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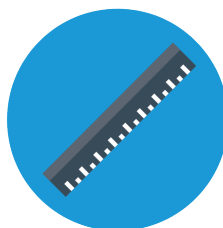
Final Evaluation of Fresh Tastes

Prepared for

ACT Health Directorate



RESEARCH



EVALUATION



DESIGN

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Executive summary

Introduction

Fresh Tastes was a free, voluntary program for ACT primary schools that aimed to create and embed a healthy food and drink culture throughout the whole school environment.

Between 2014 and 2021, 97 schools (87% of all ACT primary schools) accessed Fresh Tastes, reaching approximately 42,000 students.

Fresh Tastes was based on a model of best practice for health behaviour change and action learning. It drew from systems change and community development principles plus learnings from formative program evaluations and consultation.

A school with a 'healthy food and drink culture' was defined as one that promotes positive community attitudes towards healthier food and drinks; improves knowledge, skills and confidence of students, families and staff to make healthier food and drink choices; and improves access to healthier food and drinks. Healthy food and drinks become the norm in the school, rather than the exception.

The Fresh Tastes model included eight principles designed to help schools maximise opportunities to influence their environment and culture as below:



Fresh Tastes offered participating schools three years of intensive support, aligned with the principles of the model. Six Fresh Tastes action areas were developed: Healthy Food and Drink Guidelines, Classroom Learning, Food For Sale, Growing Food, Cooking Food and Food from Home. Schools could choose to focus on one or two action areas per year depending on their own priorities. A member of the ACT Health Directorate's (ACTHD) Fresh Tastes team was assigned to each school to provide one-one support and advice.

Fresh Tastes provided support to help schools implement annual action plans, including small financial grants, professional learning opportunities, networking events, curriculum materials, information on healthy food and drinks for distribution to families, and discounted services from local businesses and community organisations.

ACTHD engaged First Person Consulting (FPC) to evaluate Fresh Tastes. This Fresh Tastes Final Evaluation Report considers the following key evaluation questions:

1. How was Fresh Tastes implemented?
2. Did Fresh Tastes influence the food and drink culture in participating schools?
3. What lessons can be learnt from the Fresh Tastes program?

Key Findings

Implementation of Fresh Tastes

Fresh Tastes was implemented as intended, with clear evidence of learning and adaptation throughout the program that fostered continuous improvement.

Fresh Tastes was viewed very positively by schools in most instances, with schools reporting progress in all Fresh Tastes action areas by the end of their participation.

Importantly, Fresh Tastes was successful in supporting schools to reduce barriers and increase enablers to program implementation. Prior to the program:

- Eighty per cent (80%) of schools had identified barriers, which was reduced to an average of 27% by program completion; and
- Sixty-five per cent (65%) of schools had identified enablers which increased to 94% by program completion.

The action areas model and support systems for schools to implement action plans were effective.

Overall, schools reported that communication and promotion, engagement and involvement, the kitchen garden and the canteen were key enabling factors for program implementation.

Schools noted that successful program implementation could be affected by:

- The availability and extent of support from students, families, the school executive team, the wider school community, and the Fresh Tastes team
- Flexibility of the program design
- Availability of partnerships
- Level of resources and knowledge
- Existence of and access to facilities and infrastructure, particularly a kitchen garden and canteen
- Promotion, engagement, and communication with the school community
- Staff turnover, capacity, and capability

Influence of Fresh Tastes on food and drink culture

The Fresh Tastes program effectively contributed to improving the healthy food and drink culture of participating schools in the ACT.

To evaluate whether school food and drink culture had changed, ACTHD developed a 'culture change matrix' drawing on an extensive literature review that identified the following domains of school culture: leadership, partnerships and community, knowledge building, communication, resources, environment and readiness for change. When completing the matrix, each school determined where they sat on a scale from 'beginning', 'developing', 'established' to 'embedded', pre and post their participation in Fresh Tastes.

Culture change matrix results showed that 80% of schools reported a positive shift in their overall food and drink culture after participating in Fresh Tastes.

Before participation in Fresh Tastes, only 4% of schools reported having a healthy food and drink culture that was either established or embedded which increased to 78% after participation.

Schools reported significant positive changes in student support for healthy eating and drinking in participating schools:

- Student support for healthy eating increased from 28% to 59%; and
- Student support for healthy drinks increased from 58% to 67%.

A total of 81% of schools reported a change in student demand for healthy food and drinks, and 84% reported a positive change in student attitudes towards healthy food and drinks.

Fresh Tastes helped to increase opportunities for teachers to undertake relevant, high-quality professional learning opportunities linked to the Australian Curriculum.

- Teacher professional development opportunities for cooking increased from 17% to 51%;
- Teacher professional development opportunities for growing food increased from 30% to 62%; and
- Levels of high or very high confidence in teachers to teach about nutrition increased from 70% to 81% among participating schools.

Schools identified that the following key success factors were the most essential in influencing their food and drink culture:

- Strong leadership support, particularly from the principal.
- Support from the ACT Health Fresh Tastes team.
- Appropriate infrastructure e.g. school kitchen gardens.
- Healthy food and drinks being a school priority.
- A passionate and dedicated Fresh Tastes School Coordinator to drive action.

Schools reported that Fresh Tastes had helped them to embed nutrition education that would likely continue into the future.

The above findings demonstrate and reinforce the effectiveness of Fresh Tastes in achieving a change in the food and drink culture of participating schools.

Lessons learnt from Fresh Tastes

Key evaluative learnings suggest that the design of future school-based programs should:

- Align with school priorities to make programs easy to for schools to implement.
- Maintain flexibility in program design and delivery, allowing schools to implement what works best for them.
- Assess schools' readiness for change, using a tool like the culture change matrix, to identify those at the beginning of program participation that are likely to require comparatively higher levels of support to achieve program aims.
- Gather strong leadership and executive support.
- Encourage a 'team' of people beyond an individual champion.
- Focus on addressing systemic drivers and barriers, at both the education system level and at a school level.
- Ensure there is a plan for post-participation.

Schools reported that the Fresh Tastes model had effectively contributed to sustainable outcomes and longer-term culture change, however sustainability of the program outcomes could be positively or negatively impacted by:

- Staff capacity and capability at both the implementer and school executive level.
- Ongoing communication and engagement with families, and the wider community.
- Aligning and embedding nutritional education, particularly ensuring consistency of nutrition messaging between the canteen and the classroom.
- Maintaining motivation and preventing burnout.

The key activities through which schools could continue improving and sustaining a healthy food and drink culture included:

- Maintaining the school kitchen garden and providing ongoing growing food activities for students.
- Promoting healthy food and drinks to the school community.
- Integrating nutrition education into various activities across the curriculum.
- Maintaining school cooking facilities and providing ongoing cooking activities for students.
- Ensuring consistency between canteen and classroom messages about nutrition.
- Encouraging family involvement in both cooking and growing food activities to improve family support for healthy eating and drinking.
- Monitoring and improving the effectiveness of the school's healthy food and drink policy.

Further monitoring and investigation are required to understand how schools will maintain culture change in the longer term.

Recommendations

Support for schools following Fresh Tastes

1. ACTHD should continue to explore ways in which schools can be supported post-participation that are appropriate to the degree of culture change achieved.

While 80% of participating schools reported a positive shift towards embedding a healthy food and drink culture, only 19% reported that it was in fact embedded by the end of their participation. This suggests that most Fresh Tastes schools still had progress to make towards embedding change that will likely rely on further support and resourcing. Schools that indicated their healthy food and drink environment was ‘developing’ or ‘established’ are not necessarily at a stage where they can simply maintain their culture change, and further assistance may be required. In contrast, schools reporting to have embedded a healthy food and drink culture may only require moderate ongoing support.

The following ongoing operational support is required:

- authorisation from the principal and school executive team
- a passionate and supported Fresh Tastes school coordinator
- ongoing support from the Fresh Tastes team that varies according to school needs

Priority content areas for continued focus are:

- Growing food professional learning for teachers and kitchen garden experiences for students.
- Promotion and communication about healthy food and drinks to families, including encouraging family involvement in healthy eating and drinking activities at school.
- Integrating nutrition education activities across the curriculum and ensuring the school canteen aligns with classroom nutrition messages.
- Cooking food professional learning for teachers and cooking experiences for students.

Future program design and delivery

2. Future school-based programs should:

- a. Be aligned with school priorities and allow for flexibility in program delivery to ensure they are appropriate and easy for schools to implement.
- b. Ensure schools gather leadership and executive support and develop a team of people to drive and maintain change at the school level.
- c. Assess schools’ readiness for change, using a tool like the culture change matrix, to identify those who are likely to require comparatively higher levels of support to achieve program aims and maintain change. Appropriate ongoing post-program support can then be provided.
- d. Focus on addressing systemic drivers and barriers, at both an education system level and at a school level (for example, ongoing work with the EDU on systems-level change).

Contribute to building the evidence base

3. Widely promote and disseminate the impact of the program with other jurisdictions to add to the evidence base for school-based culture change.

The evaluation has demonstrated that the Fresh Tastes model was effective in creating culture change within a primary school setting and improving the healthy food and drink environment for students and the wider community. There is benefit for the ACTHD in sharing this experience with other jurisdictions and noting its applicability for future health promotion programs in similar contexts, settings, and content areas.

4. Focus on evaluating culture change in any future evaluation efforts of similar programs.

This evaluation has reinforced the benefit of evaluating change from a systems perspective, demonstrating that focusing on systems change can be a more fruitful approach than focusing on individual health outcomes. The ACT Health Directorate is building up a substantial evidence base for the success of systems change programs in impacting the culture of a school system. Expanding evaluation of school-based initiatives to include educational as well as health outcomes would enrich the evidence for addressing culture change in school settings. Ongoing investment by the ACTHD in evaluating health promotion initiatives is essential for building this evidence base.

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Acronyms

ACT	Australian Capital Territory
ACTHD	ACT Health Directorate
ACTPANS	ACT Year 6 Physical Activity and Nutrition Survey
EDU	ACT Education Directorate
COAG	Council of Australian Governments
FPC	First Person Consulting
HWAP	Healthy Weight Action Plan
HWI	Healthy Weight Initiative
IYM	It's Your Move
KEQ	Key Evaluation Question
KPI	Key Performance Indicator
NHSCG	National Healthy School Canteen Guidelines
PL	Professional Learning
SAKGF	Stephanie Alexander Kitchen Garden Foundation

1 Introduction

1.1 Background to Fresh Tastes

Fresh Tastes was developed as an extension of previous efforts to promote and support healthy school canteens in the ACT. It aimed to create and embed a culture of healthy food and drinks in ACT primary schools across the whole school environment.

The ACT Health Directorate (ACTHD) led the development and implementation of Fresh Tastes in partnership with the Education Directorate (EDU), and with support from the Catholic Education Office and the Association of Independent Schools of the ACT.

Fresh Tastes was based on evidence – both from Australia and overseas – that school nutrition programs taking a whole of school approach, with strong leadership and community partnerships, can have the greatest impact on improving children’s eating and drinking habits¹. **Children who have a healthy diet are better placed to learn, participate, and attend school.**^{2,3,4} They can also have improved levels of concentration, behaviour, self-confidence, and immunity from disease.⁵

Australian children aged 5 – 16 years consume 32% of their total energy needs during school hours through meals, snacks, and drinks.⁶ This is through a mix of:

- food and drinks brought from home;
- food and drinks purchased in the canteen; and
- food and drinks provided through other school activities such as catered events or classroom activities.

Prior to the launch of Fresh Tastes in 2014, many primary schools in the ACT had already been working on improving the availability of healthier options in the canteen and educating students about good nutrition in the classroom.

Fresh Tastes built on a range of achievements and initiatives over the last decade. Initially it was one of several programs developed and delivered under the ACT Healthy Children’s Initiative, funded by ACT Health and the Australian Government National Partnership Agreement on Preventive Health (NPAPH) to improve health outcomes for children and their families.

The ACT Government’s *Towards Zero Growth: Healthy Weight Action Plan* (HWAP) was launched in October 2013. Following the release of the HWAP, the *Healthy Weight Initiative* (HWI) was funded as a whole-of-government approach to address the rising rates of overweight and obesity in the Canberra community. A range of activities and programs targeting nutrition and physical activity were instigated

¹ Department of Health and Ageing: 2007 National Children’s Nutrition and Physical Activity Survey – Main findings. Australian Government, 2008.

² Soraindo A, Feinstejn L: What is the relationship between child nutrition and school outcomes? 2006.

³ Food and Nutrition Information Centre: Role of Nutrition in Learning and Behaviour. 2011.

⁴ Nansel T, Huang T, Rovner A et al: Association of school performance indicators with implementation of the Healthy Kids, Smart Kids program: case study. Public Health Nutrition, 2010.

⁵ The Smith Family: How Learning is enhanced through improved health and nutrition. Sydney, 2011

⁶ Department of Health and Ageing: 2007 National Children’s Nutrition and Physical Activity Survey – Main findings. Australian Government, 2008.

from 2014 – 2018 and contributed to halting the rise of overweight and obesity in the ACT⁷. Following the cessation of NPAPH funding, Fresh Tastes was funded by the ACT Government and was reported under the umbrella of the HWI. Fresh Tastes continued following the conclusion of the HWI in 2018.

The *Healthy Canberra: ACT Preventive Health Plan 2020–2025*⁸ builds on the achievements of the HWI and outlines key action areas to be addressed by preventive health initiatives. Fresh Tastes now contributes to the goal of improving the food environment in schools under the ‘Increasing Healthy Eating’ action area.

1.2 Design and aim of Fresh Tastes

The ACTHD supported school canteens to provide healthier food and drink choices through several previous programs and initiatives. The ACTHD designed capacity building strategies under the banner of *Healthy Food@School* to help schools follow the National Healthy School Canteen Guidelines when they were released in 2010. An evaluation of this program identified that school food initiatives beyond the canteen could influence attitudes and behaviours of the school community, especially around acceptance of healthy menu changes in the canteen.

In designing Fresh Tastes, a needs assessment was conducted with the canteen sector and 15 schools in 2012/13. This highlighted the need to expand the focus beyond canteens to a whole-school approach in order to impact the broader food and drink environment. It was identified that a new program to allow schools to build on their existing strengths and offer flexible, adaptable activities was needed. Teachers suggested a healthy food and drink program needed to be simple and to provide resources linked to the Australian Curriculum. Schools were most interested in gardening and cooking activities and identified that additional support would be necessary to increase teacher capacity in these areas. Teachers supported the idea of a school working group to help guide the direction of Fresh Tastes activities and agreed that this leadership group would give the program additional credibility. Schools identified that a focus on younger students should be the priority to embed a new school culture.⁹

The ACTHD also surveyed 100 young people to inform the development of Fresh Tastes. Respondents identified that eating healthy food was important, and they would find it easier to adopt healthier food habits if they had easier access to healthier items and could develop skills to prepare their own healthy food and drinks.

Fresh Tastes was subsequently developed in 2013 by the ACTHD, working in partnership with the Education Directorate. It was launched in February 2014, with eight recruitment rounds in total.

The ACTHD funded a position within the ACT Education Directorate to assist with the design and implementation of school-based health promotion programs including Fresh Tastes. Resources were also provided to the Catholic Education Office and Association of Independent Schools of the ACT to encourage and support participation.

⁷ ACT Government (2017) Healthy Weight Initiative 2016 – 17 Progress Report. Canberra ACT https://www.act.gov.au/_data/assets/pdf_file/0007/1076677/2016-17-HWI-Progress-report.pdf

⁸ ACT Government (2019) Healthy Canberra: ACT Preventative Health Plan 2020 – 2025. Canberra ACT <https://www.health.act.gov.au/about-our-health-system/population-health/act-preventive-health-plan>

⁹ ACT Government (2014) Fresh Tastes: Strategies to support the creation of a healthy food and drink culture in ACT schools. Canberra ACT <https://www.health.act.gov.au/about-our-health-system/healthy-living/fresh-tastes/about-fresh-tastes>

The Fresh Tastes model

Fresh Tastes aimed to create and embed a culture of healthy food and drinks in ACT primary schools.

The program offered a free, voluntary service to primary schools to help make healthy food and drinks a bigger part of everyday life for students. Participating schools were provided with intensive support for three years to take a whole-school, strengths-based approach to improving their food and drink environment and culture.

