frequently initiatives target a specific population e.g. families with pre-school or young children, adolescents, or vulnerable groups. Initiatives can operate at a local community, state or national level and are managed by a diverse range of entities including community organisations, not-for-profits, health departments, companies, industry associations and volunteer groups.

Evaluation data examining the impact of approaches encouraging enjoyment of eating together is scarce, with the exception of some of the larger well-funded, longer term initiatives where this element is a key focus such as The Stephanie Alexander Kitchen Garden Program or The Good Foundations Jamie's Ministry of Food. That said, some valuable insights and learnings have been identified from the various initiatives, that can inform considerations of approaches to improve Australia's food culture. These are discussed in the following section.

3.1.1 Strategy

There are a number of food and healthy eating strategies across government and NGO's which acknowledge the important role of food culture to support healthier eating.

FOCUS AREA Food cultures

Our food culture has changed significantly in recent years. Victorians' diets now transcend seasonality, meals and snacks are commonly consumed outside the home, and people are increasingly disconnected from food preparation and cooking.

What will success look like?

A shift in attitudes and norms towards healthier food cultures.

Food manufacturers and retailers expose Victorians to an array of food products, many of which are ultra-processed and heavily marketed.

Building on our experience of developing an <u>Alcohol Cultures Framework</u>, we will seek to better define and understand how food culture influences eating habits.

Over the next four years, we will:

- review the evidence on food cultures and effective ways to shift expectations, beliefs and social norms towards healthier eating
- work with partners and communities to co-develop healthy eating messages that reflect
 a contemporary understanding of food, and resonate strongly with decision-makers and
 people most at risk of diet-related poor health
- use this evidence to influence food cultures in Victoria, along with the healthy eating
 policies and practices of organisations and government.

Victorian Health Promotion Foundation (Vic Health) Healthy Eating Strategy 2019-20238

As an example, food cultures are one of three focus areas (along with sports settings and fruit and vegetable consumption) detailed in the Victorian Health Promotion Foundation (Vic Health) **Healthy Eating Strategy 2019-2023** released in August 2019. Vic Health describe how "Our food culture has changed significantly in recent years. Victorians' diets now transcend seasonality, meals and snacks are commonly consumed outside the home, and people are increasingly disconnected from food preparation and cooking." Based on earlier experience of developing an 'Alcohol Cultures Framework', Vic Health plan to better define and understand how food culture influences eating habits. Their approach to changing alcohol culture focussed on three separate but overlapping elements: settings, social know-how or skills and the shared meaning of drinking together. Their Alcohol Cultures Framework captures critical components of culture change and details step by step actions. This Framework was developed in partnership with experts in alcohol policy and research.

However, on enquiry with Vic Health as part of this review, it was learnt that Vic Health's Healthy Eating Strategy (2019-2023) has since its release last year been revised. The original focus on food culture has evolved more broadly to address healthy & sustainable food systems. The details of the revised strategy are not currently publicly available. Additionally, of relevance to the Partnership's interest in reframing the narrative around healthy eating, Vic Health are currently actively exploring the approach of using 'values-based messaging' to influence behaviour change towards healthier eating, rather than fact-based messaging⁹. Based on this new way of thinking about messaging, VicHealth are currently reviewing their communications in line with this approach.

⁸ Healthy Eating Strategy 2019-2023. Victorian Health Promotion Foundation. Vic Health August (2019). https://www.vichealth.vic.gov.au/media-and-resources/publications/vichealths-strategic-approach-to-healthy-eating [Accessed June 8 2020].

⁹ Values-based messaging for health promotion. Vic Health. Available at: https://www.vichealth.vic.gov.au/media-and-resources/hpcomms [Accessed June 8, 2020].

Within the policy setting, a food systems approach is increasingly being adopted to encourage a healthy food culture and the enjoyment of food and healthy eating is positioned within this broader context. An example of this approach is **Greater Bendigo's Draft Food System Strategy (2020)**. ¹⁰

"Greater Bendigo's food system is shaped by and shapes, in turn, all aspects of our life. This includes the culture that informs our food and drink choices, to our environment that determines what can be grown, where and when; and the economic and political forces that shape access to food and drink. Cultivating local food systems can significantly enhance the health and wellbeing of communities; improve the availability of and access to nutritious food; strengthen the local economy; and revitalise urban and natural environments."



"The food system includes all of the steps it takes to get food (and drink) on our plate. This includes how food and drinks are grown and produced, processed, packaged and distributed, marketed, sold, consumed and then disposed of. A local food system aims to create a more direct link between producers and consumers, through the food system stages. A strong local food system not only has health and environmental benefits, but also benefits local economies through job creation, greater investment in local businesses and increased farm viability"

Eat Well Tasmania Strategic Plan (2018-2023)

The current vision of the Eat Well Tasmania Strategy¹¹ speaks directly to food culture. "In 2025 Tasmania will have a strong food culture supported by a policy environment that values eating well."

The Eat Well Tasmania program is focussing on campaigns called 'We Eat Local' and 'What's in Season' both of which seek to promote a local food culture which is believed will lead to healthier eating, support local jobs and develop a local food culture. This approach has been informed by insights and consumer research, ¹² pointing towards use of seasonality to frame talking about healthy eating as both engaging and successful for influencing food choices and food culture.

¹⁰ Greater Bendigo's Draft Food System Strategy (2020). Available at: https://www.bendigo.vic.gov.au/sites/default/files/2020-01/Draft-Greater-Bendigo-Food-System-Strategy.pdf [Accessed June 1, 2020]

¹¹ Eat Well Tasmania Strategic Plan 2018-2023. Available at: https://www.eatwelltas.org.au/wp-content/uploads/2019/05/EWT_Strategic-Plan-2018-23.pdf [Accessed June 28, 2020].

¹² Eat Well Tasmania Annual Report 2018/19. Available at: https://www.eatwelltas.org.au/wp-content/uploads/2019/10/EWT Annual-Report 1819 Highlights-1.pdf [Accessed June 28, 2020].

The Good Practice Guide – Supporting Healthy Eating and Drinking at School (Good Practice Guide) 2019¹³ developed by COAG Health and Education Councils describes evidence informed best-practice approaches for schools and communities to consider in their local environment, making it easier to identify actions that contribute to a healthy food and drink school culture. Their vision, "All Australian schools have a healthy food and drink culture that maximises student wellbeing and achievement."

The Good Practice Guide is one component of a three-part national approach to strengthen efforts to support healthy eating at school. It clarifies the actions required to respond to the *Joint statement from the Council of Australian Government Education and Health Councils — Promoting and Supporting Healthy Food and Drink Choices at School.* It supports school communities to create environments where students are enabled and supported to make informed healthy food and drink choices. Of interest to this review, the guide includes recommendations around eating context including allocation of a pleasant eating space for students to eat together, adequate time, reinforcement of healthy eating behaviour at home and need for consistency of healthy food and drink policies to encompass the broad range of school activities, celebrations and settings where food and drink are supplied in the school environment.

_

¹³ The Good Practice Guide: Supporting healthy eating and drinking at school. Published by COAG Health Council and COAG Education Council (July 2019).

3.1.2 Food Education

The Stephanie Alexander Kitchen Garden Program



A key initiative of interest is the Stephanie Alexander Kitchen Garden Program which has at its core, the ritual of sharing a meal. Delivered through a school-based kitchen garden program, 'pleasurable food education' teaches children to grow, harvest, prepare and share fresh, seasonal, delicious food in order to form positive food habits for life. It is designed to be fully integrated into the school curriculum and offers a wide range of benefits including supporting student health and wellbeing, encouraging critical thinking and teamwork, and engaging families and communities to positively influence local food cultures.

'Pleasurable food education' is delivered to children across Australia by the Stephanie Alexander Kitchen Garden Foundation, a not-for-profit charity that provides the inspiration, information, professional development and support for educators through the program. Established by Stephanie Alexander AO in 2004, the motivation for this work came from Stephanie's awareness of the growing childhood obesity problem in Australia. The only national initiative of its kind, today the Stephanie Alexander Kitchen Garden Foundation supports almost 2000 Australian early childhood services, primary and secondary schools across Australia to deliver pleasurable food education, and this community is growing. The Kitchen Garden Foundation partners with government, corporate, philanthropic organisations and individuals to support positive change in the food habits of children in Australia.

A Department of Health and Ageing-funded national evaluation of the Stephanie Alexander Kitchen Garden National Program (SAKGNP) was undertaken between 2011-2012 by the Centre for Health Service Development at the Australian Health Services Research Institute, University of Wollongong. The evaluation confirmed positive impacts of the Program¹⁴ providing evidence that the SAKGNP had enabled primary school students in Years 3 – 6 across Australia to participate in enjoyable food experiences that have included how to grow, harvest, prepare and share seasonal fresh food.

¹⁴ Yeatman H, Quinsey K, Dawber J, Nielsen W, Condon-Paoloni D, Eckermann S, Morris D, Grootemaat P and Fildes D (2013). Stephanie Alexander Kitchen Garden National Program Evaluation: Final Report. Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong. Available at:

https://www.kitchengardenfoundation.org.au/sites/default/files/food%20education/sakgnp_evaluation_uow_finalreport_2012.pdf [Accessed June 5, 2020]

The 'What's Cooking' study in conjunction with The University of Melbourne was the first to measure long-term impact in the Foundation's 15-year history. The results show that 84% of those surveyed agreed it had a positive impact on their lives, with 58% of these reporting it increased their enjoyment of school as well as an increased respect for fresh and seasonal produce. The program increased children's willingness to try new foods and improved children's knowledge and confidence in relation to growing, preparing, cooking and eating a diverse range of fresh foods. ¹⁵

Jamie's Ministry of Food.

Another initiative of note is Jamie's Ministry of Food. The Good Foundation established in 2010, focuses on programs and projects that promote good health and nutrition, with Jamie's Ministry of Food their first priority program. Their vision is to lead the transformation of Australia's food habits through advocacy, program delivery and collaboration to maximise the health, wellbeing and productivity of communities. A growing list of health problems affecting Australians are caused by poor diet and lack of food knowledge and skills affects all Australians. Obesity is now one of the nation's most significant health issues. Jamie's Ministry of Food Australia is a community-based program that teaches basic cooking skills to people over the age of 12 years from all backgrounds. Jamie Oliver's manifesto is to inspire individuals to cook simple basic meals from scratch both for themselves and their families. Cooking is an important life skill which everyone should learn. With the right sort of information and teaching, anyone can learn to cook. Cooking empowers people to take control of their lives and health.