Fresh Tastes used a model of best practice for health behaviour change and action learning. It drew from systems change and community development principles plus learnings from formative evaluations and consultation. The model provided opportunities to influence food and drink attitudes, knowledge and behaviours across a school community including parents, students, staff and food services in order to have an impact at the population level.

Fresh Tastes was based on a model that included eight principles designed to help schools maximise opportunities to influence their environment and culture. See Figure 1 below for a visual representation of the eight principles.



Figure 1: Eight principles that guide a whole of school approach to healthy food and drink promotion

Action Areas

Using this model and based on previous consultation with the school sector, evidence and research, six Fresh Tastes action areas were developed:

- **Healthy Food and Drink Guidelines:** aimed to support schools to develop and implement their own Healthy Food and Drink guidelines/policy for their whole school environment (available to non-government schools only after 2015).
- **Classroom Learning:** aimed to increase teachers' capacity to deliver nutrition education in the classroom.
- **Food for Sale:** aimed to ensure that food and drinks sold to students by the school, including through the canteen, fundraising activities and school events, met the National Healthy School Canteen Guidelines (NHSCG).
- **Growing Food:** aimed to provide children with hands-on opportunities to grow and harvest vegetables and fruit.
- **Cooking Food:** aimed to provide students and families with practical experience to prepare and try healthy foods.
- **Food from Home:** aimed to encourage families and children to pack healthy school lunchboxes.

School Action Groups

Schools took ownership and leadership of Fresh Tastes by forming an Action Group with representatives from across the school community.

The Fresh Tastes team facilitated annual workshops for school Action Groups to write a simple action plan for one or two chosen action areas per year. When developing their action plans, Action Groups were encouraged to refer to the Fresh Tastes principles when they selected, planned, and implemented activities in order to create school-level systemic change. Fresh Tastes schools were encouraged to take small steps to embed change and celebrate their successes.

Fresh Tastes provided free support to help schools implement their action plans including small financial grants, professional learning opportunities (e.g. Food&ME), networking events, curriculum materials, information on healthy food and drinks for distribution to families, multicultural resources focusing on healthy lunchboxes and discounted services from local businesses and community organisations. A member of the Fresh Tastes team was assigned to each school to provide one-one support and advice, such as helping link schools to relevant services.

To support schools to deliver on the action areas, the Fresh Tastes team brokered approximately 30 partnership arrangements with a range of government programs, community organisations and businesses to offer schools optional services under each action area. Fresh Tastes services were provided either free or through a fee-for-service arrangement between the school and the provider. Schools were provided with up to \$2,500 over the course of their participation to use to purchase partner services.

Other related school-based nutrition initiatives

Fresh Tastes complemented and supplemented a range of other school-based nutrition initiatives which sought to improve healthy food and drink environments at school.

ACT Public School Food and Drink Policy

In 2015, the ACT Education Directorate introduced the mandatory *ACT Public School Food and Drink Policy*. The policy covers the food and drinks that can be sold and/or provided at public schools including through the canteen, at school events, fundraising initiatives, and in the classroom. The Catholic Education Office – Archdiocese of Canberra and Goulburn has since developed a similar (optional) policy following support from Fresh Tastes to do so. A template for a healthy food and drink policy is now also available for Canberra’s independent schools.

Water refill stations

As part of the HWI, 200 water refill stations were installed to ensure that a minimum of two water refill stations were available in each public school. Each student was given a re-usable water bottle to promote tap water as their drink of choice and to reduce plastic waste. All vending machines and sugary drinks were removed from ACT primary schools in 2014.

Healthy Canberra Grants and Health Promotion Innovation Fund

The ACTHD’s *Healthy Canberra Grants and Health Promotion Innovation Fund* provides funding for community-based health promotion activities to improve the health of Canberrans. Grants funding has been provided to a variety of schools to implement programs that support positive changes in their school food environments.

Related ACTHD health promotion programs

High schools have been supported to provide a healthy food and drink environment by the *It’s Your Move Create a Café* project, and *Healthier Choices Canberra* is working to improve the food and drinks available through sporting club canteens and businesses throughout the ACT.

Collaborative Working Group on Food at School

A *Collaborative Working Group on Food at School* was formed in 2015 to help schools and canteens provide healthy and sustainable food-for-sale services in schools. The group includes ACT Government directorates, Nutrition Australia ACT, the ACT Council of P&C Associations, NSW Healthy Kids Association and the Association of Parents and Friends of ACT Schools.

Council of Australian Governments (COAG) The Good Practice Guide: Supporting healthy eating and drinking at school

The Fresh Tastes program design also pre-empted and complemented the Council of Australian Governments (COAG) *The Good Practice Guide: Supporting healthy eating and drinking at school*.¹⁰ The COAG endorsed the good practice guide in 2020, and it is intended to be used by schools, governments, and communities to support a healthy food and drink culture at school. The guide puts forward a range of actions to be taken against four pillars:

¹⁰ COAG Health Council and COAG Education Council (2019) *The Good Practice Guide: Supporting healthy eating and drinking at school* <http://www.coaghealthcouncil.gov.au/Publications/Reports>

- Shared leadership;
- Healthy food and drink policy;
- Teaching and learning; and
- Partnerships.

The Fresh Tastes model already mirrored the COAG good practice pillars by focusing on these key areas of action to drive culture change. The learnings from the Fresh Tastes program were integral to the development of the COAG guide.

The Education Directorate and the ACTHD continue to work together to ensure the extensive gains made are sustained into the future and that widespread positive cultural changes become business as usual.

2 Summary of the evaluation approach

2.1 Key Evaluation Questions

The ACTHD engaged First Person Consulting (FPC) to provide support in evaluating the impact and effectiveness of Fresh Tastes.

A set of Key Evaluation Questions (KEQ) was developed to guide the final evaluation. These are outlined in Table 1 below.

Table 1: Key Evaluation Questions

Key evaluation question	Sub-questions	Section of report
1. How has Fresh Tastes been implemented?	<ul style="list-style-type: none"> a) How many schools did Fresh Tastes reach? Were they Catholic, Government, or Independent schools? b) What action areas were implemented by participating schools? c) To what extent were schools supportive of Fresh Tastes throughout participation? d) What were the enablers and barriers to implementation for participating schools? 	3.1
2. Did Fresh Tastes influence the food and drink culture in participating schools?	<ul style="list-style-type: none"> a) How did Fresh Tastes influence food and drink culture overall, and across the 7 elements within the Culture Change Matrix? b) To what extent has there been an increase in healthy eating among children in participating Fresh Tastes schools? c) In what ways will schools continue with the aims of the program after their Fresh Tastes participation ceases? 	3.2
3. What lessons can be learnt from the Fresh Tastes program?	<ul style="list-style-type: none"> a) What are the key success factors that influenced the effectiveness of Fresh Tastes in schools? b) What seems to help or hinder the sustainability of culture change in participating schools? c) What learnings from the Fresh Tastes experience would be useful to inform future programs? 	3.3

2.2 Approach

An [interim monitoring report](#) was prepared by FPC in early 2020 that presented the results from the first period of Fresh Tastes' implementation (school intake rounds 1 to 4). The interim report focused on the first 39 schools to finish their three-year participation in the program.

This final Fresh Tastes Evaluation Report builds on the interim report and presents the results from all eight rounds of Fresh Tastes schools from 2014 through 2021 in terms of the impact and effectiveness of Fresh Tastes, in accordance with the KEQs outlined in Table 1.

The steps used for this final evaluation by FPC are outlined below.

- **Inception meeting** – to help clarify what 'success' for the evaluation looks like, provide background to Fresh Tastes and outline the range of documentation available.
- **Document review** – The document review comprised a selection of the following sources from the 97 participating schools¹¹:
 - Pre- and post-assessments of components of the food and drink culture using a culture change matrix
 - A survey to capture the 'factors for success' in implementing Fresh Tastes
 - A food and drink situational audit – with a baseline and follow-up completed
 - Annual reviews/interviews with a representative from the Education Directorate who sits within ACT Health
 - Reporting on achievements and opportunities
 - Other information collected by ACT Health on an ad hoc or opportunistic basis.

Not every school completed every document. We have attached an n=value to the results throughout this report where appropriate to indicate how many schools provided this data.

- **Data analysis** – primarily thematic and content analysis of documentation, as well as descriptive statistical analysis of relevant quantitative data. Following this was a process of synthesis and interpretation to address the evaluation questions.
- Preparation of a **final evaluation report** (this document).

A more detailed methodology is provided in Appendix 1.

2.3 Limitations and challenges

Several limitations and challenges have been identified in relation to the data collected for the Fresh Tastes evaluation. These include:

- The evaluation was not intended to differentiate between parts of the program but focused on the program as a whole. The evaluation is therefore not able to explore each separate component of Fresh Tastes in terms of its contribution to the overall impact of the initiative.
- Some data collected relates to perceptions of change in the school as collected from Fresh Tastes Action Groups and school executives. It is recognised that this self-reported data is subjective.
- As schools self-selected (opted) into Fresh Tastes, bias cannot be ruled out in results.

¹¹ Some data was collected from the three non-completion schools before they withdrew. Where appropriate this initial data has been included.

- Across the three years of the program, there was turnover of staff in some schools meaning the pre and post surveys were completed by different people.
- Some of the questionnaires were revised during the implementation of Fresh Tastes, meaning that some of the earlier data does not correspond precisely with the data from later rounds.
- Collecting dietary intake data directly from children was outside the scope of the evaluation and available resources.
- Not every school completed every document, meaning that some key information is likely to have been excluded. This may also indicate that there is an over-representation of some schools in the results.
- While the culture change matrix appears to be a robust and reliable tool, it was not possible within the timeframe and scope of this evaluation to meaningfully triangulate the outcomes from the matrix across the other documents to understand the specific mechanisms that create culture change at an individual or more granular school level (e.g., public, Catholic, or Independent schools).

3 Results in detail

3.1 Implementation of Fresh Tastes (KEQ 1)

Fresh Tastes offered schools three years of intensive support to work towards embedding a healthy food and drink culture within their school environment.

3.1.1 How many schools did Fresh Tastes reach? Were they Catholic, Government, or Independent schools? (KEQ1a)

Between 2014 and 2021, 97 (87% of all ACT primary schools) accessed support through Fresh Tastes.

There were eight intake ‘rounds’ of schools with the final round finishing their period of intensive support in 2021 (see Table 2).

- 97 schools commenced participation in Fresh Tastes;
- 94 schools (67 public schools, 15 Catholic schools and 12 Independent schools) officially ‘graduated’ from Fresh Tastes (three schools withdrew before completion);
- 94% of public primary schools, 71% of Independent schools and 63% of Catholic schools participated in Fresh Tastes;
- three public specialist schools and one outdoor education school graduated; and
- approximately 42,000 primary school students were reached.

Table 2: Number of schools involved in the eight Fresh Tastes intake rounds

Round	Number of schools	Commencement date	Three-year milestone date
1	8	April 2014	May 2017
2	12	September 2014	October 2017
3	7	May 2015	June 2018
4	12	September 2015	October 2018
5	13	April 2016	May 2019
6	6	August 2016	November 2019
7	15	November 2016	May 2020
8	21	March 2017	February 2021

**Rounds 7 and 8 extended beyond three years due to ACTHD staff resources available for school support, the higher levels of support required by some schools in these rounds and the impact of COVID-19 closures/restrictions on ACT primary schools.*

3.1.2 What action areas were implemented by participating schools? (KEQ1b)

At the beginning of each year, each school participating in Fresh Tastes brought together their working group to attend a facilitated workshop to write an action plan that targeted one or two action areas that the school focused on for the year. This helped schools prioritise their efforts and ensure that the goals and actions they set were achievable.

Each year, schools selected a range of action areas to focus on from the following options:

- Growing Food
- Cooking Food
- Food from Home
- Classroom Learning
- Food for Sale
- Food and Drink Guidelines (eventually available to independent schools only)

Schools could choose to select new action areas each year or continue their current action area/s in a subsequent year. Some schools did not choose new action areas each year, which reflects the flexibility of Fresh Tastes in terms of schools determining what was suitable and realistic for them to undertake.

Figure 2 below illustrates the uptake of each action area across the participating schools. As demonstrated, the most popular action areas were:

- Growing Food (90% of schools)
- Classroom Learning (81% of schools)
- Food from Home (76% of schools)

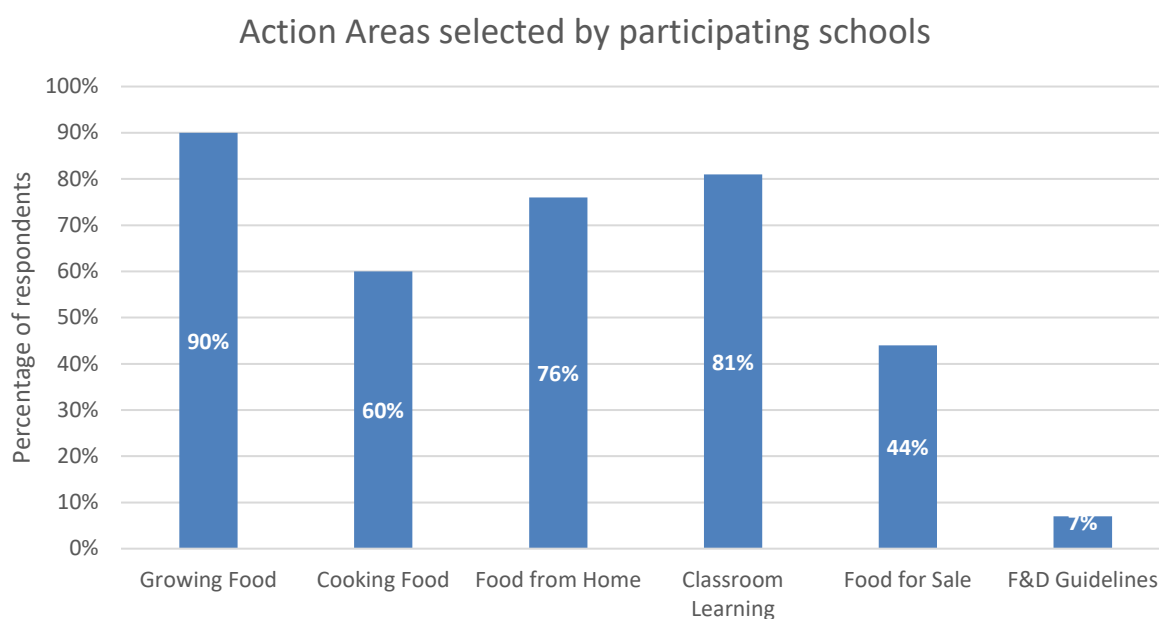


Figure 2: Action Areas selected by participating schools (n=96)¹²

The popularity of the Growing Food and Classroom learning areas aligns with the original needs assessment conducted prior to the development of Fresh Tastes which identified gardening as a key area of interest for schools and an identified need for resources linked to the Australian Curriculum.

The availability of cooking facilities was a consideration for schools when taking up the Cooking Food action area; with 60% of participating schools undertaking it.

¹² One of the 97 schools withdrew before selecting action areas.

Food for Sale was taken up by 44% of Fresh Tastes schools. The relatively lower uptake of this action area may reflect the fact that not all schools have a canteen service (approximately 30% of ACT primary schools do not have a canteen).

From 2015, the Food and Drink Guidelines action area could only be selected by non-government schools as ACT public schools were covered by the mandatory *ACT Public School Food and Drink Policy 2015*. Initially, Catholic schools could choose Healthy Food and Drink Guidelines, however once the Catholic Education Office's food and drink policy was developed with support from Fresh Tastes to do so, only Independent schools were offered this action area. Consequently, uptake of the Food and Drink Guidelines action area was relatively low.

Professional development opportunities for teachers

A key focus of Fresh Tastes, aligned with the original needs assessment, was to provide teachers with high quality professional development opportunities linked to creating healthy food and drink environments. Several action areas included access to professional learning for teachers: nutrition education in the classroom (Classroom Learning), gardening at school (Growing Food), promotion of healthy lunchboxes (Food from Home), and cooking skills (Cooking Food).

Fresh Tastes schools were provided with access to the Food&ME suite of free resources, developed in partnership with Nutrition Australia ACT. Teachers could undertake Food&ME Teacher Quality Institute accredited professional learning as well as use classroom-based resources mapped to the Australian Curriculum for all primary school year levels.

Schools were also provided with access to Stephanie Alexander Kitchen Garden program professional learning as part of the Growing Food and Cooking Food action areas.

Between 2014-2021, more than 1800 teachers undertook Food&ME, and 169 ACT teachers completed the Stephanie Alexander Kitchen Garden program professional learning*¹³.

As can be seen in more detail in Figures 3 and 4, Fresh Tastes successfully fostered a range of professional learning opportunities for staff that was successful in increasing teacher confidence to teach about healthy food and drinks:

- training opportunities that enabled staff to provide cooking experiences for students increased from 17% to 51%.
- similar opportunities for growing food professional learning increased from 30% to 62%.
- levels of high or very high confidence in teachers to teach about healthy food and drink increased from 70% to 81% among participating schools.

¹³ *As Food&ME is available online, not all teachers accessing the professional learning were in the ACT, nor in Fresh Tastes schools.

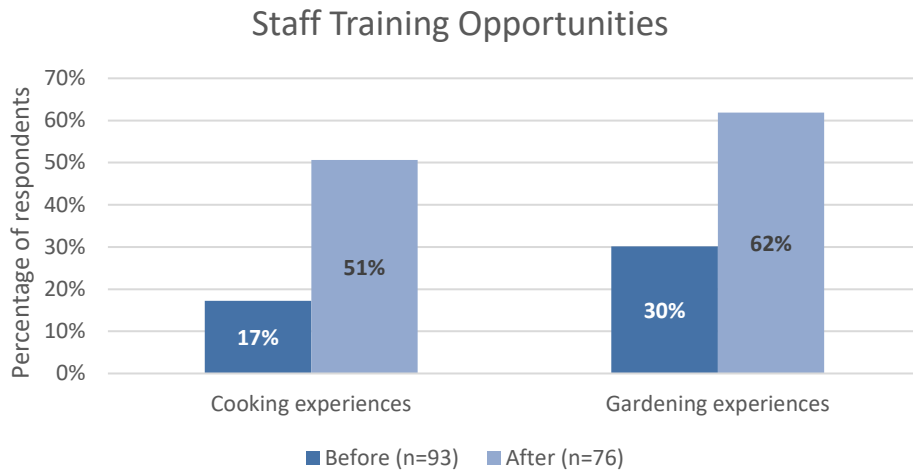


Figure 3: Changes in 'Yes' responses to the question 'Are teachers or other support services trained to provide cooking/gardening experiences for students?'

The Growing Food action area was supported with professional learning opportunities, with the working groups reporting a significant increase in teachers and other support staff being trained to provide gardening experiences for students. Teacher training in providing gardening experiences for students increased from 30% to 62% post Fresh Tastes.

Schools also reported a significant increase in teachers and other support staff being trained to provide cooking experiences for students. The availability of cooking facilities was a key consideration for schools when taking up this action area, with 60% of schools undertaking it. Teacher training in providing cooking experiences for students increased from 17% to 51% post Fresh Tastes.

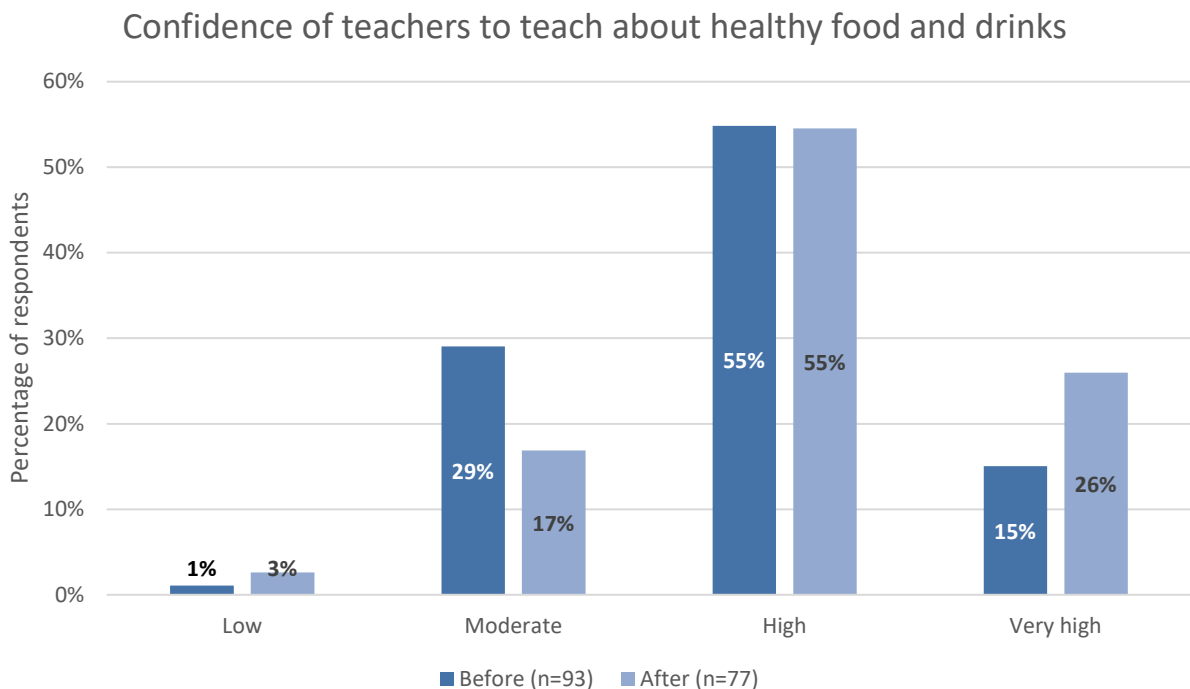


Figure 4: Pre- and Post-audit responses to question 'Rate the confidence of teachers to teach about healthy food and drinks'.

Prior to participating in Fresh Tastes, 15% of schools rated their teachers' confidence to teach about healthy food and drinks as very high. Post participation, this had increased to 26%. Notably, while the

percentage of schools rating their teachers' confidence as high stayed consistent at 55%, the proportion of schools rating their teachers' confidence as moderate decreased from 29% to 17%. This suggests movement from moderate through to very high levels of confidence.

3.1.3 To what extent were schools supportive of Fresh Tastes throughout participation? (KEQ1c)

At the end of the first and second years of Fresh Tastes participation, principals or a school executive participated in a 12-month interview. The interview included questions related to the extent to which there was support from the school and school community for Fresh Tastes.

Overall, participating schools were very positive about the Fresh Tastes program. Positive comments were regularly made by participating schools throughout the 12-month interviews and via a range of other data collection tools in relation to the Fresh Tastes team, and the experiences with service partners and the support that they received. Some of the specific responses included:

"Fresh Tastes fits in so well with our school and vision. The Fresh Tastes resources have been fantastic, and the visual supports encourage student learning. We look forward to our next action area".

"Fresh Tastes has been a wonderful way to learn and promote healthy eating and drinking at our school. The resources, partners and support provided by the team have made the 3 years of work worthwhile and have motivated us to continue on the journey".

"The executive team has ensured that the Fresh Tastes service has had a high profile. The parent community values the service, so as a result this becomes a priority of the school executive."

"The school executive supports Fresh Tastes as part of a suite of community and school services. We are conscious that we need to actively promote the services more to encourage our community to participate however we are very supportive of the Fresh Tastes services we have accessed so far."

"The Fresh Tastes activities have worked very well with [other programs] we are currently running at the school."

"Fresh Tastes has been instrumental in making positive and sustainable changes in the school".

It is clear from the 12-month interviews that Fresh Tastes was supported by schools in most instances. Where support for Fresh Tastes from within the school community was lacking it appears to relate to either a lack of leadership or leadership engagement, or staff capacity or capability. These are frequently cited and widely acknowledged barriers when working with schools and the associated risks to programs should be identified and planned for early in the engagement process.

There were a small number of examples within the 12-month interviews where support for Fresh Tastes across the school was not noted. These appear to primarily relate to staff capacity or interest, for example:

- Staff turnover
- A lack of broader support for the 'champion' within the school
- The Fresh Tastes coordinator at the school being new and lacking confidence in asking for help from other staff members and/or the Fresh Tastes team

- Lack (real and perceived) of executive support or interest relative to other priorities
- Dependencies between initiatives – for example, at one school, the Stephanie Alexander Kitchen Garden Program (SAKGP) professional development was well received, but the installation of a garden at the school to allow teachers to implement their learnings had not occurred

3.1.4 What were the enablers and barriers to implementation for participating schools? (KEQ1d)

Fresh Tastes was successful in supporting schools to reduce the number of barriers to program delivery and increase the number of enablers.

Table 3 summarises the main enablers and barriers to implementing Fresh Tastes that have emerged through analysis of participating schools' data.

- Barriers were noted for an average of 80% of schools within each action area at the start of their participation, this dropped to an average of 27% by program completion.
- Enablers were noted for an average of 65% of schools within each action area at the start of their participation, this increased to an average of 94% by program completion.

These barriers and enablers are consistent with those identified and discussed in detail within the Interim Monitoring Report and therefore will not be discussed further as part of this Final Evaluation Report.

A key aspect that became clear through the analysis of the barriers and enablers data was the marked reduction in the barriers to delivery of action areas, and an increase in enablers as participating schools progressed through their Fresh Tastes journey. Specifically, there was a shift away from aspects of delivery being seen as barriers towards them being enablers:

- Barriers were noted for an average of 80% of schools within each action area at the start of their participation, this dropped to an average of 27% by program completion.¹⁴
- Enablers were noted for an average of 65% of schools within each action area at the start of their participation, this increased to an average of 94% by program completion.

This suggests that the action areas model and, most importantly, how to support schools in the implementation of plans around these action areas, has been effective.

The following action areas demonstrated the most significant reduction in barriers over the three years.

- **Growing Food:** Barriers were identified for 78% of schools at the beginning of their participation, this dropped to 8% by program completion.
- **Cooking Food:** Barriers were identified for 79% of schools at the beginning of their participation, this dropped to 24% by program completion.
- **Classroom Learning:** Barriers were identified for 74% of schools at the beginning of their participation, this dropped to 21% by program completion.

The following action areas demonstrated the **most significant increase in enablers:**

- **Healthy Food and Drink Guidelines:** Enablers were identified for 43% of schools at the beginning of their participation, this increased to 92% by program completion.

¹⁴ The figures here have been calculated by adding the schools that experienced only limitations with schools that experienced both (barriers) and schools that experienced only strengths with schools that experienced both (enablers).

- **Cooking Food:** Enablers were identified for 44% of schools at the beginning of their participation, this increased to 84% by program completion.
- **Food From Home:** Enablers were identified for 58% of schools at the beginning of their participation, this increased to 94% by program completion.

The figures below present the changes in barriers and enablers across all action areas. Results for each individual action area are available in Appendix 2.

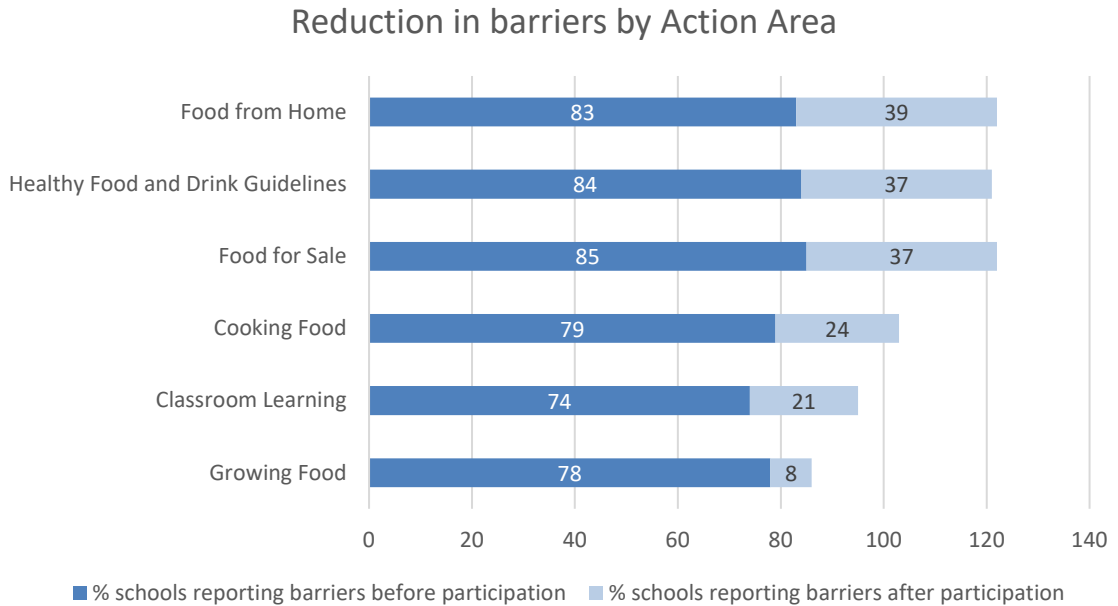


Figure 5: Reduction in barriers by Action Area

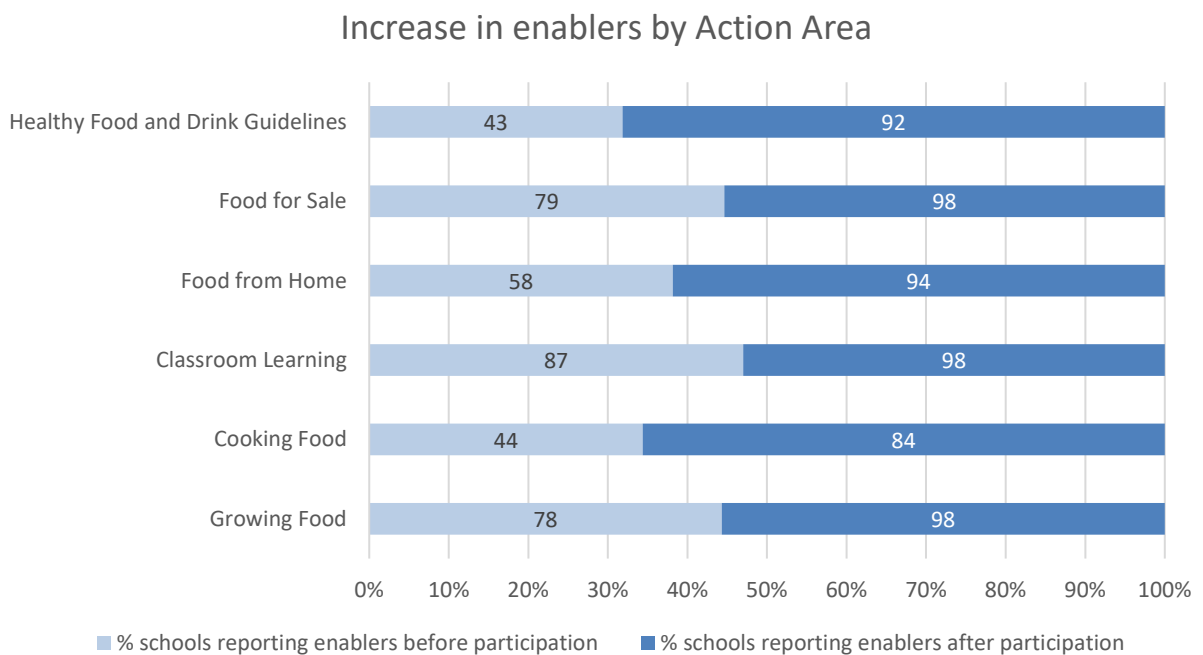


Figure 6: Increase in enablers by Action Area

3.2 Did Fresh Tastes influence the food and drink culture in participating schools? (KEQ 2)

3.2.1 How did Fresh Tastes influence food and drink culture overall, and across the elements within the Culture Change Matrix? (KEQ2a)

Fresh Tastes has made a significant positive impact on creating a healthy food and drink culture in participating schools.