The impact of Jamie's Ministry of Food Programs across Queensland and Victoria has been evaluated by Deakin University and The University of Melbourne¹⁶ ¹⁷. These evaluations report that the program not only increased participants' cooking confidence, knowledge, attitudes and beliefs towards cooking and healthy eating but shifted behaviour change towards healthier cooking and eating in the home. Participants were found to increase their vegetable consumption by over half a serve per day and this was sustained over the long term. Participants decreased their spending on take away foods, which enabled them to increase their spending on fresh fruit and vegetables with no overall increase to the weekly spend on food.

Other examples of state-based food education or food literacy initiatives targeting different population groups identified include:

The Food Embassy (SA)¹⁸ Connecting Community through food

https://www.kitchengardenfoundation.org.au/sites/default/files/Files/UoM SAKG Eval Report Final%20AUG%202019.pdf [Accessed June 5, 2020]

Health 14:1161. Available at: https://doi.org/10.1186/1471-2458-14-1161

¹⁵ Block, K., Carpenter, L., Young, D., Hayman, G., Staiger, P., & Gibbs, L., (2019). What's Cooking? Evaluation of the long-term impacts of the Stephanie Alexander Kitchen Garden Program, University of Melbourne: Centre for Health Equity, Melbourne School of Population and Global Health. Available at:

¹⁶ Flego A, Herbert J, Waters E, Gibbs L, Swinburn B, et al. (2014). Jamie's Ministry of Food: Quasi-Experimental Evaluation of Immediate and Sustained Impacts of a Cooking Skills Program in Australia. PLoS ONE 9(12): e114673. doi:10.1371/ journal.pone.0114673
¹⁷ Herbert et al. (2014). Wider impacts of a 10-week community cooking skills program - Jamie's Ministry of Food, Australia. BMC *Public*

¹⁸ The Food Embassy (SA) Available at: https://www.thefoodembassy.org/ [Accessed June 5, 2020]

In partnership with local youth centres, their Cook for Community program allows young people to develop skills in healthy cooking as well as giving back to those in need. Meals created by young people are donated to local emergency food relief organisations.

Food Sensations for Adults (WA)¹⁹ - A four-week comprehensive adult food literacy programme which covers topics such as the Australian Guide to Healthy Eating, label reading, meal planning and budgeting, mindful eating, supermarket tours as well as cooking and food safety. The Food Sensations programme is offered to people from low to middle incomes with an interest in improving their food literacy skills. The programme is predominately face to face or can be accessed via videoconference to regional and remote areas of WA. It is funded by the Department of Health WA.

The Family Food Patch program (TAS)²⁰ - Aims to improve the health and wellbeing of Tasmanian children and families through promotion of eating well and being active. Using peer education, Family Food Patch empowers families and local communities by building and mobilising skills in children's nutrition and food literacy, physical activity and community action. Activities include: Hosting practical food activities like taste testing, cooking or sharing meals at community venues. Since 2001, training has been provided to over 400 parents, carers and community/health workers in over 30 different locations throughout Tasmania. Child Health Association of Tasmania (CHAT), receives funding from the Tasmanian State Government, through the Department of Health, to provide Family Food Patch.

3.1.3 Childhood Obesity

Go4Fun® (NSW)²¹ - is a free healthy lifestyle program for NSW children aged 7-13 years who are above a healthy weight, and their families. run by qualified health and community professionals It helps children to improve their eating habits, fitness and confidence. Sessions are once a week for 10 weeks, during school terms. Week 8 of the program talks about family priorities and rules (addressing eating behaviour, sharing meals at the table without tv or screens). More than 13,000 families have participated in the Go4Fun program since it started in 2011. Eight years later, Go4Fun® has expanded into three versions: standard Go4Fun®, Aboriginal Go4Fun® and Go4Fun® Online.

Growing Good Habits (Qld)²² - With more than one in four Queensland kids overweight or obese, and a high proportion of these likely to remain overweight as adults, this website aims to help families, communities, health professionals and researchers solve the problem together.

The *Growing good habits* website offers tips and advice on a range of common lifestyle issues that play a part in maintaining a healthy weight, ideas for physical activity, practical ways to improve nutrition, child-friendly and tasty recipes as well as the latest news and research on childhood obesity. *Growing good habits* is (an initiative of Children's Health Queensland, the Queensland Child and Youth Clinical Network and The University of Queensland). This online resource includes a Family Toolkit which provides tips for parents to model healthy eating habits and encourages them to eat together and connect with their children at mealtimes (without the TV).

¹⁹ Food Sensations for Adults (WA) Available at: https://www.superherofoodshq.org.au/fsa/ [Accessed June 5, 2020]

²⁰ The Family Food Patch program (TAS). Available at: http://www.familyfoodpatch.org.au/ [Accessed June 5,2020]

²¹ Go4Fun® (NSW). Available at: www.go4fun.com.au [Accessed June 5,2020]

²² Growing Good Habits (Qld). Available at: https://www.growinggoodhabits.health.qld.gov.au/family-toolkit/making-changes/ [Accessed June 5,2020]

Schools

Julie Dunbabin, Executive Officer of the Tasmanian School Canteen Association provides an interesting perspective from her 2018 Churchill Travel Fellowship. She undertook her travels to investigate factors that enable school lunch programs to impact positively on student health and wellbeing – across the UK, Netherlands, France, Finland, USA and Japan. In her report she contrasts the school lunch food culture of these countries with that of Australia. ²³ She believes Australian schools would benefit from 'a shift in food culture that enhances time with their friends through sharing and enjoying food.'

For example, from France:

"A school child's nutrition is essential for his or her growth, psychomotor development and learning abilities. The nutrition must be balanced, diverse and divided amongst the day: 20% of calories at breakfast, 40% of calories at lunch, 10% of calories for afternoon snack, and 30% of calories at dinner. Lunch time at school is an opportunity for students to relax and communicate with one another. It must be a special moment of pleasure and discovery."

France's Ministry of National Education²⁴

Whereas in Australia:

- Children have, at best, 10 minutes allocated to sitting at their desk or arranged seating to enjoy their lunch.
- Our culture is to eat food on the move.
- Children are generally more interested in playing than eating as they prefer to play in the short time allocated for their lunch period.

3.1.4 Food Security

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.²⁵

According to the United Nations' Food and Agriculture Organisation food insecurity is defined as individuals or households having limited or uncertain physical, social or economic access to sufficient, safe, nutritious and culturally relevant food. According to the latest national Foodbank report, ²⁶ in the last year, more than one in five Australians (21%) have been in a situation where they have run out of food and have been unable to buy more. That is the equivalent of five million people. At least once a week, around half of these people skip a meal (55%) or cut down on the size

²³ Julie Dunbabin (2020). To investigate the factors that enable school lunch programs to impact positively on student health and wellbeing. 'Julie's School Lunch Journey'. Available at: https://www.churchilltrust.com.au/fellows/detail/4340/Julie+Dunbabin [Accessed June 25, 2020]

²⁴ Rebeca Plantier. French School Lunch: Why Delicious and Nutritious Cafeteria Food is a National Priority in France (2019). eBooks.

²⁵ FAO Definition of Food Security. Available at: http://www.fao.org/economic/ess/ess-fs/en/ [Accessed June 5, 2020]

²⁶ Foodbank Hunger Report (2019). Available at: https://www.foodbank.org.au/wp-content/uploads/2019/10/Foodbank-Hunger-Report-2019.pdf?state=vic. [Accessed June 5, 2020]

of their meals to make their food go further (50%). At least once a week, three in ten food insecure Australians (30%) go a whole day without eating.

There are many initiatives across the country working to address food insecurity. An example is **The Community Grocer**, ²⁷ an independent social enterprise based in Victoria that supports the retail supply of low-cost fresh produce within community settings at risk of food insecurity. They run weekly affordable fresh food markets to support healthy connected communities in five locations across metropolitan Melbourne, which can often involve preparation and sharing of food. This initiative is seen as a dignified approach, offering people the choice to purchase fruit and vegetables at an affordable price, not as 'food relief' as such which can create dependency.

3.1.5 Food Literacy

Defining food literacy for the Australian context is a fairly recent occurrence. The emergence of this term may relate to the inadequacy of existing measures to capture the complexity of knowledge, skills and behaviours used to meet day-to-day food needs. Measures tend to either focus on just one element, such as cooking, food skills, eating competence, nutrition knowledge or food preparation or have been developed to describe consumer behaviour rather than to describe protective or risk factors for health.

Vidgen & Gallagos (2012)²⁸ who have extensively researched this topic and its components define food literacy as:

"a collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat foods to meet needs and determine food intake."

"the scaffolding that empowers individuals, households, communities or nations to protect diet quality through change and strengthen dietary resilience over time."

While they recommend, "more research is needed to examine the relationship between food literacy and healthy eating more broadly including food security, social connectedness and ecological sustainability".²⁹

²⁷ The Community Grocer. Available at: https://www.thecommunitygrocer.com.au/ [Accessed June 5, 2020]

²⁸ Vidgen H & Gallegos D. (2012). Defining food literacy, its components, developments and relationship to food intake: A case study of young people and disadvantage. Queensland University of Technology, Brisbane, Queensland. Available at: https://eprints.qut.edu.au/53786/ [Accessed June 10, 2020]

²⁹ Vidgen H & Gallegos D. (2014). Defining food literacy and its components. *Appetite*; 76:50-59. Available at: https://blogs.deakin.edu.au/apfnc/wp-content/uploads/sites/119/2015/06/Vidgen 2014 food-literacy-Appetite.pdf [Accessed June 10, 2020]

Figure 1. Describes the conceptual relationship between food literacy and nutrition

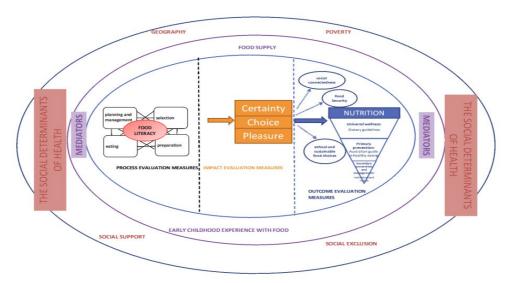


FIGURE 2: A CONCEPTUAL MODEL OF THE RELATIONSHIP BETWEEN FOOD LITERACY AND NUTRITION

Figure 2. Demonstrates the interdependence of the above to support food literacy. (Vidgen & Gallegos, 2014)



Fig. 3. The eleven components of food literacy derived from the Expert and Young People's Studies.