To understand whether school culture had changed, ACTHD developed a 'culture change matrix'¹⁵ drawing on an extensive literature review that identified seven key components of a 'healthy food and drink culture':

- **Leadership** – involvement in decision making, role modelling re healthy food & drink
- **Partnerships and community** – school, family and student partnerships for healthy food & drink
- **Knowledge building** – teachers' confidence and family involvement in healthy food & drink
- **Communication** – promotion of healthy food & drink, student participation
- **Resources** – staff, finance, educational tools & equipment that support healthy food & drink
- **Environment** – policy/guidelines and infrastructure for healthy food & drink
- **Readiness for change** – school's readiness to change food and drink culture

Each participating school completed a culture change matrix at the start of their involvement in Fresh Tastes, and again at the end of their involvement. To complete the matrix, the group driving Fresh Tastes within each school met as a group and collectively worked through the matrix to arrive at a rating of where they sat on a spectrum of 'beginning', 'developing', 'established' or 'embedded'. If it was not possible for the group to do this, the Fresh Tastes Coordinator completed the matrix.

In total, 97 schools completed the baseline survey, and 91 schools completed the end of participation survey. Of the 91 schools, 89 completed the end of participation survey after their three years of participation, with two schools completing the survey after only one year of involvement. A number of respondents selected an option 'in between' two possible rankings, and these rankings have been 'rounded down' to the lower selection so as to not to overstate the impact and level of change.

Key findings from the culture change matrix analysis include:

- **Before participating in Fresh Tastes, only 4% of schools indicated that their school's current healthy food and drink culture was either established or embedded, however after participation, 78% indicated it was established or embedded.**
- **73 schools (80%) reported a positive shift in their overall food and drink culture.**
- Of these 73 schools, the most common shift was from 'developing' to 'established', with 41 (56%) of schools reporting this change.
- The next most common shift was from 'developing' to 'embedded' (14 schools), followed by 'beginning' to 'established' (11 schools).
- One school moved from 'beginning' to 'embedded' during their Fresh Tastes journey.
- 17 schools did not report any change, and one school reported a negative shift.¹⁶

¹⁵ See Appendix 2 for the full matrix.

¹⁶ Fresh Tastes staff suggest that this negative shift was caused by the different staff reporting before and after participation, rather than a commentary on the school's culture.

Figure 7 below shows the overall rating of culture in participating schools as per the culture change matrix at the start and completion of participation in Fresh Tastes.

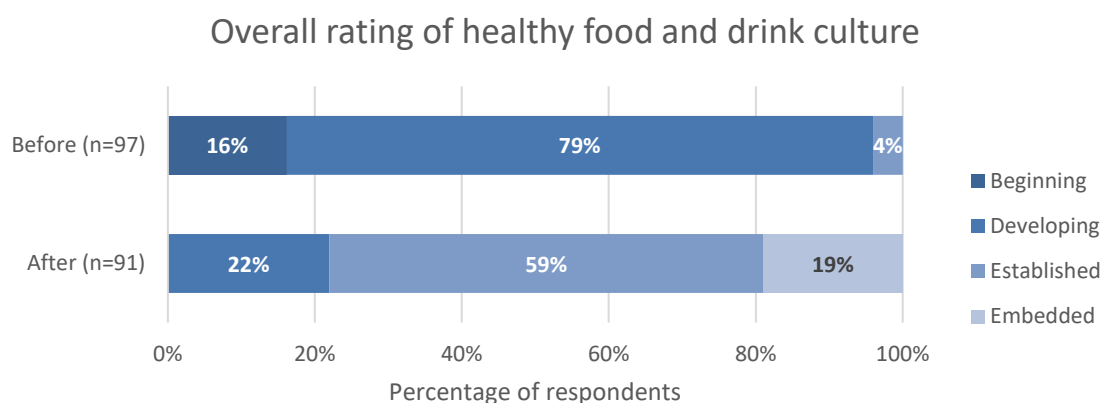


Figure 7: Culture Change Matrix responses to “Overall, how would you describe the current food & drink culture of your school?”

Fresh Tastes supported schools to significantly improve across each of the identified domains of a healthy food and drink school culture. The proportion of schools reporting each domain as being ‘established’ or ‘embedded’ improved markedly pre and post participation in Fresh Tastes. For example:

- Before participation, 5% of schools indicated that **leadership** was established or embedded, and after participation 68% of schools indicated that it was established or embedded.
- Before participation, 4% of schools indicated that **partnerships and community – school**¹⁷ was established or embedded, and after participation 64% of schools indicated that it was established or embedded.
- Before participation, 6% of schools indicated that **communication** was established or embedded, and after participation 71% of schools indicated that it was established or embedded.
- Before participation, 6% of schools indicated that **resources** was established or embedded, and after participation 73% of schools indicated that it was established or embedded.
- Before participation, 31% of schools indicated that **environment – policies**¹⁸ was established or embedded, and after participation 90% of schools indicated that it was established or embedded.

Figure 8 illustrates the results for each of the culture change domains.

¹⁷ The initial version of the culture change matrix only had one option for ‘partnerships and community’ and ‘environment’. The results from these 25 and 26 schools respectively have been added to both options (partnerships and community – school, partnerships and community – families and students / environment – policies, environment – infrastructure), therefore these results may not be as accurate as the other components.

% schools with domains of culture 'established' or 'embedded'

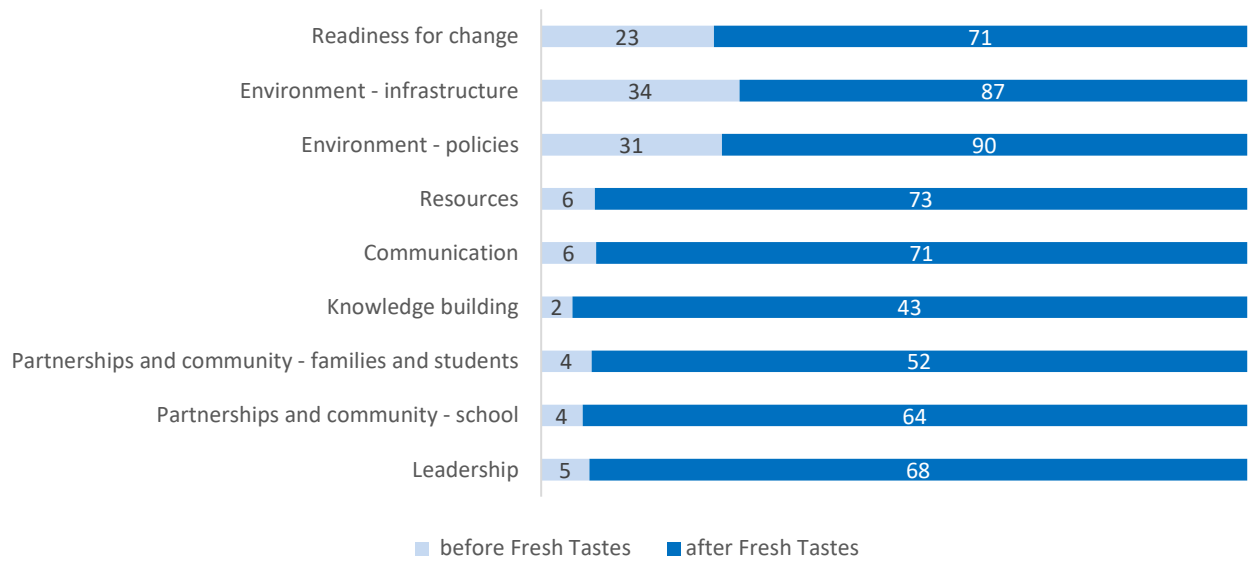


Figure 8: % of schools reporting each domain of healthy food and drink culture as being 'established' or 'embedded'

The graph below contains the full culture change matrix results, with the individual results for each component provided in Appendix 3.

Culture change matrix results: overall and for all domains - pre and post participation in Fresh Tastes

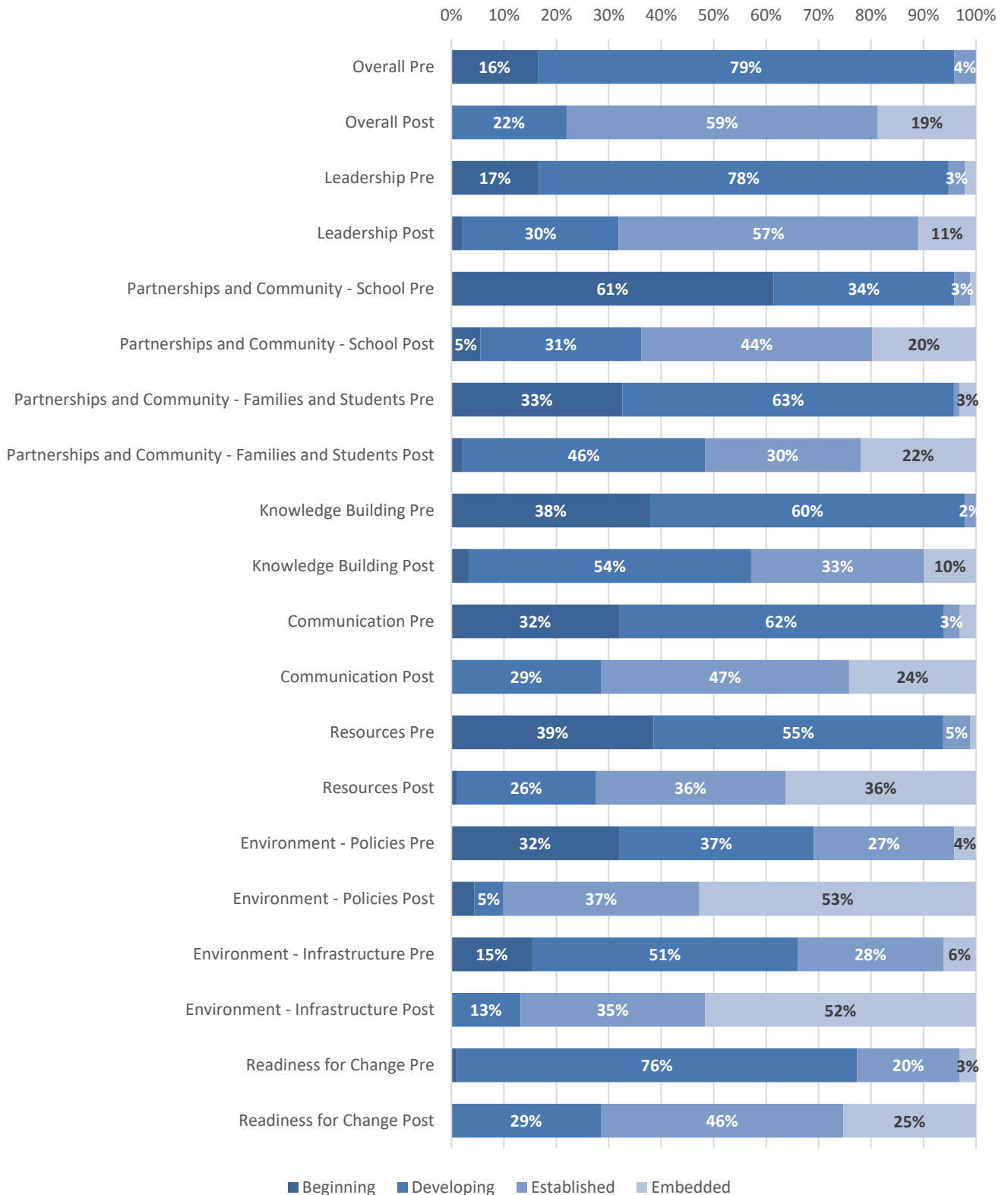


Figure 9: Responses for all domains of the Culture Change Matrix pre and post Fresh Tastes participation.

Differences between higher and lower performing schools

Seventeen schools reported a healthy food and drink culture being 'embedded' by the end of their participation in Fresh Tastes, and 12 schools reported a large culture shift from 'beginning' to 'established'.

Of these 29 "top performing" schools:

- 100% (29) reported that 'Environment' was either embedded or had markedly improved (increased by more than one level)
- 79% (23) reported that 'Resources' was embedded or markedly improved
- 69% (20) reported that 'Partnerships' was embedded or markedly improved

Notably, only 31% (9) of these 29 schools indicated that 'Leadership' was embedded or markedly improved by the end of their three-year participation period.

There were 17 schools that did not report an overall shift in their culture during their participation in Fresh Tastes. Of these, 16 remained at 'developing' and one school remained at 'established'. All of these schools participated in rounds 4 through 8, with the highest number of non-shifting schools participating in Round 8.

Potential reasons for this set of schools not making a shift may include a shortened length of time participating in Fresh Tastes (several schools were recruited for one or two years only); and the fact that these schools were all recruited after Round 4 which meant they may have been more difficult to attract into Fresh Tastes than in the first instance, and therefore have been less enthusiastic about the program and possibly less ready to change.

There are some points of difference to note between the group of schools reporting the highest levels of culture change compared with those who did not report an overall shift in culture.

- 100% of the highest achieving schools in terms of culture change had successfully embedded or made substantial improvements to their policy and/or physical 'Environment'; however only 41% of the schools that did not make an overall culture shift improved on that domain.
- 79% of the highest achieving schools had embedded or improved their 'Resources' for healthy food and drink compared to 47% of schools that did not shift overall.
- 44% of schools in the group that achieved the most culture change had embedded 'Readiness for change' compared with just 12% of schools that did not report an overall culture shift.

These differences suggest that environmental changes (infrastructure or policy-based); allocation of resources to healthy food and drink initiatives and readiness for change are all key drivers of positive culture change.

The readiness for change finding is particularly relevant for recruitment of schools to future programs. An accurate assessment of readiness for change, such as that provided by the culture change matrix, could be an extremely useful tool for program areas to identify schools, at the beginning of program participation, that are likely to require comparatively higher levels of support to achieve program aims. Further exploration of this element of the culture change matrix should be considered for potential adaptation and use in future programs.

3.2.2 To what extent has there been an increase in healthy eating among children in participating Fresh Tastes schools? (KEQ 2b)

This section draws on specific elements of the Food and Drink Situational Audit which participating schools completed as part of their involvement in Fresh Tastes. Results demonstrate that there have been positive changes in student support for healthy eating and drinking in participating schools.

The audit was completed at the start of a school’s involvement in Fresh Tastes, and then again when they finished the program. The audit contributed both to action planning via the ‘pre-audit’ results, and to this evaluation via a comparison to ‘post-audit’ results. This helps to provide a picture of how the Fresh Tastes School Action Group perceived student attitudes to healthy food and drink consumption to have changed.

As can be seen in Figure 10, **there have been positive changes perceived in student support for healthy eating and drinking in participating schools.** Notably, the support for healthy eating ranked as ‘High/Very high’ significantly increased from a combined 22% to 59% between the two audits. Support for healthy drinking among students was also felt to have increased, though less than support for healthy eating (58% to 67%).

These changes in perceived student support were determined to be statistically significant. Details can be found in Appendix 3.