3.1.6 Food Marketing & Promotion

The Fruit & Vegetable Consortium

Established in May 2020 this consortium³⁰ brings together key organisations (including Nutrition Australia, Vic Health, Heart Foundation, Aus Veg, Health & Wellbeing Queensland, Stephanie Alexander Kitchen Garden, The Good Foundation, Deakin University) to collectively advocate for comprehensive joint action to improve Australia's fruit and vegetable consumption. Their mission is to develop more effective marketing and promotional interventions that will deliver significant long-term change to fruit and vegetable consumption. They call for greater investment to address Australia's low levels of fruit and vegetable consumption and are currently preparing a business case which will outline the investment needed for a sustained, comprehensive behavioural change campaign. The business case is expected to be finalised in the coming months. It will be of interest to learn how the proposed messaging captures shared enjoyment of eating together.

Cook with Heart

Coles recently teamed up with the Heart Foundation to encourage home cooks to create and share heart-healthy recipes in their kitchens, to improve their own wellbeing and raise vital funds to help save lives from heart disease. The campaign³¹ which ran in May 2020, with celebrity chefs inspiring Australian's to make delicious and heart-healthy recipes over the course of a week. Their goal of inspiring Aussie families to share tasty, healthy meals was at the heart of this partnership. "Our purpose at Coles is to sustainably feed Australians and help them lead heathy and happy lives and this is very much aligned to the Heart Foundation's vital work. As our community continues to follow social distancing practices, sharing food at home or through virtual channels strongly connects people during these uncertain times. Now's the perfect opportunity to try new recipes or improve your skills in the kitchen,"

Let's Make Dinnertime Matter

As part of this review, a previous MasterFoods Australia consumer campaign *Let's Make Dinnertime Matter* (2017) was identified.³² The campaign was informed by a survey the company commissioned around dinnertime to get a deeper understanding of how shared dinnertimes contribute to Australian's wellbeing and happiness. According to their survey, who you eat with is just as important as what's on your plate. Whether it's with family or friends, sharing a meal with others provides an opportunity to take time out of your busy day to connect with the people around you. They found that Australians recognised the benefits of dinnertime with 78% saying a home-cooked dinner with family delivers more emotional connection than a nice big hug. But at the same time, 75% of people aren't happy with their current dinnertimes. There are just too many distractions and people often don't have the time with 20% admitting they regularly eat dinner on their own.

(2017). Available at: https://www.masterfoods.com.au/lets-make-dinnertime-matter/ [Accessed June 5, 2020].

³⁰ The Fruit & Vegetable Consortium. Available at: https://www.thefvc.org.au/ [Accessed June 5, 2020].

 $^{{}^{31}\,}Cook\,with\,Heart.\,Available\,at:\,\underline{https://www.cookwithheart.com.au/event/cook-with-heart-challenge}\,[Accessed\,June\,5,\,2020].$

³² MasterFoods Australia consumer campaign Let's Make Dinnertime Matter

According to the campaign website:

"This study highlights that many Aussies are missing out on the health and wellbeing benefits that a shared dinner times offers. Dinnertimes make us feel happier, loved and cared for. Studies also show that family dinners help children to improve their academic performance at school."

In the available time, the White paper that informed this Masterfoods initiative and the campaign evaluation could not be sourced.

Workplace 'Feeding Connection'

Sharon Natoli, a Sydney based Dietitian with a background in nutrition, marketing, communication and business leadership has recently prepared a white paper on 'eating together' in the workplace. She is launching a new corporate program to encourage eating together at work and the benefits to employers and employee engagement as well as to broader wellbeing. She is finalising a new book on the topic 'Feeding Connection' due to be released in August 2020.

3.2 CURRENT RESEARCH IN AUSTRALIA

There are a number of research projects underway across Australia of relevance to improving Australia's food culture. Having a greater understanding of the complex interplay of factors influencing our food behaviours relating to where, how and with whom we eat and enjoy food, will help to inform future approaches and messaging that successfully nudge us towards healthier eating. This is an important and expanding area of research.

Prof John Coveney, Professor of Global Food Culture and Health at Flinders University South Australia leads an International Research Collective on Food Culture and Health which explores the intersections between food and health within a cultural context. The Research Collective seeks to improves nutritional and psychosocial health by reducing economic, health and social costs to people; whether they are vulnerable individuals, families, or even entire communities. Their focus is on optimising nutritional health by researching environments that provide healthy meals. The research aims to enhance social connectivity by encouraging people to share food on a regular basis. This empowers individuals, families, and communities to both have, and make choices that are beneficial to their health and wellbeing.

The Collective's current research is examining a number of areas including the social and health value of shared meals; the value of teaching primary school children about shared eating and family meals; the benefits of eating in company for older adults and how food security impacts family life.

The research group has recently published a systematic review of family meals recommending future interventions would benefit from using a range of strategies targeting the family meal, such as environment, use of technology, quality of food served and parental role-modelling.³³ The International Research Collective on Food Culture and Health is currently planning an online symposium of the Research Collective for August/September 2020 (details TBA).

Professor Sarah McNaughton leads the Dietary Patterns and Eating Behaviours Research Group at the Institute for Physical Activity and Nutrition (IPAN) at Deakin University. This work is focussed on research assessing dietary behaviours, diet quality and eating patterns, their determinants and role in health. Eating patterns refers to the ways in which foods are consumed together in discrete eating occasions, and includes measures of eating occasion patterning (frequency, size, timing/time of day, spacing of eating occasions, meal skipping), eating occasion format (food types, food combinations) and eating occasion context (includes the eating location, presence of others, activities occurring while eating). This program of research is aimed at understanding the characteristics of meals and meal patterns in the Australian population.

Meal patterns appear to be important, as they may influence health. However, little is known about how people consume meals during the day or how foods are consumed together. Her research team are conducting the Measuring Eating in Everyday Life (MEALS) Study. This project uses a smartphone

³³ Middleton G et al (2020). What can families gain from the family meal? A mixed-papers systematic review. *Appetite* 153 104725. Available at: https://www.researchgate.net/publication/341431454 What can families gain from the family meal A mixed-papers systematic review [Accessed June 20, 2020].

app to understand young adults' meal patterns and their determinants. This study funded by an Australian Research Council (ARC) Discovery grant will provide important insights into how young people eat and will help support the development of messages, strategies and interventions to promote healthy eating in this age group.

Prof Mc Naughton has also led a collaboration with the US National Cancer Institute and four other Australian research groups to develop an Australian version of the "ASA24", an online self-administered 24-hour recall tool used in dietary assessment. It includes optional modules to query where meals were eaten, whether meals were eaten alone or with others, television and computer use during meals, and source of foods consumed. Use of this tool will provide valuable behavioural insights and help address some of our key knowledge gaps around eating context. For example, using this novel dietary assessment tool, a study of 675 young Australian adults (18-30 years) identified that sugar sweetened beverages (SSBs) are predominantly consumed alone, at home, are purchased from supermarkets and consumed while undertaking screen-based activities. The study also found that SSBs are rarely consumed in isolation during eating occasions.³⁴

The Stephanie Alexander Kitchen Garden Program has a number of research initiatives in the pipeline. This includes plans to develop an online framework which will make future evaluation of the program easier. They are also looking to work with the Murdoch Children's Research Institute around future evaluation of the program, aiming to provide more academic evidence around the health, wellbeing and community outcomes. Additionally, they are exploring in collaboration with RMIT the potential of establishing online food communities.

Previous work by Hort Innovation has identified exposure, role modelling and conviviality (positive experiences and enjoyment) as effective ways to foster children's long-term vegetable acceptance. However, advice on how to encourage acceptance of vegetables in the early years of life is lacking. It has been estimated that just five per cent of two to six-year old children in Australia eat adequate amounts of vegetables. **The VegKIT**³⁵ project is addressing this issue by leveraging dietary advice opportunities to enhance age appropriate, evidence-based, practical advice as a sustainable way to increase longer term demand for vegetables. The project established in 2019 aims to increase the vegetable intake of Australian children. CSIRO, Flinders University and Nutrition Australia are working together to deliver VegKIT, an integrated \$4M five-year project designed to deliver tools and interventions for increasing children's vegetable intake.

This project is about getting children to enjoy vegetables, using knowledge about the development of taste preferences, and then using this information to find practical ways of addressing the problem. Part of this work will include revising dietary advice to mothers, working with childcare providers to improve children's experiences of vegetables and working with industry to make vegetable products more appetising for children. VegKIT aims to provide a national framework for promoting vegetable consumption and bring together a number of research and educational

³⁴ McNaughton, S.A., Pendergast, F.J., Worsley, A. *et al.* (2020). Eating occasion situational factors and sugar-sweetened beverage consumption in young adults. *Int J Behav Nutr Phys Act* 17, 71. Available at: https://doi.org/10.1186/s12966-020-00975-y [Accessed June 20, 2020].

³⁵ The VegKIT Project. Available at: https://www.vegkit.com.au/globalassets/vegkit/vegkit-infographic.pdf [Accessed June 10, 2020].

resources, with the ultimate aim of increasing vegetable intake by more than half a serving per day for every child.

The 'Time to Be Trial' Health trial, a NSW Health Promotion Healthy Lifestyle Program targeting parents of children 2-6 years with information on healthy eating, physical activity and sleep is currently underway. It includes a fact sheet on 'Positive family mealtimes' (resource not available to be shared). This resource has been developed based on the information on family meals from the Raising Children Network website³⁶. The trial is expected to be completed mid 2021 and should provide some useful insights.

The Healthy Meals Report³⁷ prepared by Meat & Livestock Australia (MLA) provides consumer insights around Australians meal choice and meal preparation habits (based on a nationally representative sample) These practical insights help our understanding of food behaviours.

- Home prepared meals feature five to six days a week (lunch/dinner).
- Value-for money is the key context for food choice.
- 17% of meals eaten at home are pre-prepared or purchased.

Edith Cowan University (ECU) is participating in a new global study seeking to explore the impacts of the COVID-19 crisis on people's food behaviours.³⁸ ECU nutrition researchers are surveying Australians as part of the project. It is hoped to understand the shifts in food consumption and shopping habits since the arrival of COVID-19 and how we're adapting and changing the way we eat, cook and source our food to provide a broader insight into pandemic behaviours and food literacy. The survey is led by the University of Antwerp in Belgium with collaborators from around the world. All Australians aged over 18 are invited to participate in the Corona Cooking Survey. This research will provide some valuable insights to inform healthy eating messaging in the COVID recovery era.

³⁶ Raising Children Network. Available at: https://raisingchildren.net.au/teens/family-life/family-meals-cooking/family-meals-tips [Accessed June 10, 2020].

³⁷ MLA Healthy Meals Report (MLA, 2020). Available at: https://www.mlahealthymeals.com.au/research/nutrition-communications/ [Accessed June 10, 2020].