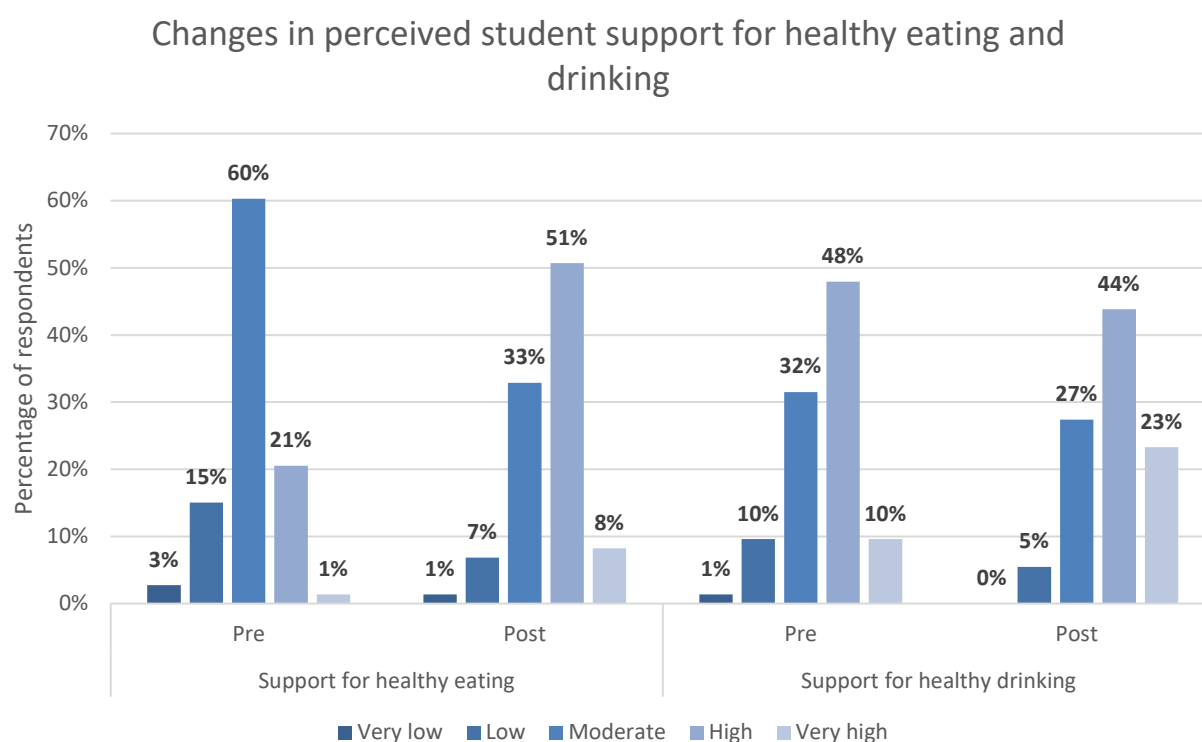


Figure 10: Pre and post Food and Drink audit results (n=74 schools)

School canteen environment

Since the *ACT Public School Food and Drink Policy* was implemented in 2015, all public school canteens have completed an annual canteen menu assessment. While this process was independent of Fresh Tastes,

the program supported school canteens by providing them with resources and support to create healthier menus and run efficient healthier canteens. Non-government Fresh Tastes schools were also offered canteen support and menu assessments. Since 2015, the proportion of ‘red’ items on public school canteen menus has decreased from 18% to just 2%, and green items have increased by 28%. School canteens have made a major contribution to improving the school food and drink environment in public schools in particular.

Demand for and access to healthy food and drinks

In terms of changes in school canteens; results from the Fresh Tastes Food and Drink Situational Audit indicate that:

- Fresh Tastes schools that had fully embedded the National Healthy School Canteen Guidelines increased from 25% (23/93) to 57% (45/79) pre and post their participation in the program.
- There was an increase from 44% to 66% of schools agreeing that their canteen mainly provides food and drinks with high nutritional value.
- School canteens were more likely to have improved on offering healthy food choices than healthy drink choices, with 61% of schools agreeing in their post-audit that the canteen promotes healthy food choices, and 48% agreeing that it promotes healthy drink choices.
- **There was an increase from 22% to 46% of schools agreeing that the food and drinks provided by the canteen were consistent with classroom messages about nutrition.**
- **81% of schools reported a positive change in demand for healthy food and drinks pre and post participation in Fresh Tastes.**
- **84% of schools reported a change in attitudes towards healthy food and drinks pre and post participation in Fresh Tastes.**

These figures are provided below.

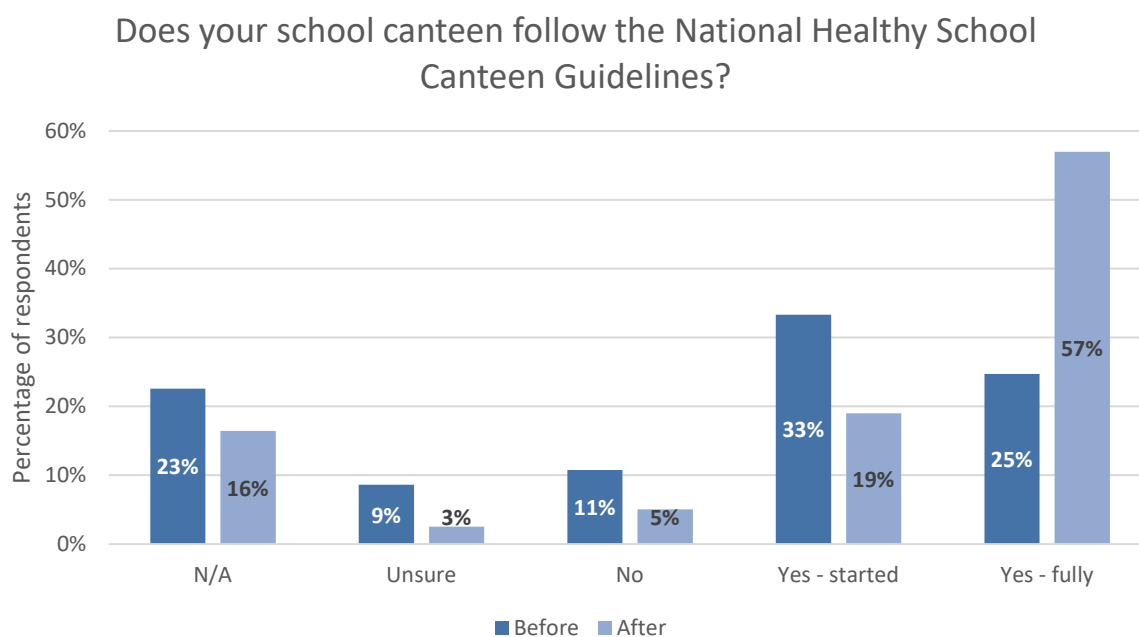


Figure 11: Pre and post-audit responses to ‘Does your school canteen follow the National Healthy School Canteen Guidelines’

Our canteen service mainly provides foods and drinks with high nutritional value

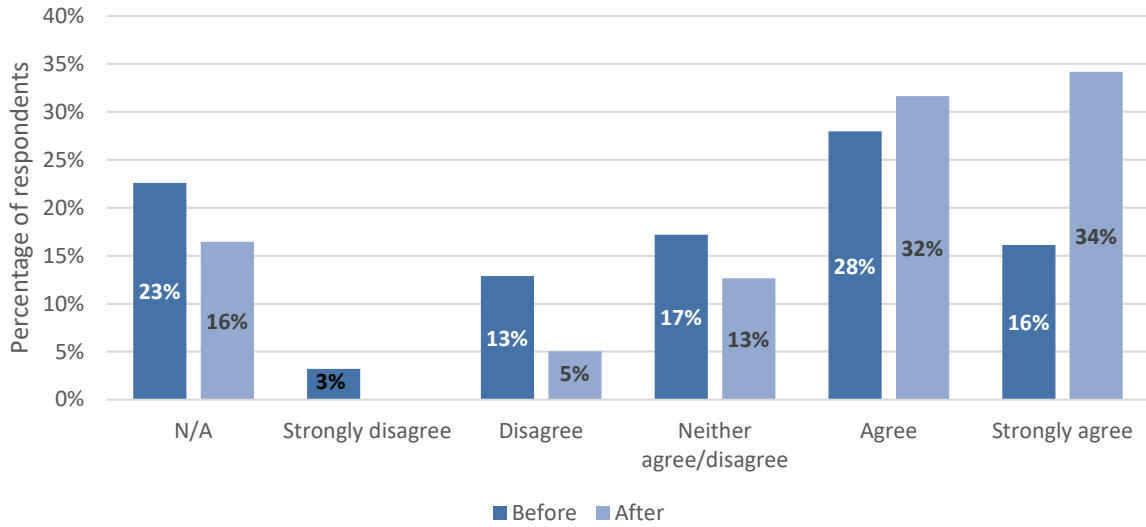


Figure 12: Pre and post-audit responses to 'Our canteen service mainly provides foods and drinks with high nutritional value'

Does the canteen routinely promote healthy food/drink choices?

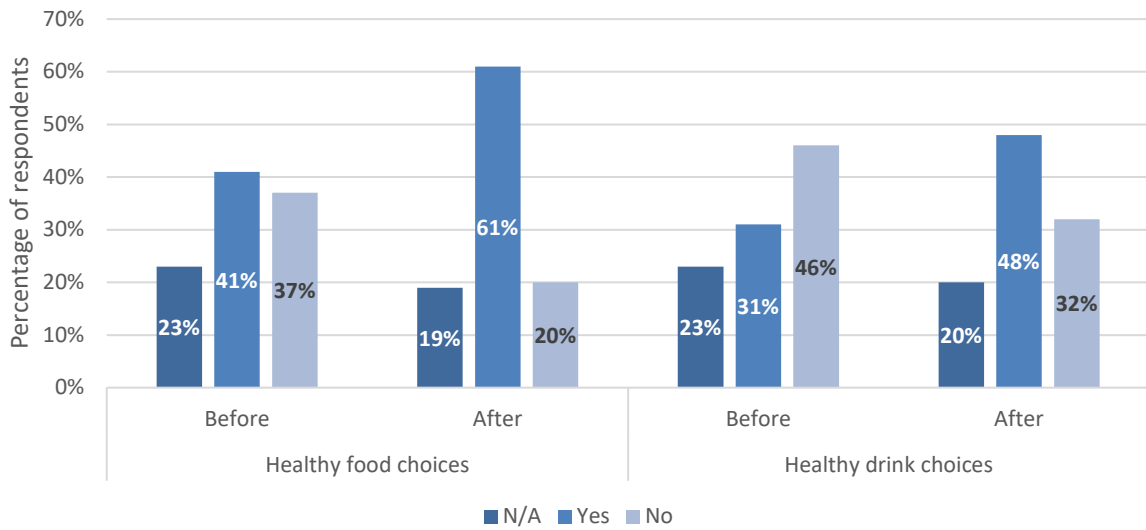


Figure 13: Pre and post-audit responses to 'Does the canteen routinely promote healthy food/drink choices'

Are the food and drinks provided by the canteen consistent with classroom food and nutrition messages?

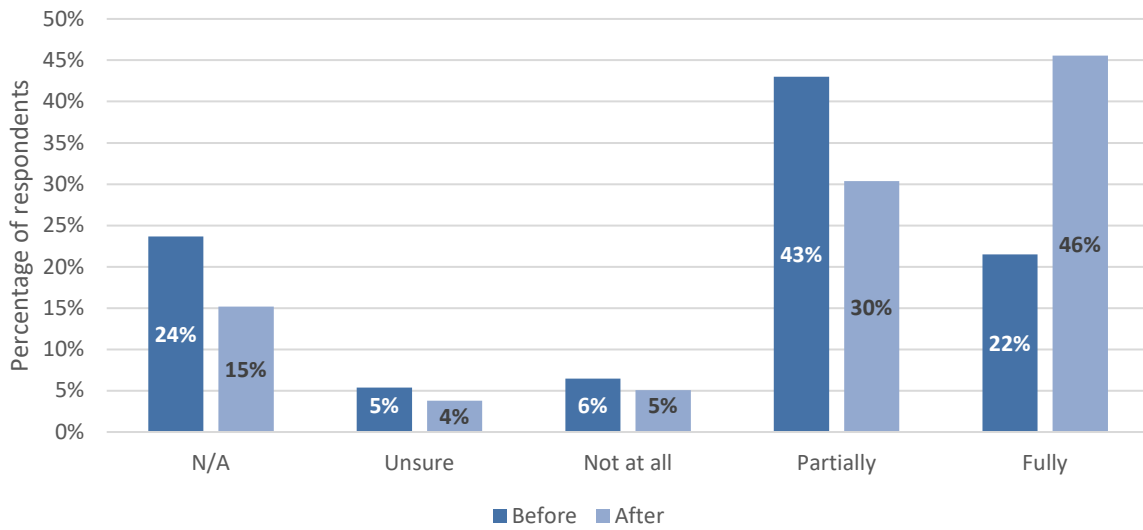


Figure 14: Pre and post-audit responses to 'Are the food and drinks provided by the canteen consistent with classroom food and nutrition messages'

Perceived changes in demand for and attitudes towards healthy food and drinks

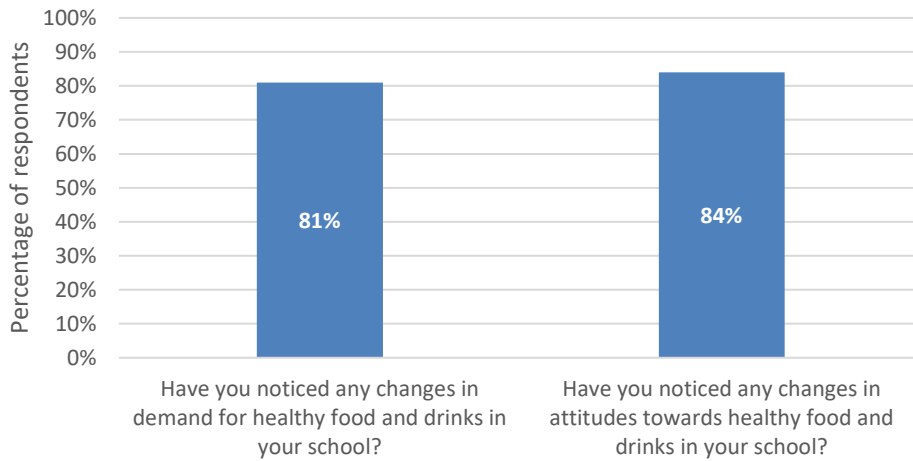


Figure 15: Post-interview 'Yes' responses to 'have you noticed any changes in demand for/attitudes towards for healthy food and drinks in your school?' (n=73/76)

To supplement the data above, analysis was also undertaken by ACTHD’s Epidemiology section on the ACT Physical Activity and Nutrition Survey (ACTPANS) data from 2015 and 2018, to explore whether this provided additional evidence for the efficacy of Fresh Tastes. The ACT Physical Activity and Nutrition Survey (ACTPANS) is a health survey that has been conducted every 3 years since 2006. Around 1500 Year 6 students from primary schools across the ACT participate in ACTPANS each time. Information about physical activity, nutrition and weight status are collected. Height and weight are also measured by trained professionals in a private setting. Overall, there has been a downward trend in the prevalence of overweight and obesity in ACT Year 6 students, from 25.1% in 2006 to 19.4% in 2018.¹⁹

ACTPANS results between 2015-2018 demonstrate that most ACT Year 6 students meet or exceed the daily recommendation of two serves of fruit. The proportion of children reporting that they eat sufficient fruit has been stable in recent years, ranging from 84.1% in 2015 to 82.9% in 2018.

In contrast, vegetable consumption amongst ACT Year 6 students is low, with only one in 10 (10.3%) of children meeting the daily recommendation of five or more serves in 2018. This figure remains stable from 2015. Over half of all children (55.2%) consumed less than 2 serves of vegetables per day in 2018, which has remained stable from 54.2% in 2015.²⁰

Six Fresh Tastes schools were randomly selected for inclusion in ACTPANS both in 2015 and 2018, however, there were no significant differences in reported fruit and vegetable consumption between these six schools and the ACTPANS overall results.

One possible reason for the lack of appreciable difference between the groups is the saturation of Fresh Tastes in the ACT, with almost 90% of schools having been exposed to the program at some point. It is likely that this exposure contributed to some of the overall positive results from ACTPANS, and the lack of variation between the two groups, as the ACTPANS sample does not have enough power to assess the impact of the Fresh Tastes program, nor make attributable cause to the program.

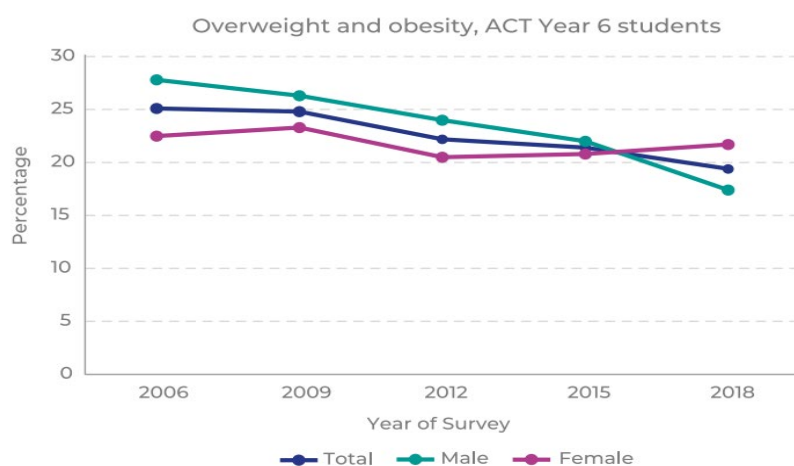


Figure 1: Overweight and obesity, ACT Year 6 students (Source: ACTPANS 2006-2018)¹

¹⁹ ACT Government (2019) Focus on Healthy weight in childhood. Canberra ACT

²⁰ ACT Government (2019) Focus On Child nutrition. Canberra ACT

3.2.3 In what ways will schools continue with the aims of the program after their Fresh Tastes participation ceases? (KEQ2c)

Schools were given the opportunity to note how they planned to continue promoting a healthy food and drink culture in their post Food and Drink audit. Similarly, schools indicated what activities they planned to sustain going forward in their Achievements and Opportunities questionnaire. The most common answers were themed as follows:

- **The garden and gardening:** Schools noted that they would design, develop, maintain, or upgrade their garden space. This included improving the accessibility of the garden and increasing gardening activities including growing and eating fresh produce. For example:

“The school has architect plans to build a new kitchen garden area where children can grow fruit and vegetables and harvest their crops. Plumbing, drainage and covered spaces are already completed. The area will have a teaching space”

- **Promotion and communication:** Schools indicated they planned to focus on promoting a healthy food and drink culture particularly with students, families, and the wider community. Suggestions included providing nutrition information and recipes in newsletters, healthy eating reminders at assemblies, and displaying posters in classrooms. For example:

“This space needs constant attention through good communication across the school, access to up to date and fresh ideas/research”

- **Nutritional education and curriculum integration:** Suggestions included incorporating Fresh Tastes concepts into areas of inquiry within the school curriculum and making links between other relevant subject areas and programs. For example:

“Using the Food&ME program as part of meeting outcomes in the health component of the curriculum”

- **Cooking:** Schools suggested they would continue offering cooking opportunities for students, including cooking clubs and cooking demonstrations. For example:

“Cooking food is our next initiative. It is a strong focus in the preschool but not across the whole school. We have recently had a professional learning on cooking in your classroom which inspired those who attended”

- **Canteen:** Schools indicated that they would focus on the canteen continuing to sell healthy food choices, improving and maintaining the canteen space, and continuing to meet guidelines. For example:

“Through the continued success of the canteen and its active involvement with students to promote healthy eating options and the school”

The Fresh Tastes team relied on the information provided in the Food and Drink Audit to provide each school with a range of ‘opportunities’ identified by the team against each action area as part of their final year ‘strengths map’. These opportunities indicated where schools could focus their energy and attention going forward based on their audit results. The key areas identified through this process were:

- **Family involvement for both cooking and growing food, and family support for healthy eating and drinking;**

- **Ensuring consistency between the canteen and classroom messages about nutrition; and**
- **Monitoring and improving the effectiveness of the school’s healthy food and drink policy.**

Table 4 presents the top identified opportunity for each action area.

Table 3: Top opportunities for each action area

Action Area	Top opportunity identified
Cooking Food	Family involvement in cooking activities
Growing Food	Family involvement in growing activities
Food From Home	Increase family/parent/student support for healthy eating and drinking
Classroom Learning	Consistency of canteen and classroom messages about nutrition
Health Food and Drink Guidelines	Continue monitoring and improving effectiveness of policy
Food for Sale	Consistency of canteen and classroom messages about nutrition

3.3 Lessons from the implementation of Fresh Tastes (KEQ 3)

3.3.1 What are the key success factors that influenced the effectiveness of Fresh Tastes in schools? (KEQ3a)

Strong leadership support, particularly from the principal, and a passionate and dedicated Fresh Tastes coordinator were seen by schools as very important for the effectiveness of Fresh Tastes.

One of the key monitoring tools used in Fresh Tastes was the ‘factors for success’ questionnaire. It was developed to allow Fresh Tastes Action Groups to identify the most important factors that influenced the food and drink culture in their schools. Data was received from 58 schools through the Fresh Tastes Coordinator. There were two versions of the questionnaire that were provided to schools:

- The version for round 1 included 25 options to select, and schools could tick a box if they felt that factor was essential.
- The version for rounds 2 through 8 included 29 options, and schools could select from the following for each factor: this was essential; this helped, but was not essential; we didn’t have this, which made it more difficult; this was not a factor; N/A.

Overall, schools felt that the following factors were essential:

- **Strong leadership support, particularly from the principal**
- **Support from the ACT Health Fresh Tastes team**
- **Appropriate infrastructure and/or availability of drinking water²¹**
- **Food and drinks being a school priority**
- **A passionate and dedicated Fresh Tastes coordinator to drive action**

²¹ Only one school from round 1 selected this option (the availability of drinking water) therefore the high response rate to this question is almost exclusively related to having appropriate infrastructure.

Schools indicated that the following factors had **helped, but had not been essential**:

- Having access to Teacher Quality Institute accredited professional learning (n=22).
- Having an ability to link Fresh Tastes to annual school planning documents (n=21).
- Having support from parents/ families (n=20).
- Having an awareness of Fresh Tastes within school community (n=20).

Schools indicated that **not having the following factors had made things more difficult**:

- Having staff time allocated to Fresh Tastes (n=11).
- Having other teachers within the school involved in Fresh Tastes activities (n=8).
- Having a dedicated budget to support food & drink activities (n=6).
- Having a good relationship between the canteen and the school (n=5)
- Experiencing changes in school staff (n=5)
- Having students as part of Fresh Tastes Action Group (n=5)

Appendix 3 contains the full analysis and results of the factors for success questionnaire.

3.3.2 What seems to help or hinder the sustainability of culture change in participating schools? (KEQ3b)

Results from the pre and post culture change matrices strongly indicate that Fresh Tastes schools experienced positive movement towards embedding the seven components of a healthy food and drink culture. After completing Fresh Tastes, 78% of participating schools indicated that their school's overall healthy food and drink culture was either established or embedded, compared to only 4% before participation. **This suggests that the Fresh Tastes model is effectively contributing to sustainable outcomes and longer-term culture change.** Other data provided by participating Fresh Tastes schools, including through 12-month interviews, pre and post audits and Fresh Tastes' workshops suggests that the sustainability of culture change can be impacted by the following:

- Staff capacity and capability at both the implementer and executive/leadership level
- Promotional efforts, including engaging and involving students, families, and the wider community
- Aligning and embedding nutritional education, particularly ensuring consistency of messaging about nutrition between the canteen and the classroom
- Maintaining motivation and preventing burnout

Staff capacity and capability

The 12-month interview completed by schools at the end of their first and second years' participation indicated that **staff capacity and capability could hinder the sustainability of the program.** This was primarily due to:

- Staff turnover
- Fresh Tastes coordinator being new and lacking confidence
- Lack of broader support for the Fresh Tastes 'champion'
- Lack of executive support

It was noted that the presence of executive team members on the Fresh Tastes Action Group and specific allocation of staff time to focus on being the 'cooking and gardening teacher' was very helpful. Strong

leadership support, particularly from the principal, was identified as being the most essential 'key success factor', and a passionate and dedicated school Fresh Tastes coordinator was also seen as very important.

Promotional efforts

The post-food and drink audit, Strengths Map, 12-month review, and Achievements and Opportunities questionnaire results all suggest that **promotional efforts and communication with families and the wider school community is seen as an important consideration going forward**. Schools identified both the levels of involvement and engagement from students, staff, parents, and the wider community, and communication as some of the most significant challenges when implementing the program. Similarly, comments on the Strengths Map noted that family involvement for both cooking and growing food, and family support for healthy eating and drinking should be a key focus going forward, to ensure the sustainability of the program.

Nutrition education and classroom links

Schools suggested through the pre and post audits and the Factors for Success questionnaire that **aligning classroom and canteen messages about nutrition was a crucial enabler**. Embedding nutritional education within the curriculum at every year level and including hands-on nutrition activities was also seen as important, as was healthy food and drinks being a school priority.

Motivation, burnout, and continued support

Interviews with key stakeholders conducted for the interim evaluation report suggested that **'burnout' was the main barrier to the continuation of program delivery**. This highlights the importance of keeping energy levels and motivation high after the cessation of intensive involvement in the program.

Several stakeholders interviewed for the interim report mentioned that there may be a risk that schools 'drop off' or 'fall over' after their period of intensive involvement ceases. The ACTHD Fresh Tastes team has recognised this and offer a range of support and resourcing to schools after their intensive support ends.

This includes:

- A 'Sustaining Fresh Tastes' workshop run by the Fresh Tastes team where Fresh Tastes Action Groups reflect on strengths, challenges, and opportunities by developing a simple maintenance plan to continue Fresh Tastes activities in the school;
- Ongoing phone and email support;
- Quarterly e-newsletter;
- Invitations to networking events;
- Invitations to relevant professional learning opportunities;
- Fresh Tastes website;
- Articles to use for social media, newsletters, orientation sessions, and websites;
- Fresh Tastes partner services;
- Promotional materials (e.g., banners, posters); and
- Optional annual Action Planning Workshops.

Only 19% of schools reported that they had embedded a healthy food and drink culture by the end of their participation, with 22% reporting it was still developing. While there was a high proportion of schools who reported it was established (59%), most participating schools were still working towards making a healthy food and drink environment 'business as usual'.

Given that:

- **support from the ACT Health Fresh Tastes’ team**
- **having a passionate and dedicated Fresh Tastes coordinator, and**
- **support from the principal or executive**

were identified as three of the five most essential success factors, it is important to ensure that these components remain available to the 81% of schools still working towards an ‘embedded’ healthy food and drink culture.

Ways to ensure that the cessation of intensive support from the Fresh Tastes team and the potential for staff members to experience ‘burnout’ do not compromise these schools’ journeys should be investigated and supported going forward.

3.3.3 What learnings from the Fresh Tastes experience would be useful to inform future programs? (KEQ3c)

Overall, the key learning from the implementation of Fresh Tastes is that the program has effectively contributed to improving the healthy food and drink culture of participating schools in the ACT. These positive results indicate that the Fresh Tastes model is effective in creating culture change within a school-based environment, and could be successfully applied to other contexts, and content areas. This highlights that future programs should ensure that:

- **school-based health promotion programs should be ‘easy to implement’.** This may mean aligning the program to government and school policies and priorities, using the language of schools and the education sector, and developing and disseminating high quality resources and supporting materials that tie into teacher’s professional development and learning.
- **flexibility in the program design and delivery is maintained.** This will allow schools to implement what works best for them and tailor the implementation of the initiative to their own context. Taking a principles-based approach has been effective for Fresh Tastes and appears to be worthwhile as a basis for school-based programs.
- **An accurate assessment of readiness for change is conducted to identify schools that are likely to require comparatively higher levels of support to achieve program aims.** Further exploration of this element of the culture change matrix should be considered for potential adaptation and use in future programs.
- **A ‘team’ of people beyond an individual champion within a school should be encouraged.** Ensuring leadership engagement and buy-in and dealing with staff capacity and capability were seen as key factors for the success of the program. Future programs should ensure that there is strong leadership and executive support, and that the success of the program is not tied to one particularly passionate or involved individual. Plans should be put into place that address staff turnover and motivational fatigue challenges.
- **There needs to be a focus on addressing systemic drivers or barriers.** At an education system level, consideration should be given to prioritising drivers such as leadership, appropriate infrastructure and a policy/planning environment that supports healthy school environments. At the school level, this includes having an understanding of any possible interrelated mechanisms available to the school (such as existing infrastructure, or other relevant and compatible programs) in order to maximise efficiency and success, and building in these different ‘attractors’ for schools (such as producing goods to sell to raise funds, curriculum-integrated educational outcomes, career outcomes and health outcomes).

- **Ensure there is a plan for 'post-participation'**. Ways to ensure that schools do not 'drop off' after intensive support ceases should be investigated. This ongoing support should be relevant and proportionate to the school and their situation. Future programs should ensure that motivation to deliver doesn't stop and that the benefits of the program are sustained.

4 Key findings and recommendations

4.1 Key findings

Implementation of Fresh Tastes

Fresh Tastes was implemented as intended, with clear evidence of learning and adaptation throughout the program that fostered continuous improvement.

Fresh Tastes was viewed very positively by schools in most instances, with schools reporting progress in all Fresh Tastes action areas by the end of their participation.

Importantly, Fresh Tastes was successful in supporting schools to reduce barriers and increase enablers to program implementation. Prior to the program:

- Eighty per cent (80%) of schools had identified barriers, which was reduced to an average of 27% by program completion; and
- Sixty-five per cent (65%) of schools had identified enablers which increased to 94% by program completion.

The action areas model and support systems for schools to implement action plans were effective.

Overall, schools reported that communication and promotion, engagement and involvement, the kitchen garden and the canteen were key enabling factors for program implementation.

Schools noted that successful program implementation could be affected by:

- The availability and extent of support from students, families, the school executive team, the wider school community, and the Fresh Tastes team
- Flexibility of the program design
- Availability of partnerships
- Level of resources and knowledge
- Existence of and access to facilities and infrastructure, particularly a kitchen garden and canteen
- Promotion, engagement, and communication with the school community
- Staff turnover, capacity, and capability

Influence of Fresh Tastes on food and drink culture

The Fresh Tastes program effectively contributed to improving the healthy food and drink culture of participating schools in the ACT.

To evaluate whether school food and drink culture had changed, ACTHD developed a 'culture change matrix' drawing on an extensive literature review that identified the following domains of school culture: leadership, partnerships and community, knowledge building, communication, resources, environment and readiness for change. When completing the matrix, each school determined where they sat on a scale from 'beginning', 'developing', 'established' to 'embedded', pre and post their participation in Fresh Tastes. Culture change matrix results showed that 80% of schools reported a positive shift in their overall food and drink culture after participating in Fresh Tastes.

Before participation in Fresh Tastes, only 4% of schools reported having a healthy food and drink culture that was either established or embedded which increased to 78% after participation.

Schools reported significant positive changes in student support for healthy eating and drinking in participating schools:

- Student support for healthy eating increased from 28% to 59%; and
- Student support for healthy drinks increased from 58% to 67%.

A total of 81% of schools reported a change in student demand for healthy food and drinks, and 84% reported a positive change in student attitudes towards healthy food and drinks.

Fresh Tastes helped to increase opportunities for teachers to undertake relevant, high-quality professional learning opportunities linked to the Australian Curriculum.

- Teacher professional development opportunities for cooking increased from 17% to 51%;
- Teacher professional development opportunities for growing food increased from 30% to 62%; and
- Levels of high or very high confidence in teachers to teach about nutrition increased from 70% to 81% among participating schools.

Schools identified that the following key success factors were the most essential in influencing their food and drink culture:

- Strong leadership support, particularly from the principal.
- Support from the ACT Health Fresh Tastes team.
- Appropriate infrastructure e.g. school kitchen gardens.
- Healthy food and drinks being a school priority.
- A passionate and dedicated Fresh Tastes School Coordinator to drive action.

Schools reported that Fresh Tastes had helped them to embed nutrition education that would likely continue into the future.

The above findings demonstrate and reinforce the effectiveness of Fresh Tastes in achieving a change in the food and drink culture of participating schools.

Lessons learnt from Fresh Tastes

Key evaluative learnings suggest that the design of future school-based programs should:

- Align with school priorities to make programs easy to for schools to implement.
- Maintain flexibility in program design and delivery, allowing schools to implement what works best for them.
- Assess schools' readiness for change, using a tool like the culture change matrix, to identify those at the beginning of program participation that are likely to require comparatively higher levels of support to achieve program aims.
- Gather strong leadership and executive support.
- Encourage a 'team' of people beyond an individual champion.
- Focus on addressing systemic drivers and barriers, at both the education system level and at a school level.
- Ensure there is a plan for post-participation.

Schools reported that the Fresh Tastes model had effectively contributed to sustainable outcomes and longer-term culture change, however sustainability of the program outcomes could be positively or negatively impacted by:

- Staff capacity and capability at both the implementer and school executive level.
- Ongoing communication and engagement with families, and the wider community.
- Aligning and embedding nutritional education, particularly ensuring consistency of nutrition messaging between the canteen and the classroom.
- Maintaining motivation and preventing burnout.

The key activities through which schools could continue improving and sustaining a healthy food and drink culture included:

- Maintaining the school kitchen garden and providing ongoing growing food activities for students.
- Promoting healthy food and drinks to the school community.
- Integrating nutrition education into various activities across the curriculum.
- Maintaining school cooking facilities and providing ongoing cooking activities for students.
- Ensuring consistency between canteen and classroom messages about nutrition.
- Encouraging family involvement in both cooking and growing food activities to improve family support for healthy eating and drinking.
- Monitoring and improving the effectiveness of the school's healthy food and drink policy.