³⁸ Online at: https://www.ecu.edu.au/news/latest-news/2020/04/covid-cooking-ecu-researchers-explore-how-coronavirus-is-changing-food-habits [Accessed June 27, 2020].

3.3 CURRENT PROGRAMS INTERNATIONAL

There are a variety of initiatives internationally encouraging the sharing and enjoyment of food. Family dinner programs and related initiatives have been quite common in the US for 20 years or more. They often target vulnerable or at-risk groups. What is striking, is that many of the international initiatives identified talk to the broader health and wellbeing benefits of enjoying healthy eating with others. In particular the social, emotional and mental health benefits and the importance of connecting with family, friends or community. Refer to Appendix (Page 45) for further details.

Scanning the international environment, several countries recognise the importance of contextual factors that support healthy eating in their food based dietary guidelines – Examples are provided in Table 1 opposite.

According to the FAO:

"Food Based Dietary Guidelines aim to contextualize scientific knowledge on food and nutrition within environmental, social, economic, and cultural aspects of human nourishment." ³⁹

While current Australian Dietary Guidelines (2013)⁴⁰ encourage to "Enjoy a wide variety of nutritious foods from these five groups every day"

Additional messaging in the guidelines around eating context, the where, how, with whom etc. may be helpful to support healthier eating. The latest Canadian Dietary Guidelines provide some practical, positive messages around eating context.

³⁹ Food and Agriculture Organization of the United Nations. (2007). A manual from the English- speaking Caribbean: developing food-based dietary guidelines. Rome: Food and Agriculture Organization of the United Nations.

⁴⁰ National Health and Medical Research Council (2013). Australian Dietary Guidelines. Canberra: National Health and Medical Research Council.

Table 1. Examples of International Dietary Guidelines that encourage enjoyment of eating with others and provide advice on eating context to support healthy eating.

Country	Dietary Guidance Includes:
Japan ⁴¹ (2010)	Enjoy communication at the table with your family and participate in the preparation of meals.
	Establish a healthy rhythm by keeping regular hours for meals.
Brazil ⁴² (2015)	These guidelines acknowledge the context of eating . Three aspects are considered: the time and attention devoted to eating, the environment where it occurs, and the sharing of meals. Chapter 4 of their guidelines, 'Modes of eating', addresses the circumstances - time, focus, place, and company - which influence how foods are metabolised by the body and also the pleasure afforded by eating.
	Eating regularly and carefully always when possible, eat daily meals at similar times. Avoid 'snacking' between meals. Eat slowly, with full attention, and enjoy eating without engaging in another activity. Eating in appropriate environments always prefer to eat in clean, comfortable, and quiet places, and where there is no stimulus to consume unlimited amounts of food. Eating in company Prefer eating together with family, friends, or colleagues. At home, share in acquisition, preparation, cooking and arrangements before and after eating.
Canada (2019) ⁴³	Healthy eating is more than the foods you eat. It is also about where, when, why and how you eat. Be mindful of your eating habits Take time to eat Notice when you are full and when you are hungry Cook more often Plan what you eat Involve others in planning and preparing meals Enjoy your food Culture and food traditions can be a part of healthy eating Eat meals with others

⁴¹ Dietary Guidelines for Japanese (2010). Available at: http://www.fao.org/nutrition/education/food-dietary-guidelines/regions/countries/Japan/en [Accessed June 10, 2020].

guidelines/regions/countries/Japan/en [Accessed June 10, 2020].

42 Dietary Guidelines for the Brazilian Population (2015). Ministry of Health of Brazil. Available at:
http://bvsms.saude.gov.br/bvs/publicacoes/dietary_guidelines_brazilian_population.pdf [Accessed June 10, 2020].

⁴³ Canada's Food Guide. Healthy Eating Habits (2019). Available at: https://food-guide.canada.ca/en/healthy-eating-habits/ [Accessed June 10, 2020].

3.4 CURRENT EVIDENCE

Insights

Family meals offer a rich opportunity to expose children to healthy foods. Family meals have the potential to shape children's eating routines and behaviours from an early age.

Coming together regularly for family meals has been associated with:

- Dietary and weight benefits for both adults and children
- Improvements in wellbeing
- Reduced risk behaviours and
- Fewer eating disorders in adolescents

It's not clear what aspects of family meals are responsible for these benefits.

Family connection and communication have been reported as the main perceived benefit of family meals, nutritional and physical health do not tend to be the main priorities.

How a family eats together was found to be at least equally important as how often. Six social, environmental and behavioural components of family mealtime have been identified that may help to explain why frequent family meals may be beneficial for children's nutritional health:

- turning the tv off at mealtimes
- better food quality
- parental modelling of healthy eating
- a positive atmosphere
- children's involvement in meal preparation
- longer meal duration

Barriers to households eating together include:

- conflicting work and school schedules,
- time commitment
- exhaustion
- food preferences

The complex and messy realities of everyday family food consumption is shaped by social structures such as gender, work and care interacting with micro level elements such as food preferences. Sociologists caution against promoting the evening family meal as an imperative; a straightforward solution to complex social problems such as childhood obesity, family breakdown and depression.

Based on data from the UK, Australia and the US, those who live alone consume a lower variety of food and are more likely to have an unhealthy diet since they consume fewer core food group foods (lone-living males are more susceptible to the likelihood of poor dietary intake than lone-living females).

The impact on food choices of the use of digital technology when eating as well as the use of technology to facilitate remote eating together i.e. 'digital commensality' require further exploration.

It may also be important to be more directive in developing nutrition messaging on the contextual influences of food choice.

3.4.1 Eating Together - What does the current evidence tell us?

Eating together is a hugely important social activity. Eating together sits at the core of human evolution and is a ritual with commonality across cultures. 'Commensality' refers to the positive social interactions that are associated with people eating together. Although the structure of commensal units (groups eating together) is potentially wide – work groups, social groups, leisure groups etc, the 'family' is regarded as the most influential commensal grouping. The role of the family meal and its impact on health and wellbeing has received significant attention across the scientific literature in the last few decades.

A significant proportion of this research has been conducted in the US where the 'family meal' typically involving parents with children or adolescents has been an area of interest for some time. The home remains an important target for intervention through family and nutrition education, outreach, and social marketing campaigns. ⁴⁴ The family meal looks different in different households, people hold different ideas of what a family meal means, the priority to be placed on it and how it should take place.

While the research has tended to examine meals in the context of traditional 'family' structures, to reflect modern society it is considered more appropriate to reference 'household' meals recognising the diversity of family structures.

3.4.2 Eating Together – The family meal

Family meals offer a rich opportunity to expose children to healthy foods. Family meals have the potential to shape children's eating routines and behaviours from an early age. A study of family mealtime characteristics among Australian families with young children⁴⁵ (aged six months to six years) provides some useful insights on family meals in the Australian context in terms of family meal frequency, common locations and TV viewing during mealtimes and their relationship with socioeconomic position (SEP). Their findings suggest that future nutrition promotion initiatives that focus on mealtime location and TV viewing during mealtimes, particularly in lower socioeconomic families provide opportunities for promoting healthy behaviours in families. From their research, family meals appear to be an important and frequent occurrence among Australian families. Their findings support the potential for promoting healthy behaviours targeting the family meal setting.

A systematic review and meta-analysis of healthy family meals⁴⁶ identified six social, environmental and behavioural components of family mealtime that may help to explain why frequent family meals may be beneficial for children's nutritional health: turning the tv off at mealtimes (watching tv while eating impairs the capacity to monitor food intake and respond to satiety cues), better food quality, parental modelling of healthy eating (children are more likely to eat a new food if an adult role model eats the same type of food), a positive atmosphere, (less likely to engage in emotional eating)

⁴⁴ Ziaudden et al (2018). Eating at food outlets and leisure places and "on the go" is associated with less-healthy food choices than eating at home and in school in children: cross-sectional data from the UK National Diet and Nutrition Survey Rolling Program (2008–2014). *Am J Clin Nutr*; 107:992–1003. Available at: https://academic.oup.com/ajcn/article/107/6/992/4993680 [Accessed June 10, 2020].

⁴⁵ Litterbach et al (2017). Family meals with young children: an online study of family mealtime characteristics, among Australian families with children aged six months to six years. *BMC Public Health*; 17: 111. Available at: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3960-6 [Accessed June 10, 2020].

⁴⁶ Dallacker M et al (2019). Quality Matters: A meta-analysis on Components of Healthy Family Meals. Health Psych; 38(12): 1137-1149.

children's involvement in meal preparation and longer meal duration (longer meals are associated with lower BMI and better diet quality). How a family eats together was found to be at least equally important as how often. It's worthwhile noting that many of the components identified above are in decline because of modern lifestyle changes e.g. eating on the go, use of electronic devices during mealtimes and increasing numbers of dual-earner families. In Australia, the percentage of parent couples with children under 18 years where both partners work is increasing steadily, from 53% in 1996 to 61% in 2016.⁴⁷

Using cross sectional data from the Project F-EAT (a US population study of 3709 parents of adolescents) Bauer et al (2012)⁴⁸ examined associations between parents' employment status and experience of work-life stress and qualities of the family food environment including the frequency of family meals and time spent preparing meals, as well as parents' own dietary patterns. Their findings report that full-time employed mothers reported fewer family meals, lower fruit and vegetable intake, less time spent on food preparation compared to part-time and mothers not employed, after adjusting for socio-demographics. They conclude, "With increasing numbers of mothers entering the workforce, this makes the provision of regular family meals more of a challenge – hence the need to consider lifestyle of modern families."

(N.B. Future approaches/communications should avoid gender stereotyping regarding household roles & responsibilities.)

A Flinders University based research team has recently conducted a mixed-papers systematic review of how families benefit from family meals (Middleton et al 2020).⁴⁹ In summary:

Coming together regularly for family meals has been associated with:

- Dietary and weight benefits for both adults and children
- Improvements in wellbeing
- · Reduced risk behaviours and
- Fewer eating disorders in adolescents

Although it's not clear what aspects of the family meals are responsible for these health and wellbeing benefits. To establish causality with confidence future study of family meals requires use of experimental intervention design which should be informed by qualitative finings to ensure they align with parents' priorities and challenges.

This review identified only one study that exclusively targeted the family meal (but did not actively involve parents). It did not report any statistically significant results between groups although it was underpowered to detect significance. Parent involvement in interventions targeting family meals should be encouraged. They recommend future interventions would benefit from using a range of strategies targeting the family meal, such as environment, use of technology, quality of food served and parental role-modelling.

⁴⁷ Work & Family. Australian Institute of Family Studies. Available at https://aifs.gov.au/facts-and-figures/work-and-family [Accessed June 26, 2020]

⁴⁸ Bauer KW et al (2012). Parental employment and work-family stress: associations with family food environments. *Soc Sci Med*; 75(3): 496-504. Available at: https://pubmed.ncbi.nlm.nih.gov/22591825/ [Accessed June 10, 2020].