Further monitoring and investigation are required to understand how schools will maintain culture change in the longer term.

Recommendations

Support for schools following Fresh Tastes

- 1. ACTHD should continue to explore ways in which schools can be supported post-participation that are appropriate to the degree of culture change achieved.**

While 80% of participating schools reported a positive shift towards embedding a healthy food and drink culture, only 19% reported that it was in fact embedded by the end of their participation. This suggests that most Fresh Tastes schools still had progress to make towards embedding change that will likely rely on further support and resourcing. Schools that indicated their healthy food and drink environment was 'developing' or 'established' are not necessarily at a stage where they can simply maintain their culture change, and further assistance may be required. In contrast, schools reporting to have embedded a healthy food and drink culture may only require moderate ongoing support.

The following ongoing operational support is required:

- authorisation from the principal and school executive team
- a passionate and supported Fresh Tastes school coordinator
- ongoing support from the Fresh Tastes team that varies according to school needs

Priority content areas for continued focus are:

- Growing food professional learning for teachers and kitchen garden experiences for students.
- Promotion and communication about healthy food and drinks to families, including encouraging family involvement in healthy eating and drinking activities at school.
- Integrating nutrition education activities across the curriculum and ensuring the school canteen aligns with classroom nutrition messages.
- Cooking food professional learning for teachers and cooking experiences for students.

Future program design and delivery

- 2. Future school-based programs should:**
 - a. Be aligned with school priorities and allow for flexibility in program delivery to ensure they are appropriate and easy for schools to implement.
 - b. Ensure schools gather leadership and executive support and develop a team of people to drive and maintain change at the school level.
 - c. Assess schools' readiness for change, using a tool like the culture change matrix, to identify those who are likely to require comparatively higher levels of support to achieve program aims and maintain change. Appropriate ongoing post-program support can then be provided.
 - d. Focus on addressing systemic drivers and barriers, at both an education system level and at a school level (for example, ongoing work with the EDU on systems-level change).

Contribute to building the evidence base

- 3. Widely promote and disseminate the impact of the program with other jurisdictions to add to the evidence base for school-based culture change.**

The evaluation has demonstrated that the Fresh Tastes model was effective in creating culture

change within a primary school setting and improving the healthy food and drink environment for students and the wider community. There is benefit for the ACTHD in sharing this experience with other jurisdictions and noting its applicability for future health promotion programs in similar contexts, settings, and content areas.

4. Focus on evaluating culture change in any future evaluation efforts of similar programs.

This evaluation has reinforced the benefit of evaluating change from a systems perspective, demonstrating that focusing on systems change can be a more fruitful approach than focusing on individual health outcomes. The ACT Health Directorate is building up a substantial evidence base for the success of systems change programs in impacting the culture of a school system. Expanding evaluation of school-based initiatives to include educational as well as health outcomes would enrich the evidence for addressing culture change in school settings. Ongoing investment by the ACTHD in evaluating health promotion initiatives is essential for building this evidence base.

Appendix 1. Methodology for the evaluation

Interim evaluation

An interim evaluation was completed mid-way through the program (Rounds 1 to 4), after 39 schools had completed Fresh Tastes. The interim evaluation involved a document review and 14 key informant interviews. The final evaluation report (this document) drew from the results of the interim evaluation and presents the findings from all eight rounds of Fresh Tastes' delivery.

Inception meeting

A meeting was held with ACT Health to discuss and review the objectives of the final evaluation and workshop an updated set of Key Evaluation Questions. Other agenda items included:

- Agreement on reporting, timelines and project management processes
- Identification of documents to be included in the final evaluation and planning for data management processes
- Discussion of the relevance of the ACT Physical Activity and Nutrition Survey (ACTPANS)
- Discussion on the format of the deliverables
- Milestone dates and invoices (as needed)

Following the meeting a short plan was developed to capture the results of the meeting, the approach and specific timelines. During delivery, FPC maintained regular contact with ACT Health.

Pre-existing data and document review

ACT Health had collected an extensive amount of data and documents that were provided to FPC for review and analysis. Much of this was at the individual school level, and included:

- Pre- and post-assessments of components of the food and drink culture using a culture change matrix
- A survey to capture the 'factors for success' in implementing Fresh Tastes
- A food and drink situational audit – with a baseline and follow-up completed
- Annual reviews/interviews with school executives conducted by a representative from the Education Directorate funded by ACT Health
- Reporting on achievements and opportunities
- Other information collected by ACT Health on an ad hoc or opportunistic basis.

Thematic and content analysis of key documentation was then undertaken, as well as descriptive analysis of relevant quantitative data. Following this was a process of synthesis and interpretation to address the Key Evaluation Questions. Information was collated and synthesised into a range of figures and tables, and then prepared for inclusion in this report.

Preparation of the evaluation report

A draft evaluation report was prepared following document review and analysis. The draft version of the report was provided to ACT Health for review and feedback, following this a final version was prepared.

Appendix 2. Culture change matrix

COMPONENTS OF HEALTHY FOOD & DRINK CULTURE	Beginning	Developing	Established	Embedded
Leadership -shared leadership -shared involvement -role modelling	- leadership and support mostly by executive levels only - staff don't identify as role models for healthy food & drinks □	- Fresh Tastes Action Group members are identified - some other parts of the school are engaged - some staff identify themselves as role models for healthy food & drinks □	- Fresh Tastes Action Group is functioning - broader school community is involved - most staff are role models for healthy food & drinks □	- school is a leader in healthy food & drinks - consistent involvement right across school community - staff role modelling healthy food & drinks is 'the norm' □
Partnerships and Community School partners	- partnerships for healthy food & drinks outside the school are not identified □	- key partners to support healthy food & drinks outside the school are identified □	- partnerships for healthy food & drinks are functioning well □	- partnerships outside the school are integrated into school programs □
Families & students	- little family involvement - students are not interested in healthy food and drink activities/issues □	Families are becoming involved in healthy food & drink activities/issues with encouragement - some students are interested in healthy food and drink activities/issues □	- families are involved in appropriate Fresh Tastes action areas with little encouragement required - most students are involved with little encouragement required □	- families want healthy food & drink activities to continue after Fresh Tastes program is completed - most students are very interested, want to participate in & request nutrition activities. □
Knowledge Building -teachers' confidence -family involvement	- teachers are not accessing nutrition professional development opportunities - teachers are not confident to deliver nutrition education - families are not requesting healthy food and drink to be part of curriculum, school environment and activities - minimal family involvement in current healthy food and drink activities □	- some teachers are attending nutrition related professional development - some teachers are confident to deliver nutrition education - some families are learning about healthy food and drinks through involvement in relevant action areas e.g. homework completion, cooking food □	- most teachers are attending nutrition professional development - most teachers are confident to deliver nutrition education - most families are actively involved in healthy food and drink activities □	- most teachers continue to access and use nutrition education resources and are confident to mentor new teachers - most families are actively involved and request further information or activities beyond the original Fresh Tastes program. □

COMPONENTS OF HEALTHY FOOD & DRINK CULTURE	Beginning	Developing	Established	Embedded
Communication -promoting healthy food & drinks -student participation	- healthy food and drinks are not promoted in school environment - students are not involved in healthy food and drink activities/issues <input type="checkbox"/>	- communication mechanisms about healthy food & drinks within the school and to families are identified - communication has commenced - healthy food and drinks are promoted but not prominent - potential student involvement is identified <input type="checkbox"/>	- regular communication about healthy food & drinks to the school community occurs - promotion of healthy food and drinks is prominent students are actively involved in healthy food and drink activities/issues <input type="checkbox"/>	- communication & promotion of healthy food and drinks is the 'norm' within the school - students are actively involved and generate ideas for healthy food and drink activities <input type="checkbox"/>
Resources -staff, money, educational tools & equipment that support healthy food & drink	- healthy food and drink resources are not identified or available <input type="checkbox"/>	- healthy food and drink resource requirements are identified <input type="checkbox"/>	- healthy food and drink resources are being used effectively <input type="checkbox"/>	- school continues to provide and access healthy food & drink resources/programs within its own means <input type="checkbox"/>
Environment -policies/ guidelines supporting healthy food & drink	- no formal healthy food and drink policies/guidelines exist <input type="checkbox"/>	- policies/guidelines are being developed <input type="checkbox"/>	- policies/guidelines in place <input type="checkbox"/>	- policies/ guidelines are integrated and enforced - student wellbeing is the focus of policy/infrastructure decisions <input type="checkbox"/>
Infrastructure eg equipment, facilities	- infrastructure is not available (e.g. canteen, space for garden) <input type="checkbox"/>	- infrastructure needs are identified <input type="checkbox"/>	- appropriate infrastructure is developed <input type="checkbox"/>	- appropriate infrastructure is used & maintained <input type="checkbox"/>
Readiness for change	- changing the food and drink culture and environment of the school is not considered important - school environment is not conducive to change <input type="checkbox"/>	- changing the food and drink culture and environment is considered a positive step for the school - school leaders e.g. Principal initiate change <input type="checkbox"/>	- changing the food and drink culture and environment is highly valued and encouraged by the school community - Principal reinforces the change process <input type="checkbox"/>	- teachers and the school community are involved in decision making on an ongoing basis to continue and reinforce change <input type="checkbox"/>
OVERALL How would you describe the <u>current</u> food & drink culture of your school?	Beginning <input type="checkbox"/>	Developing <input type="checkbox"/>	Established <input type="checkbox"/>	Embedded <input type="checkbox"/>

Appendix 3. Supplementary information

Full list of participating schools and associated action areas

Table 4: Action areas completed by participating schools across years of participation

Round	School	A/Area Year 1	A/Area Year 2	A/Area Year 3
1	Ainslie School	Growing Food	Food from Home Cooking Food	Classroom Learning Food for Sale
1	Isabella Plains Early Childhood School	Cooking Food Food from Home	Classroom Learning Growing Food	Food for Sale
1	Latham Primary School	Classroom Learning	Growing Food	Cooking Food
1	Macgregor Primary School	Classroom Learning Growing Food	Cooking Food	Food from Home
1	North Ainslie Primary School	F&D Guidelines Cooking Food	Classroom Learning	Food for Sale
1	Palmerston Primary School	Classroom Learning Food from Home	Growing Food Cooking Food	Food for Sale
1	Southern Cross Early Childhood	Food from Home	Classroom Learning	Growing Food
1	Weetangera Primary School	Classroom Learning Food for Sale	Cooking Food	Growing Food
2	Arawang Primary School	Classroom Learning Food from Home	Growing Food	Cooking Food
2	Charles Conder Primary School	Food from Home Classroom Learning	Growing Food Food for Sale	Cooking Food
2	Farrer Primary school	Classroom Learning Growing Food	Cooking food	Food From Home
2	Forrest Primary School	Food for Sale	Growing Food	Food From Home
2	Giralang Primary School	Cooking Food Growing Food	Food from Home	Classroom Learning
2	Kingsford Smith School	Cooking Food Classroom Learning	Food for Sale Growing Food	Food From Home
2	Lyons Early Childhood School	Cooking Food	Food from Home	Classroom Learning

		Growing Food		
2	Mawson Primary School	Growing Food	Food for Sale Food from Home	Cooking Food Classroom Learning
2	Mt Rogers Primary	Food for Sale F&D Guidelines	Classroom Learning Growing Food	Cooking Food Food From Home
2	Narrabundah Early Childhood School	Growing Food	Cooking Food	Food From Home
2	Teloopa Park School	Food from Home Classroom Learning	Growing Food	Cooking Food Food For Sale
2	Torrens Primary School	Food for Sale	Growing Food Classroom Learning	Food From Home
3	Curtin Primary	Classroom Learning	Food From Home	No new AAs
3	Franklin Early Childhood School	Cooking Food Growing Food	Classroom Learning	Classroom Learning
3	Fraser Primary School	Food for Sale	Food from Home Classroom Learning	Growing Food Cooking Food
3	Kaleen Primary School	Classroom Learning Food for Sale	Growing Food	Cooking Food
3	Red Hill Primary	Cooking Food Growing Food	Cooking Food Growing Food	Classroom Learning Food From Home
3	Radford College	F&D Guidelines Food for Sale	Classroom Learning Growing Food	Food From Home
3	Mother Teresa Primary School	Classroom Learning Growing Food	Food from Home Cooking Food	Food For Sale
4	Duffy Primary School	Growing Food Food for Sale	Cooking Food Food from Home	Classroom Learning
4	Evatt Primary School	Cooking Food Classroom Learning	Food From Home	No new AAs
4	Fadden Primary School	Classroom Learning	Growing Food Cooking Food	No new AAs
4	Garran Primary School	Food from Home	Growing Food	Cooking Food Food For Sale

		Classroom Learning		
4	Gilmore Primary	Growing Food	Food From Home	Cooking Food Classroom Learning
4	Gowrie Primary School	Classroom Learning	Food From Home	Growing Food
4	Hawker Primary School	Growing Food	Growing Food (Cont)	Classroom Learning
4	Malkara School	Cooking Food	Growing Food	Food From Home
4	Monash Primary School	Growing Food	Cooking Food	Food From Home Food For Sale
4	Ngunnawal Primary School	Growing Food	Food From Home	Classroom Learning
4	St Joseph's Primary School (O'Conner)	Growing Food	Food For Sale	Classroom Learning
4	St Monica's Primary School (Evatt)	Growing Food	Classroom Learning Food from Home	Food For Sale Cooking Food
5	Namadgi School	Food from Home	Cooking Food	Growing Food
5	Amaroo School	Food for Sale	Growing Food	Food From Home
5	Richardson Primary	Classroom Learning	Cooking Food	Growing Food
5	Charnwood-Dunlop Primary	Growing Food Classroom Learning	Cooking Food	Food From Home Food For Sale
5	Calwell Primary	Growing Food	Food From Home	Classroom Learning
5	Caroline Chisholm	Food From Home Classroom Learning	Cooking Food	Growing Food
5	Bonython Primary	Growing Food	Classroom Learning	Cooking Food
5	Aranda Primary	Classroom Learning	Cooking Food	Growing Food
5	Lyneham Primary School	Classroom Learning	Food from Home	Cooking Food Growing Food
5	Taylor Primary	Growing Food Cooking Food	Classroom Learning	Food From Home
5	St Michael's (Kaleen)	Classroom Learning	Growing Food	Food from Home
5	St Vincent's Aranda	Classroom Learning	Growing Food Cooking Food	Food For Sale

5	St John Vianney's Waramanga	Food from Home	Growing Food	Food For Sale Cooking Food
6	Yarralumla Primary	Growing Food	Food From Home	Cooking Food Classroom Learning
6	Harrison Primary	Food for Sale	Food from Home	Classroom Learning
6	Gold Creek school	Food From Home Food For Sale	Growing Food	No new action area
6	Jervis Bay Primary School	Classroom Learning Growing Food	Cooking Food	Food for Sale Food from Home
6	Yarralumla Primary	Growing Food Food For Sale	Classroom Learning Food From Home	No new action area
6	Emmaus Christian School	Classroom Learning	Cooking Food Food From Home	Growing Food HF&DG
7	Birrigai Outdoor school	Food For Sale	Growing Food	No new AA's
7	Black Mountain School	Cooking Food Food For Sale	Growing Food	Classroom Learning Food from Home
7	Chapman Primary	Food For Sale Growing Food	Food From Home	Cooking Food
7	Charles Weston School	Classroom Learning Food From Home	No new AA's	Food For Sale
7	Floreys Primary School	Food For Sale Classroom Learning	Food From Home	No new AA's
7	Neville Bonner Primary	Classroom Learning	Growing Food	Food from Home
7	O'Connor Coop School	Classroom Learning Food From Home	Growing Food Cooking Food	No new AA's
7	Turner Primary	Food from Home Classroom Learning	Growing Food Cooking Food	No new AA's
7	Wanniassa School	Classroom Learning	Growing Food	No new AA's
7	Majura Primary	Food From Home	Growing Food Food For Sale	Cooking Food Classroom Learning