⁴⁹ Middleton G et al (2020). What can families gain from the family meal? A mixed-papers systematic review. *Appetite*; 153: 104725.

An earlier review by Dwyer et al (2015)⁵⁰ examined existing interventions promoting family meals and identified the following opportunities and strategies for future research: increasing youth involvement in mealtime, tailoring interventions to family characteristics and providing support for families experiencing time-related barriers.

Qualitative studies of family meals provide some valuable insights to the multiple barriers modern life presents to the family meal including scheduling conflicts, exhaustion and lack of time and reported family connection and communication as the main perceived benefit. Nutritional and physical health do not tend to be the main priorities. This supports approaches to broaden healthy eating messages to include broader social and wellbeing benefits rather than narrowly focus on nutrition and health outcomes.

Qualitative data tells us parents are motivated to have the family meal, but are discouraged by the chaotic atmosphere, mess and stress that can ensue and are up against many barriers just to get food on the table. Interventions targeting the family meal are needed. These should include strategies that focus on communication and connection, making the process easier, sustainable and less stressful and consider the many barriers families face when coming together for a meal.

Sociology researchers at Monash University⁵¹ have examined the challenges faced by families in achieving the family meal on a daily basis. From their qualitative research with 50 diverse families in Victoria, they demonstrate the complex and messy realities of everyday family food consumption which is shaped by social structures such as gender, work and care interacting with micro level elements such as food preferences. They suggest that recognising and supporting diverse modes of family interaction and belonging beyond the shared table may be a more fruitful strategy for promoting public health. They caution against promoting the evening family meal as an imperative; a straightforward solution to complex social problems such as childhood obesity, family breakdown and depression.

3.4.3 Eating Together – The family meal & body weight

Inconsistencies across studies require further research to clarify the association between family meal frequency and weight outcomes. A longitudinal analysis of data from US based Project EAT-III⁵² (Eating and Activity with Teens) found that eating family meals during adolescence was associated with a lower likelihood of being overweight or obese 10 years later, particularly for African American respondents.

Analysis of this dataset also suggests that mental and physical benefits of having regular family meals may be realised as a parent whether the routine of regular family meals is carried forward

⁵⁰ Dwyer L et al (2015). Promoting family meals: a review of existing interventions and opportunities for future research. *Adolescent Health, Medicine & Therapeutics*; 6: 115-131. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4482375/ [Accessed June 10, 2020].

⁵¹ Jo Lindsay, Claire Tanner, Deana Leahy, Sian Supski, Jan Wright & Janemaree Maher (2019) The family meals imperative and everyday family life: an analysis of children's photos and videos, Critical Public Health, DOI: 10.1080/09581596.2019.1684443

⁵² Berge JM et al (2015). The protective role of family meals for youth obesity: 10-year longitudinal associations.

J Paediatr; 166(2) 296-301. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4308550/ [Accessed June 10, 2020].

from adolescence into parenthood or if the routine is started in parenthood.⁵³ The takeout being that it's never too late to start having regular family meals in order to realise these benefits.

Evaluation of a US program (Healthy Home Offerings via the Mealtime Environment (HOME) Plus)⁵⁴ support the value of a community based, family-focused intervention program to promote family meals, limit screen time and prevent obesity among preadolescents.

A meta-analysis by Hammons et al (2011)⁵⁵ found the frequency of shared family meals to be significantly related to the nutritional health in children and adolescents. They report the benefits of sharing 3 or more family mealtimes per week include a reduction in the odds for overweight (12%), eating unhealthy food (20% and disordered eating (35%) and an increasing the odds for eating healthy foods (24%). Consistent with other findings, they recommend specific mechanisms of how family mealtimes influence related nutritional outcomes should be investigated. The next frontier is to design and implement randomised control trials to help reveal the causal direction of the association between family meal frequency and nutritional health as well as identify the mechanisms that make family meals more or less healthy and that could potentially be harnessed in future obesity prevention interventions.⁵⁶

UK researchers⁵⁷ have examined the associations between children's (1-18 years) diet quality and watching television during meal or snack consumption. Eating whilst watching television is associated with poorer diet quality among children, including more frequent consumption of sugar sweetened beverages, high fat, high sugar foods and fewer fruits and vegetables. Although the differences in consumption are small, the cumulative effect may contribute to the positive association between eating whilst watching tv and childhood obesity. They also found family meals did not overcome the adverse impact on diet quality of having tv on at mealtimes.

3.4.5 Eating Together - Adolescents

A UK study exploring adolescent perceptions and experiences of family meals⁵⁸ provides some useful insights for future efforts aiming to increase adolescent engagement in family meals including use of:

- tailored approaches for males and females e.g. the nutritional value of the meal was more salient for females whereas males were more concerned about the impact of family meals on their mood.
- a family systems approach to improve the frequency and experience of family meals.

⁵³ Berge JM et al. (2018). Intergenerational transmission of family meal patterns from adolescence to parenthood: Longitudinal associations with parents' dietary intake, weight related behaviours and psychosocial well-being. *Public Health Nutr*; 21(2):299-308. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5947321/ [Accessed June 10, 2020].

⁵⁴ Flattum C et al. (2015). HOME Plus: Program design and implementation of a family-focused, community-based intervention to promote the frequency and healthfulness of family meals, reduce children's sedentary behaviour and prevent obesity. *International Journal of Behavioural Nutrition & Physical Activity* 12:53. Available at: https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-015-0211-7 [Accessed June 10, 2020].

⁵⁵ Hammons & Fiese (2011). Is frequency of shared family meals related to the nutritional health of children and adolescents? *Paediatrics*; 127: e1565-1574. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3387875/ [Accessed June 10, 2020].

⁵⁶ Dallacker M et al (2018). The frequency of family meals and nutritional health in children: a meta-analysis. *Obesity Reviews*; 19: 638-653. Available at: https://pubmed.ncbi.nlm.nih.gov/29334693/ [Accessed June 10, 2020].

⁵⁷ Avery A et al. (2016). Associations between children's diet quality and watching television during meal or snack consumption; A systematic review. *Matern Child Nutr*; 13: e12428. Available at: https://pubmed.ncbi.nlm.nih.gov/28211230/ [Accessed June 10, 2020]. ⁵⁸ Prior & Limbert (2012). Adolescents' perceptions and experiences of family meals. *Journal of Child Health Care*; 17(4) 354-365. Available at: https://journals.sagepub.com/doi/10.1177/1367493512462261 [Accessed June 10, 2020].

Barriers to eating family meals identified by both parents and adolescents included conflicting work and school schedules, time commitment and food preferences. Additionally, difficult family relationships and the desire for independence were identified by adolescents.

An online study of adolescent experiences of 'family meals' in Australia, ⁵⁹ reported a significant diversity in the description of what constitutes a 'family meal'. Adolescents are divided, on the value of the family meal, with half seeing it as a positive experience of family togetherness and half regarding it negatively or as unimportant.

3.4.6 Eating Together - Workplace

In the modern workplace it is quite common for employees to eat alone at their desk. The simple act of eating together in the workplace goes beyond simple nourishment to support team connection and collaboration and build a positive, productive and engaged work culture.⁶⁰

3.4.7 Eating in 1 and 2 person households

Eating together in smaller commensal units (groups eating together) or alone may in fact be becoming the norm based. Australian Institute of Family Studies figures report Australian households are getting smaller. In 1911, the average number of people per household was 4.5. By 2016, that number had fallen to 2.6.⁶¹ Knowing more about this topic becomes increasingly important for social, economic, health and wellbeing reasons.

Hanna & Collins (2015)⁶² literature review to assess whether there was a difference in food and nutrient intake between adults living alone and those living with others concluded that 'persons who live alone have a lower diversity of food intake, a lower consumption of some core food groups (fruits, vegetables, and fish), a higher likelihood of having an un-healthy dietary pattern'. The lack of qualitative research in this field limits insights into the reasons why people who live alone exhibit the eating practices and dietary behaviours that they do.

A scoping review of eating practices and food environments in 1 and 2-person households in the UK, Australia and US was conducted by Breen et al (2018). Eating in company is regarded to be desirable for the associated benefits of social interaction and connection. On the other hand, eating alone carries some stigma and is believed to be linked to unhealthy eating behaviours and diet related diseases. Consistent with earlier findings, their results suggest that those who live alone consume a lower variety of food and are more likely to have an unhealthy diet since they consume fewer core food group foods. Gender difference in dietary risk of those living alone were observed, with lone-living males more susceptible to the likelihood of poor dietary intake than lone-living females.

⁵⁹ Gallegos & Fozdar (2015). Adolescent experiences of 'family meals' in Australia. *Journal of Sociology* 47(3): 243-260. Available at https://www.researchgate.net/publication/241656074 Adolescent experiences of 'family meals' in Australia [Accessed June 1,2020] ⁶⁰ Sharon Natoli (2020). Eating Together. A White Paper. Prepared by Sharon Natoli.

⁶¹ Australian Institute of Family Studies. Populations and households. Available at: https://aifs.gov.au/facts-and-figures/population-and-households#">https://aifs.gov.au/facts-and-figures/population-and-households#">https://aifs.gov.au/facts-and-figures/population-and-households#">https://aifs.gov.au/facts-and-figures/population-and-households#. Populations and households, from \$\frac{1}{2}\$ 2019%25%20to \$\frac{2}{2}\$ 2020%2024%25. [Accessed June 1, 2020].

⁶² Hanna KL & Collins PF (2015). Relationship between living alone and food and nutrient intake. *Nutrition Reviews*; 73(9), 594-611. Available at: https://doi.org/10.1093/nutrit/nuv024 [Accessed June 1,2020].

⁶³ Breen F et al. (2018). A literature scoping review of eating practices and food environments in 1 and 2-person households in the UK, Australia and USA. *Appetite*; 126 (43-53). Available at: https://doi.org/10.1016/j.appet.2018.03.005 [Accessed June 1,2020].

According to ABS projections, between 3.0 and 3.5 million Australians (out of a predicted total population of 34 million) will be living alone in 2041.⁶⁴ The influence of social relationships on risk of mortality is comparable with well-established risk factors for mortality.⁶⁵

A recent review paper explored the role of digital facilitation of commensality among the growing numbers of solo diners. The article on the topic of 'digital commensality' describes the ways in which digital technologies historically may have led to problems at mealtimes e.g. TV dinners, but also explores how new and future digital technologies e.g. Skeating (Skyping with a remote contact while eating) may be offering opportunities to enhance the experience of eating. ⁶⁶ From their research, they suggest that the social aspects of eating together are particularly important among individuals at either end of the age spectrum.

3.4.8 Eating Together - Social & health benefit for CALD

Researchers at Flinders University⁶⁷ have examined to what extent shared meals have a social and health benefit for culturally and linguistically diverse (CALD) groups. From their qualitative research of older Adults from Greek, Italian, Ukrainian and Chinese backgrounds, they found shared lunch gatherings offered at cultural organisations are highly valued and important to elderly CALD individuals in the community. The social connection and communication, the opportunity to leave the house and the cultural experience of attending all contributed to an improved sense of health and wellbeing for participants.

3.4.9 Focusing on the how we eat, rather than on the what we eat

An international collaboration of experts (paediatricians, dietitians, nutritionists, psychologists, sociologists and public health professionals) developed a positional statement on '*Nurturing Children's Healthy Eating'* in our changing world, focusing on the *how* we eat, rather than on the *what* we eat. ⁶⁸ They identified four key themes that encourage and support healthy eating practices among children in the modern Western world and developed evidence-based recommendations for parents, caregivers, healthcare professionals and health authorities: positive parenting, eating together, a healthy home food environment and the pleasure of eating healthful foods.

Eating together highlights the link between socialization through regular family meals and healthful diet among children. The frequency and context of family meals have the potential to improve dietary intake among children of all ages. However, the frequency of eating together is declining. The pleasure of eating links children's healthy eating with pleasure through repeated exposure to healthful foods, enjoyable social meals and enhancement of the cognitive qualities (e.g. thoughts or ideas) of healthful foods. According to the expert collaboration, intervention programs that effectively support busy families, thereby enabling them to eat together, are clearly required

⁶⁴ Australian Bureau of Statistics (2019). 3236.0 - Household and Family Projections, Australia, 2016 to 2041. Available at: https://www.abs.gov.au/ausstats/abs@.nsf/mf/3236.0 [Accessed June 10, 2020].

⁶⁵ Holt-Lunstad et al. (2010). Social relationships and Mortality Risk: A Meta-analytic review. PLOS Medicine. Available at: https://doi.org/10.1371/journal.pmed.1000316 [Accessed June 10, 2020].

⁶⁶ Spence C, Mancini M, Huisman G. (2019). Digital Commensality: Eating and Drinking in the Company of Technology. *Front Psychol.* 2019;10:2252. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6794350/ [Accessed June 8, 2020].

⁶⁷ The social and wellbeing values of shared meals provided at Cultural and Linguistically Diverse organisations. A report prepared by: Georgia Middleton, Karen Patterson, Stefania Velardo and John Coveney (Flinders University) in partnership with Multicultural Communities Council of South Australia (MCCSA) July 2019.

⁶⁸ Haines J et al (2019). Nurturing Children's Healthy Eating: Position Statement. *Appetite* 137: 124-133. Available at: https://pubmed.ncbi.nlm.nih.gov/30797837/ [Accessed June 8, 2020].

(particularly important for single-parent families, families in lower socioeconomic groups and migrant families). They also suggest that Health Authorities should consider using marketing strategies to influence the pleasure of eating healthful foods in terms of taste, social eating and cognitive pleasure and the use of 'sensory imagery' to make people happier with smaller portions of 'treat' food.

Dietary Guidelines that focus on the 'how' of healthy eating encourage 'eating together'

National dietary guidelines typically focus exclusively on what to eat and specific food groups. Laska et al (2015)⁶⁹ suggest it may also be important to be more directive in developing nutrition messaging on the contextual influences of food choice, specifically the context of how and where we eat. They identified factors most strongly associated with poor dietary patterns in young adults attending college or University these included eating on the run, using media while eating and purchasing food/beverage on camp.

⁶⁹ Laska et al. (2015) How we eat what we eat: Identifying meal routines and practices most strongly with healthy and unhealthy dietary factors among young adults. *Public Health Nutr*; 18(12): 2135-2145. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5567832/ [Accessed June 10, 2020].

4.0 DISCUSSION

4.1 COVID-19

Insights

The COVID recovery era is predicted to offer the opportunity to reset values and behaviours around personal health and wellbeing including food and healthy eating. However, affordability may take precedent as the economy declines and jobs are less secure. Food security will increase in importance.

A survey of Australian's diets, reports almost two thirds (63%) have changed their eating habits, and of these, one third were eating 'worse' in lockdown.

This review was conducted during the COVID-19 pandemic. The magnitude of the COVID-19 health and economic crisis is unparalleled in recent history. It has effectively stalled the Australian way of life and stopped 'business as usual'. Throughout March and April 2020 Australians were asked to stay home unless going out for essentials such as food shopping and exercising. Schools were closed, and Australians were confined to their homes. Australians experienced significant changes in their lives. Many lost their jobs overnight or were forced to work reduced hours.

The COVID crisis has also been referred to as a food crisis. With rising unemployment, greater numbers of Australians have been pushed into food insecurity. Some agencies are already reporting higher demand for food relief, and many expect a more significant rise as JobKeeper and extra JobSeeker payments are wound back.⁷⁰

4.1.1 Impact on the Australian Diet

Diet for one in three Australians is 'worse' in lockdown: new survey

Media Release - 17 May 2020

More than half of Australians (54%) whose diets have changed in lockdown say they have put on weight, have lef themselves go or are feeling sluggish and slow, according to a new survey by the weight, have let the Heart Foundation.

In other findings of the survey of 500 people

- · Nearly two thirds (63%) have changed their eating habits, and of these, one third are eating 'worse' in lockdown
- · One in five people are consuming larger serves
- Nearly half (46%) of those who said their diet had changed were feeling frustrated or guilty about

Now the Heart Foundation and Coles are teaming up to encourage home cooks to create and share heart-healthy recipes in their kitchens to improve their own wellbeing and raise vital funds to help save lives from heart disease - Australia's single biggest killer.

Heart Foundation Group CEO, Adjunct Professor John Kelly, warned that home isolation had made some Australians cut corners when it came to heart-healthy eating and drinking "With the pantry and fridge in tempting reach, we found 29 per cent of people w

More on this topic



⁷⁰ Vic Health (2020). Life and Health Re-imagined Paper 2 – 2020 Good food for all Resetting our food system for health, equity, sustainability and resilience. Available at: https://www.vichealth.vic.gov.au/-/media/ResourceCentre/Life-and-Health-Re-imagined---Paper-2---Good-food-for-all.pdf?la=en&hash=491F0BB6D951980C818CC05F3250A43754D44976 [Accessed June 25, 2020].

According to a survey of Australians conducted by the Heart Foundation⁷¹ and released in May 2020. More than half of Australians (54%) whose diets have changed in lockdown say they have put on weight, have let themselves go or are feeling sluggish and slow. In other findings of the survey of 500 people:

- Nearly two thirds (63%) have changed their eating habits, and of these, one third are eating 'worse' in lockdown
- One in five people are consuming larger serves
- Nearly half (46%) of those who said their diet had changed were feeling frustrated or guilty about it.

EAT Well Tasmania conducted an online survey to understand how COVID-19 has changed the shopping, cooking and eating habits of Tasmanians.⁷² These insights will help to identify ways to support people to eat well as part of the COVID-19 recovery.

Cooking

"More time at home has allowed me to focus on food and cooking on a more regular basis. E.g. not getting home from work tired with no energy to prepare and cook food. Working from home has been such a positive life-changing experience."

Eating

"Spending more time around the dinner table with family, the children have expanded their eating preferences as we all eat together.

The newly established entity **Health & Wellbeing Queensland** launched a **Boost your healthy** during Covid -19. An online information Hub that provides tips and resources to boost activity, healthy eating and wellbeing⁷³

4.1.2 Australians want to keep a slower pace of life that prioritises family.

Due to COVID-19 more than half of Australians (52%) have spent more time with their family or household members and want this to continue in their life. Similarly, half of Australians are enjoying a slower pace of life (49%) and want this to continue.⁷⁴

The experience and emotions of COVID-19 has been vastly different for different people depending on their circumstances. While it has in some ways put life on hold, many have had an opportunity to reassess their priorities. For some, the increased time at home has allowed them to experience a different way of life. As we move into a new phase, there is an opportunity to not just resume life as usual, but to refocus on what is truly important.

⁷¹ Naja & Hamadeh (2020). Nutrition amid the COVID-19 pandemic: a multi-level framework for action. *European Journal of Clinical Nutrition*. Available at: https://doi.org/10.1038/s41430-020-0634-3 <a href="https://doi.org/1

⁷² EatWell Tasmania (2020). Survey Overview Available at: https://www.eatwelltas.org.au/wp-content/uploads/2020/05/EWT Covid-Survey-Summary A3.pdf [Accessed June 28, 2020].

⁷³ Health & wellbeing Queensland. Available at: https://hw.qld.gov.au/boostyourhealthy/ [Accessed June 28, 2020].

⁷⁴ Recovering from COVID-19. The Australian experience, generational impacts and the future outlook 'Recovering from COVID-19' By Sophie Renton, McCrindle Research (June 2020).

4.1.3 International Insights

A report prepared by IGD (a research and training charity of the food and grocery industry), in the UK details their hypotheses of how the pandemic could influence food, health and wellness for individuals and households in the future. ⁷⁵ Their predictions are also relevant to Australia.

'Greater connection with food'

- The way people think and feel about food will evolve. 42% say the outbreak has changed how they value food as an essential.
- Mealtimes become key with many dedicating time to scratch cooking and baking.
- With the reversal of globalisation we will see an increased demand for local, seasonal produce
- Food will bring families and friends together

'Affordability will challenge health priorities'

- Balancing savvy shopping and healthy eating will be challenging.
- With job losses and economic decline, many will feel financially constrained
- Affordability may override good intentions. Consumers may have to make trade-offs, prioritising affordability over nutrition.
- Increased food poverty will negatively impact on nutrition

'Interest in holistic health will increase'

- Supporting physical and mental health will be a priority
- Individual health priorities will evolve and become broader; spanning nutrition, exercise, work-life balance and sleep (generational and demographic differences are likely to exist)

⁷⁵ Post-Coronavirus (COVID-19): how could health and wellness evolve? Navigating beyond Coronavirus in the UK (IGD, May 2020). https://www.igd.com/charitable-impact/healthy-eating/content-library/article/t/navigating-beyond-coronavirus---how-could-health-and-wellness-evolve/i/25647 (accessed June 30, 2020).

5.0 THE FUTURE

The role of food culture in supporting healthier eating is gaining traction in Australia as evidenced by some of the newer food and healthy eating strategies that talk directly to its importance.

Current programs in food education, food literacy and food security initiatives often include a focus on enjoyment of healthy food to engage and motivate participants. This approach is supported by the latest findings of Molenaar et al (2020)⁷⁶ who report that communicating the short-term benefits of healthy eating behaviours, how food makes you feel, may be more effective than more traditional approaches of eat this because it's good for you. They discuss how healthy eating messaging can only achieve so much without systemic environmental change that supports healthy behaviours and makes healthy eating affordable and accessible.

It could be worth exploring what the collective vision for Australia's Food Culture is? Efforts to improve Australia's food culture are something that could be led at a higher policy level across government (food, agriculture, health and education). Linked to this, considerations of the inequalities in healthy eating have proposed a systems approach to identify potential solutions requiring a whole of government approach.⁷⁷

The important and emerging field of culinary nutrition is gaining some momentum. While there is no agreed definition, culinary nutrition has been described as the application of nutrition principles combined with food science knowledge and displayed through a mastery of culinary skills. The results formed from the merging of nutrition and food science with the culinary arts are healthy eating behaviours produced from culinary confidence and nutrition alertness. *Culinary nutrition has been described as the practicality needed to make a difference to the health of the population*.

There are a number of research projects in train that will further inform considerations to improve Australia's Food Culture. Prof John Coveney (Flinders University) & Prof Sarah McNaughton (Deakin University), who lead some of the research described in this report have kindly offered to present to the Healthy Food Partnership on their work.

New dietary survey methodology will allow future dietary surveys to capture more information on eating context to address our current knowledge gaps, where and how Australians are eating. This will also help to inform dietary guidelines to provide more practical guidance around the 'how' not just the what of healthy eating. There has been a positive shift in this direction with international guidelines most recently Canada. There is an opportunity for the Australian Dietary Guidelines to provide more guidance on eating context when they are reviewed. This would support clear consistent messaging around eating context to support healthier food and drink choices.

⁷⁶ Molenaar et al. (2020). Language of Health of Young Australian Adults: A qualitative exploration of perceptions of health, wellbeing and health promotion via Online Conversations. Nutrients;12(4):887. Available at: https://www.mdpi.com/2072-6643/12/4/887/htm [Accessed June 28, 2020].

⁷⁷ Friel S et al. (2017). Using systems science to understand the determinants of inequities in healthy eating. PLoS ONE 12(11): e0188872. Available at: https://doi.org/10.1371/journal.pone.0188872 [Assessed June 10,2020].

APPENDIX 1 - EXAMPLE OF HEALTHY EATING MESSAGING WHICH INCORPORATES PRACTICAL 'EATING CONTEXT' THEMES RELEVANT TO THE HEALTHY FOOD PARTNERSHIP

This example from Canada⁷⁸ demonstrates how messaging around healthy eating context can provide practical tips for healthy eating whilst aligning with current partnership focus supporting healthier choices and portions size.



⁷⁸ UW Food Services Ways to Mindfully Eating. Available at: https://uwaterloo.ca/food-services/blog/post/mindless-eating-mindful-eating (accessed June 28, 2020)

Table 1. RESULTS – CURRENT RESEARCH IN AUSTRALIA

Organisation	Researcher	Details	Weblink
Flinders University (SA)	Prof John Coveney	Prof Coveney is Professor of Global Food, Culture and Health in the College of Nursing and Health Sciences at Flinders University. He leads an International Research Collective on Food Culture and Health Exploring the intersections between food and health within a cultural context. The Research Collective seeks to improves nutritional and psychosocial health by reducing economic, health and social costs to people; whether they are vulnerable individuals, families, or even entire communities. Their focus is on optimising nutritional health by researching environments that provide healthy meals. The research aims to enhance social connectivity by encouraging people to share food on a regular basis. This empowers individuals, families, and communities to both have, and make choices that are beneficial to their health and wellbeing. His research group at Flinders University has recently published a review of family meals in Appetite (this is discussed in the literature review). Current projects include: 1. Can sharing meals increase social capital? This project aims to look at the social and health value of the provision of meals shared at ethnically focussed-gatherings. The positive relationships, (termed 'Social Capital'), that individuals and groups share with each other are now regarded to be important to health and well-being. They are crucial for building trust, reciprocity and positive supports of human capacity. Social capital is especially important in those groups who feel not to be part of the mainstream social, community and language groups in which they live. Crucial to the sense of belonging in a new environment and host country is the ability to find others who come from the same or similar culture and language group. 2. Dinnertime Matters Dinnertime Matters research will examine the outcomes of including in the curriculum of primary	https://researchno w.flinders.edu.au/e n/persons/john- coveney-2 https://www.foodc ulturehealth.com
		schools, a specific module for supporting shared eating and family meals.	m.au/projects/proje ct-call-eat-

3. Eating alone together

Research evidence suggests that for older people eating in company promotes positive health and wellbeing. These improvements are independent of the nutritional quality for the food being eaten. Most of the research has been carried out in sheltered or residential facilities. However, there is an increasing number of lone person households in Australia and overseas and the benefits of eating in company in this population has not been explored. The ability to join virtual social groups that meet regularly on the internet using Skype or similar has been proven for a variety of meeting purposes, including language learning, arts and crafts and other skills development. Left unexplored are the possibilities of using the internet to promote social eating for those who are housebound, bedbound or socially isolated.

Research has just commenced to understand how attending a regular community lunch program might impact an older person's sense of social connectedness, isolation, wellbeing or loneliness. The Flinders University EAT research will examine the feasibility of holding shared lunches on a large scale and this first part of the project will help the researchers identify and understand better potential participants for the main project. They are currently recruiting volunteers who may be at risk of social isolation to participate in an online focus group with Flinders University.

4. Food security and impact on family life

This research will examine the perspectives of users of charitable food assistance programs to recommend aspects of program delivery that can address family food needs whilst maintaining the dignity and self-respect of family member recipients. International literature confirms that in countries like Australia, more families are using charitable food services as a last resort, when all other avenues have been exhausted. Food charity, while necessary to bridge short-term needs, has a psychosocial impact, associated with a considerable degree of shame, stigma and humiliation and embarrassment. Consequently, not all families needing food relief step forwards to apply. Thus ways of making food assistance and food relief more appropriate for users is needed.

The International Research Collective on Food Culture and Health is planning an online symposium in August /Sept 2000 (details TBA)

everyone-at-thetable-flindersuniversity/

Organisation	Researcher	Details	Weblink
Deakin	Prof Sarah	Professor McNaughton's current research interests include the assessment of dietary behaviours,	https://www.deakin
University	McNaughton	diet quality and dietary patterns, their determinants and role in health. She leads the Measuring	<u>.edu.au/ipan/our-</u>
Institute for		Eating in Everyday Life (MEALS) Study. Meal patterns appear to be important, as they may	research/meals-
Physical		influence health. However, little is known about how people consume meals during the day or	study
Activity &		how foods are consumed together. This project uses a smartphone app to understand young	
Nutrition		adults' meal patterns and their determinants. This study asks young adults (aged 18–30 years) to	
(IPAN) (VIC)		complete an online survey and keep a food diary over four days, using a smartphone app. The	
		online survey will measure a range of potential influences on young adults' meal patterns	
		including intra-personal, social and environmental factors. The smartphone food diary app	
		requires participants to answer a series of questions for all food/drink consumed over the four	
		days of the study. These questions focus on the type of food/drink, the social situation during the	
		eating/drinking occasion, the preparation involved and the location of the eating/drinking	
		occasion. This project is carried out according to the National Statement on Ethical Conduct in	
		Human Research (2007) produced by the National Health and Medical Research Council of	
		Australia with funding provided by an Australian Research Council (ARC) Discovery grant. This	
		study will provide important insights into how young people eat and will help us develop	
		messages, strategies and interventions to promote healthy eating in this age group.	
		ASA 24	https://www.deakin
		ASA 24-Australia-2016 is a freely available, web-based software tool adapted for use in Australia	.edu.au/ipan/our-
		by a team led by Sarah at Deakin University. The tool that enables the collection of automated	research/asa24-
		and self-administered 24-hour dietary recalls and food diaries is now available to researchers	australia-2016
		around the country. It's being used in number of studies across Australia, including IPAN's "The	
		Picture Project, an online survey of 10,000 Australians aged 18-30 that will be conducted in	
		2017/18 and repeated in 2019/20, The Picture Project is examining the eating behaviour,	

Organisation	Researcher	Details	Weblink
		physical activity, sedentary behaviour and health of young adults and track changes occurring	
		over time.	
Edith Cowan	Dr Ruth	The impacts of the COVID-19 crisis on people's food behaviours.	https://www.ecu.ed
University	Wallace,	Edith Cowan University (ECU) is participating in a new global study seeking to explore the impacts	<u>u.au/news/latest-</u>
(WA)	Professor	of the COVID-19 crisis on people's food behaviours. ECU nutrition researchers are surveying	news/2020/04/covi
	Amanda	Australians as part of the project. It is hoped to understand the shifts in food consumption and	d-cooking-ecu-
	Devine and	shopping habits since the arrival of COVID-19 and how we're adapting and changing the way we	researchers-
	Ros Sambell	eat, cook and source our food to provide a broader insight into pandemic behaviours and food	explore-how-
		literacy.	coronavirus-is-
		The survey is led by the University of Antwerp in Belgium with collaborators from around the	changing-food-
		world. All Australians aged over 18 are invited to participate in the Corona Cooking Survey.	<u>habits</u>

Organisation	Researcher	Details	Weblink
Monash University	Prof Jo Linsey	Challenging the family dinner imperative	https://medium.co
(VIC)		Sociology research supported by the Australian Research Council The traditional family meal is rich with symbolism and nostalgia. Mum and dad and children sitting down to a lovingly prepared meal, unpacking the day and strengthening the bonds of love. Public health messaging promotes it as a straightforward solution to complex social problems such as childhood obesity, family breakdown and depression. It will improve your children's behaviour, their school grades, too, and general health. But does this health promotion of the "family meal imperative" set unrealistic expectations at a time of increasing diversity in families and family practices? Is it rooted in an anachronistic and conspicuously old-fashioned notion of family that only serves to increase parenting guilt? Rather than promoting meals of a bygone era, their research suggests that supporting flexible and healthy eating beyond the dinner table may be a more fruitful strategy for promoting public health and could create a more peaceful and practical mealtime." The study draws on data collected as part of a broader study addressing school health messages, and the role of children as health advocates in school and family contexts.	m/monash- lens/challenging- the-family-dinner- imperative- 6614e1889305
Tasmanian	Julie	Julie recently completed a report of her Churchill Fellowship travels to the United States of	
School Canteen Association	Dunbabin	America, England, Scotland, Finland, Italy, France and Japan investigating the factors that enable school lunch programs to impact positively on student health and wellbeing. Key elements of successful program 'food culture' internationally included: • children ate a school prepared lunch • children sat down to eat – for at least 20 minutes • milk and tap water were the only drink options • confectionery was not a food option • a skilled and food literate workforce, that enjoyed cooking meals from scratch, for children • proud use of local and seasonal produce • school members and Dietitians involved in menu planning • diverse food that reflected cultural and dietary needs • menus and food language based on the five food groups – fruit, vegetables, meat and meat equivalents, grains and dairy products • Adequate infrastructure to cook food and that enabled children to sit down to eat.	https://www.church illtrust.com.au/medi a/fellows/Dunbabin J 2018 School lun ch programs impac t on student healt h and wellbeing.pd f

Organisation	Researcher	Details	Weblink
CSIRO		VEG KIT	
		CSIRO, Flinders University and Nutrition Australia are working together to deliver VegKIT, an	https://www.vegkit
		integrated \$4M five-year project designed to deliver tools and interventions for increasing	.com.au
		children's vegetable intake. The VegKIT project aims to increase the vegetable intake of	
		Australian children. Designed to provide a collection of practical tools, resources and	
		interventions, the five-year project centres around six key activities to support children,	
		educators and health care professionals, and engage with industry.	
		Delivered via a collaboration between CSIRO, Flinders University and Nutrition Australia, and	
		financially supported by Hort Innovation, VegKIT is the first Australian program to provide an	
		integrated nation-wide approach to improving children's vegetable consumption. Early years	
		advice to foster a love of vegetables Previous work by Hort Innovation has identified exposure,	
		role modelling and conviviality (positive experiences and enjoyment) as effective ways to foster	
		children's long-term vegetable acceptance. However, advice on how to encourage acceptance of	
		vegetables in the early years of life is lacking.	
		VegKIT is addressing this issue by leveraging dietary advice opportunities to enhance age	
		appropriate, evidence-based, practical advice as a sustainable way to increase longer term	
		demand for vegetables. This project is about getting children to enjoy vegetables, using	
		knowledge about the development of taste preferences, and then using this information to find	
		practical ways of addressing the problem. Part of this work will include revising dietary advice to	
		mothers, working with childcare providers to improve children's experiences of vegetables and	
		working with industry to make vegetable products more appetising for children.	
		5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	

TABLE 2 - RESULTS – CURRENT PROGRAMS INTERNATIONAL

Organisation	Location	Initiative	Details	Weblink
The Family	Boston (US)	A non-profit initiative	Offers practical online resources like tips for setting	https://thefamilydinnerproje
Dinner Project	(Massachuset	started in 2010,	dinnertime goals, overcoming obstacles such as conflicting	ct.org/about-us/
	ts General	champions family	schedules and engaging everyone in meaningful conversation	
	Hospitals	dinner as an	– to improve the frequency and quality of their mealtime	
	Psychiatry	opportunity for family	interaction.	
	Academy)	members to connect	They run online and at community events to help families	
		through food, fun and	increase the frequency, meaning and long-term benefits of	
		conversation	their shared meals in the context of body, mind, and	
			emotions.	
Purdue	US	Eat Gather Go	The Purdue Extension Nutrition Education Program (NEP)	https://www.eatgathergo.org
University		Extension Nutrition	works to improve the nutrition and health of audiences with	/gather/
		Education Program	limited resources in Indiana. They provide practical online	
			resources to support healthy eating together.	
American	US	Position statement	Their statement references research supporting the many	https://acpeds.org/position-
College of		on 'The benefits of	benefits of the family meal, academic, nutritional, social and	statements/the-benefits-of-
Paediatrics		family table' (2014)	emotional. Unfortunately, families today are less likely to	the-family-table
			enjoy mealtimes together than in the past. Given the	
			protective factors that are conveyed to children and	
			adolescents, paediatricians should encourage parents to make	
			every effort to regularly gather around the "Family Table" for	
			meals.	
Mental Health	UK	Mealtimes & Mental	Sharing mealtimes is good for your mental health. Whether it	https://www.mentalhealth.or
Foundation		Health	be through sharing experiences with family and friends,	g.uk/a-to-z/m/mealtimes-
		(Online Mental	winding down with company, bonding with family members	and-mental-health
		Health Information)	or just having someone to talk to, mealtimes provide a great	

Organisation	Location	Initiative	Details	Weblink
			opportunity for us to set aside a specific time of the day or	
			week to give us time to socialise, relax and improve our	
			mental health.	
British	UK	Healthy Eating Week	This year's BNF Healthy Eating Week (28 September to 4	https://www.nutrition.org.u
Nutrition		(Healthy Eating	October 2020) aims to bring the UK together for a dedicated	k/healthyliving/hew/bnfhew
Foundation		Initiative)	Week, focusing on key health messages and promoting	<u>20.html</u>
(BNF)			healthy habits. This year's health challenges are: Eat more	
			wholegrains (Monday); Vary your veg (Tuesday); Drink plenty	
			(Wednesday); Move more (Thursday); Be mind kind	
			(Friday); Get active together (Saturday)*; Eat together	
			(Sunday)*.	
			*The Get active together and Eat together challenges are	
			intended to highlight the importance of undertaking activities	
			together. When we are trying to eat healthily, enjoying food	
			together can help with motivation. Spending time with others	
			can also be beneficial for mental health and can be a great	
			opportunity to have fun with friends or family and try new	
			dishes	
British	UK	Made with Love,	In addition to providing our bodies with the nutrients it needs,	https://www.nutrition.org.u
Nutrition		Shared with Love	food has other important social roles. Sharing food has always	k/healthyliving/helpingyoue
Foundation		(Online Educational	been part of the human story, and cooking is an important life	atwell/madewithlove.html
(BNF)		Resource)	skill. It enables children to feed themselves and others well	
			and affordably throughout later life and can influence food	
			choice in the family home.	
			The purpose is to engage children of all ages with new foods,	
			and recipes, to promote a love of cooking and encourage the	

Organisation	Location	Initiative	Details	Weblink
			joy of sharing food with family and friends. The resource	
			includes some easy, tasty recipes that children with different	
			abilities (and taste preferences) can prepare – from beginners	
			to more adventurous cooks. Children of all ages can develop	
			cooking skills but supervision should be age appropriate.	
The Eden	UK	The Big Lunch	It started with a very simple idea from the Eden Project. What	https://www.edenprojectco
Project		(Community	if, on one day a year, people came together with their	mmunities.com/thebiglunchh
		Initiative)	communities and shared a meal? And so, in 2009, The Big	<u>omepage</u>
			Lunch was born. It's the UK's annual get-together for	
			neighbours and its grown ten-fold since then, each year	
			getting bigger and better as millions of people take to their	
			streets, gardens and neighbourhoods to join in for a few hours	
			of community, friendship, and fun. Link to infographic	
			https://www.edenprojectcommunities.com/sites/default/files	
			/the_big_lunch_impact_infographic.pdf	
			The Big Lunch connects people and encourages friendlier,	
			safer neighbourhoods where people start to share more –	
			from conversations and ideas, to skills and resources, and, for	
			some, it ignites a passion for doing more good things where	
			they live. Eating with those you love.	
Family First	NZ	Time for Dinner	This report looks at the research and trends on this issue from	https://www.familyfirst.org.n
NZ		Report (2018)	both New Zealand and overseas, and asks the simple question	z/wp-
			– should we do more to promote and encourage families to	content/uploads/2018/07/TI
(Family			have dinners together on a regular basis? According to the	ME-FOR-DINNER-2018-Full-
Advocacy			report, the evidence appears strong: regular family dinners	Report.pdf
group)			have a positive and protective effect which benefits families,	

Organisation	Location	Initiative	Details	Weblink
			and especially young people. The 'magic' appears to be not	
			around the food, but around the family engagement, the	
			conversations, the strengthening of family bonds, and	
			importantly, the role in helping children deal with the	
			pressures of adolescence and peer pressure. It provides some	
			useful insights: Lower-income families can lack time and	
			energy to prepare and arrange meals together, and this is	
			exacerbated by shift work. The notion that family meals must	
			be complicated or elaborate can also dissuade parents from	
			engaging in this important activity. Don't make it about the	
			food - make it about the family	
Health Link	Canada	The Benefits of Eating	The resource talks to the nutrition, health, social, and mental	https://www.healthlinkbc.ca/
British		Together For Children	benefits to eating with others and provides some practical tips	healthy-eating/eating-
Columbia		and Families (Online	and strategies	together
		Information)		
Loblaw	Canada	Eat Together Day	With the mission to bring Canadians back to the table to eat	https://eattogether.president
(Food		#eattogether	together, the #eattogether initiative started in 2017. While	schoice.ca/
Retailer)			recognized as an important part of a healthy lifestyle in	https://media.loblaw.ca/Engli
			Canada's Food Guide updated in 2019 a recent survey**	sh/media-centre/press-
			learned that 43 per cent spend less than 1 hour a day enjoying	releases/press-release-
			meals with friends and families.	details/2019/Eat-Together-
				<u>Day-aims-to-connect-</u>
			The Loblaw website hasn't been updated for 2020 event	Canadians-through-sharing-a-
			details.	meal/default.aspx

Organisation	Location	Initiative	Details	Weblink
Purdue university	US	Eat Gather Go Extension Nutrition Education Program	The Purdue Extension Nutrition Education Program (NEP) works to improve the nutrition and health of audiences with limited resources in Indiana. They provide practical online resources to support healthy eating together.	https://www.eatgathergo.org /gather/
Garden to Table Trust	NZ	Garden to Table	The Garden to Table programme teaches children the essential skills they need to be food-resilient. Its aim is to see children enthusiastically getting their hands dirty and learning how to grow, harvest, prepare and share fresh, seasonal food. Established in 2008, Garden to Table Trust is a registered charity that works with thousands of primary-school-aged children all across New Zealand, helping them discover a love for fresh food and skills that will last a lifetime. The programme is curriculum-integrated and provides real-world learning opportunities, taking learning outside the classroom.	http://www.gardentotable.org.nz/the-programme/evaluation
The Edible Schoolyard	US	The Edible Schoolyard Project	The Edible Schoolyard Project is dedicated to transforming the health of children by designing hands-on educational experiences in the garden, kitchen, and cafeteria that connect children to food, nature, and to each other. Alice Waters (chef, author, food activist, and Restaurant owner) founded the Edible Schoolyard Project in 1995 — combining her perspectives as a trained Montessori teacher, fervent political activist, gifted chef, and champion of sustainable agriculture.	https://edibleschoolyard.org/ about