7	St Bede's Primary	Classroom Learning	Food For Sale	Food From Home
7	Holy Family Primary	Classroom Learning	Food from Home	Growing Food
7	Islamic School of Canberra	Classroom Learning Growing Food	No new AA's	No new AA's
7	Brindabella Christian College (Charnwood)	Cooking Food	Classroom Learning Food From Home	Growing Food
7	Taqwa School	Growing Food	Cooking Food	Classroom Learning Food From Home
8	Hughes Primary	Growing Food Classroom Learning	Cooking Food	No new AA's
8	Campbell Primary	Classroom Learning	Food For Sale	Food From Home
8	Woden School	Growing Food	Classroom Learning	Cooking Food
8	Margaret Hendry School	Growing Food	Food From Home	
8	Miles Franklin Primary	Growing Food	Food From Home Food for Sale	No new AA's
8	Macquarie Primary School	Growing Food	Cooking Food	No new AA's
8	Maribyrnong Primary School	Food For Sale Food From Home		
8	Theodore Primary School	Growing Food Classroom Learning		
8	Good Shepherd Primary School	Food for Sale Classroom Learning	Food From Home	Growing Food
8	St Benedict's Primary	Classroom Learning Growing Food	No new AA's	Food From Home
8	St Thomas the Apostle, Kambah	Growing Food	Cooking Food	Classroom Learning
8	St Francis of Assisi, Calwell	Growing Food	Food from Home	No new AA's
8	Sacred Heart Primary	Classroom Learning Food From Home	Food For Sale	Growing Food
8	St Anthony's Parish Primary	Classroom Learning	Growing Food	Food From Home

8	Canberra Christian School	Food From Home Healthy F&D Guidelines	Cooking Food Food for Sale	Classroom Learning
8	Covenant Christian School	Growing Food	No new AA's	Healthy Food and Drink Guidelines
8	Canberra Girls Grammar School	Healthy Food and Drink Guidelines	Food For Sale Growing Food	No new AA's
8	Orana School	Cooking Food Growing Food	Classroom Learning Food from Home	
8	Burgmann Anglican School	Classroom Learning	Growing Food	Food From Home
8	St Edmund's College	Food From Home	Classroom Learning	Growing Food
8	Trinity Christian School	Growing Food	Cooking Food Food From Home	
8				

Table 5: Inactive schools

Round	School	A/Area Year 1	A/Area Year 2	A/Area Year 3
N/A	1			
N/A	2	Classroom Learning Growing Food		
N/A	3	Classroom Learning Growing Food	Food from Home	Cooking Food

Enablers and barriers to implementation of Fresh Tastes Action Areas in participating schools

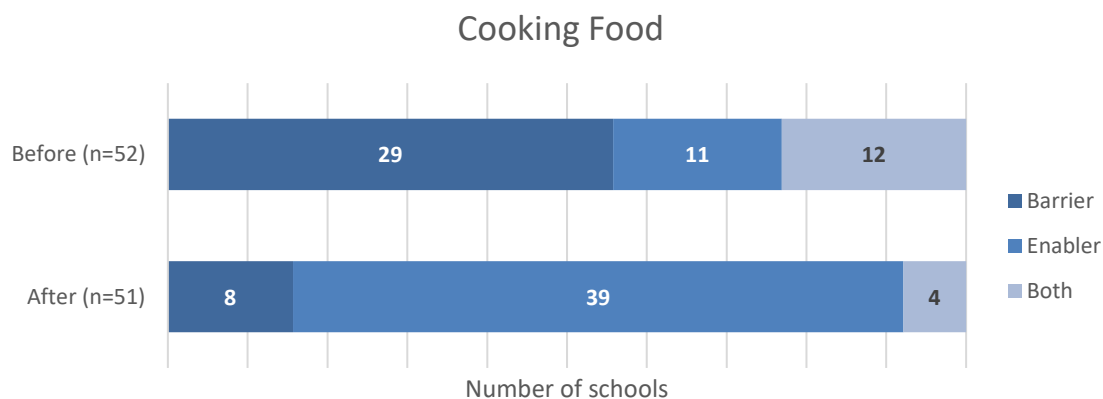


Figure 16: Cooking Food Barriers and Enablers

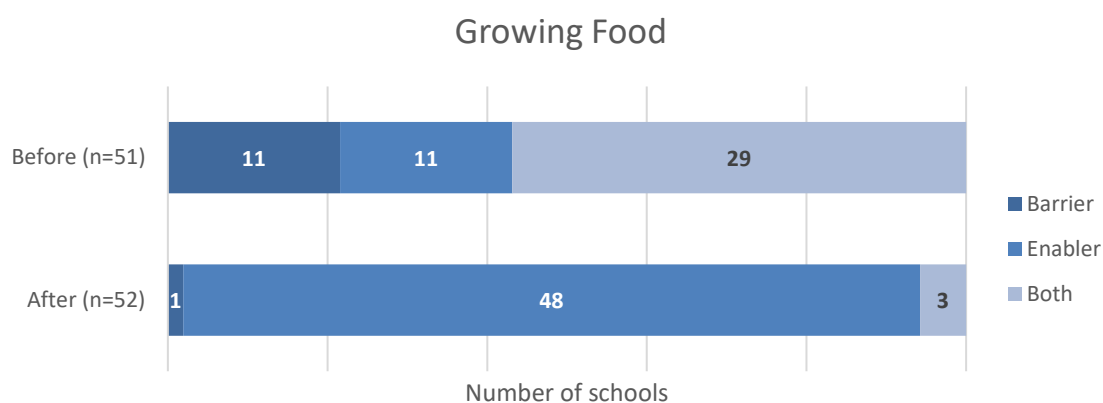


Figure 17: Growing Food Barriers and Enablers

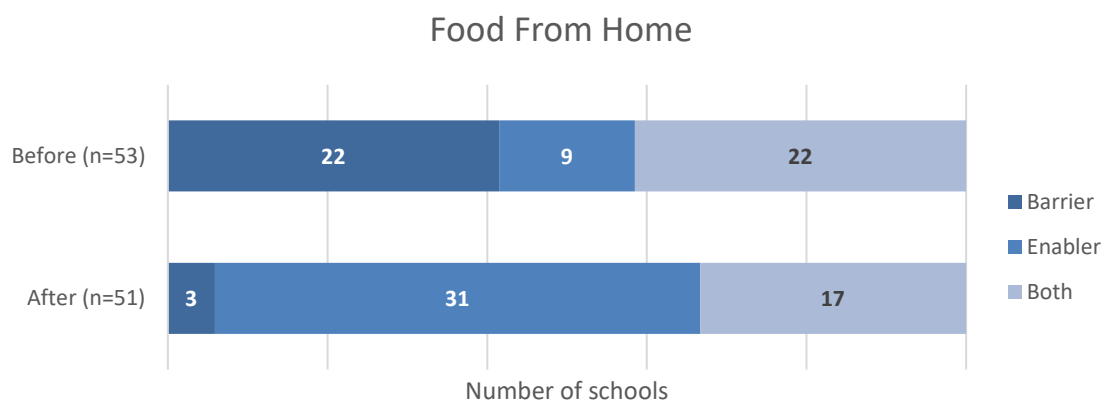


Figure 18: Food from Home Barriers and Enablers

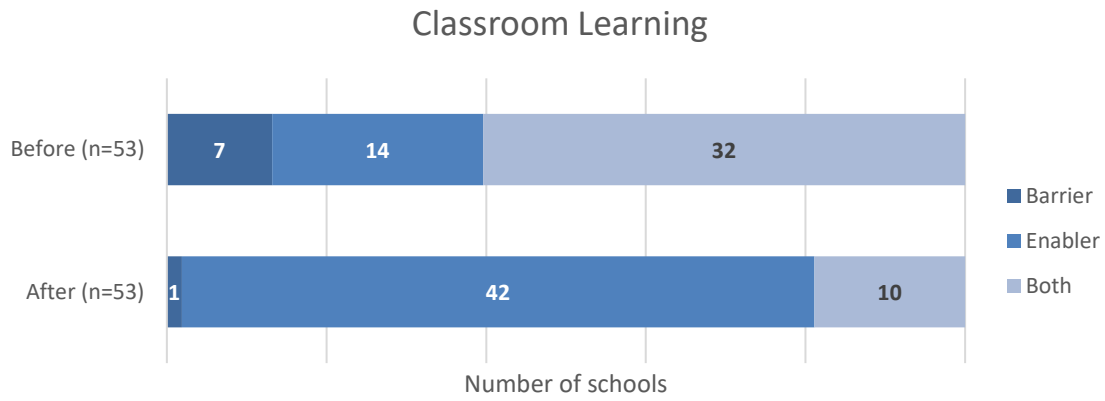


Figure 19: Classroom Learning Barriers and Enablers

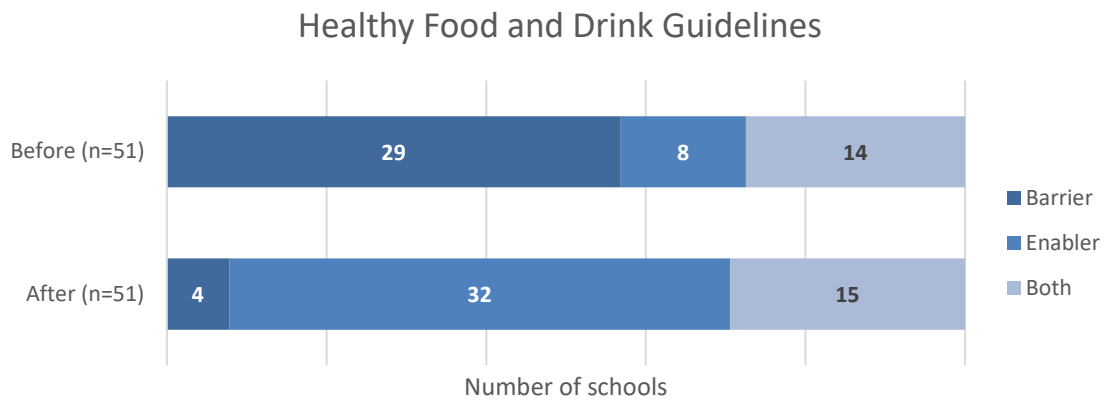


Figure 20: Healthy Food and Drink Guidelines Barriers and Enablers

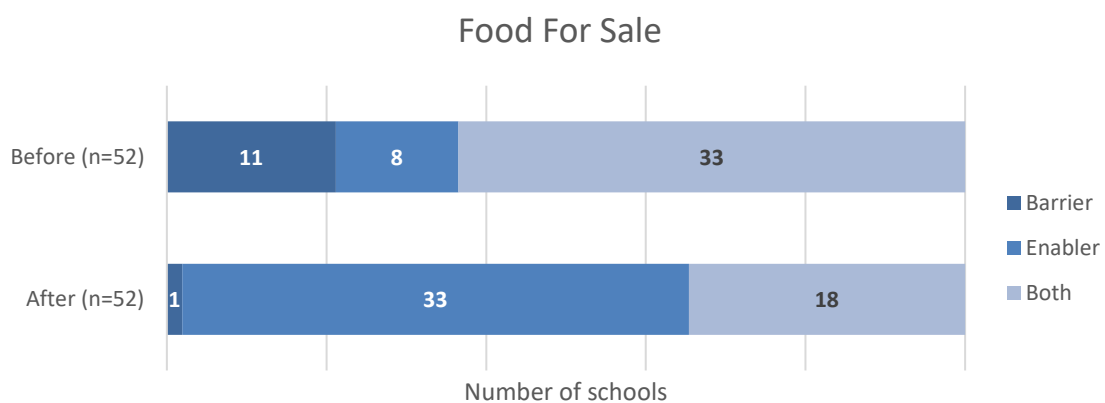


Figure 21: Food for Sale Barriers and Enablers

Results from Culture Change Matrix

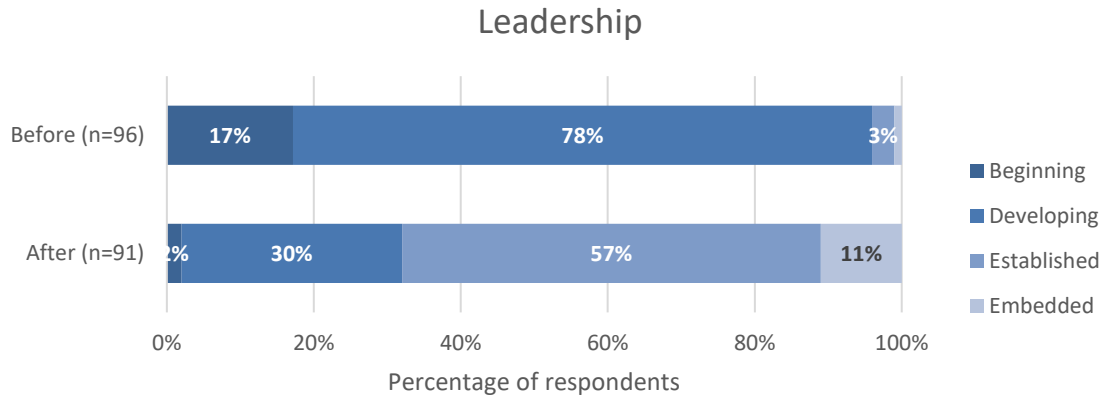


Figure 22: Responses to Leadership component in Culture Change Matrix

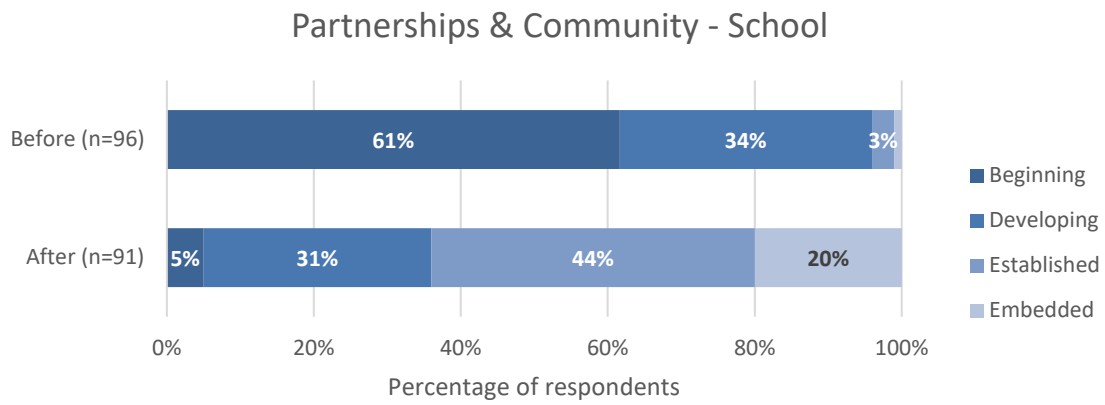


Figure 23: Responses to Partnership and Community – School component in Culture Change Matrix

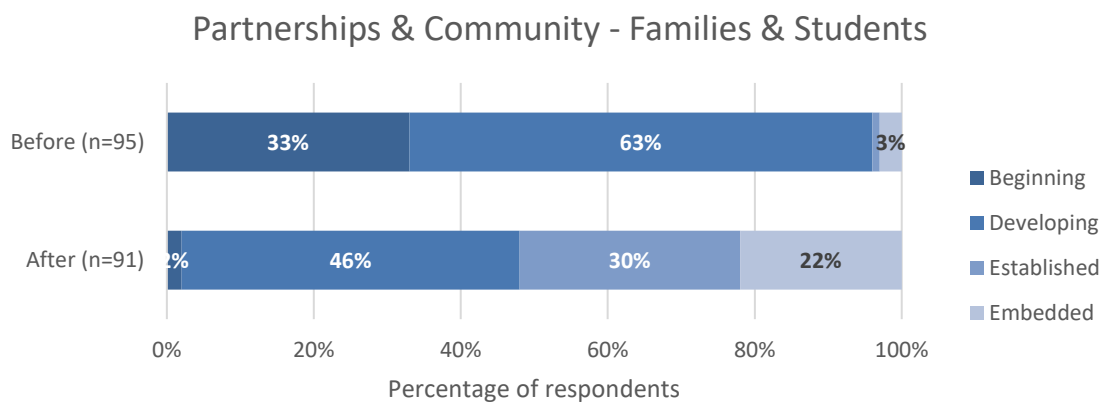


Figure 24: Responses to Partnerships and Community – Families and Students component in Culture Change Matrix

Knowledge Building

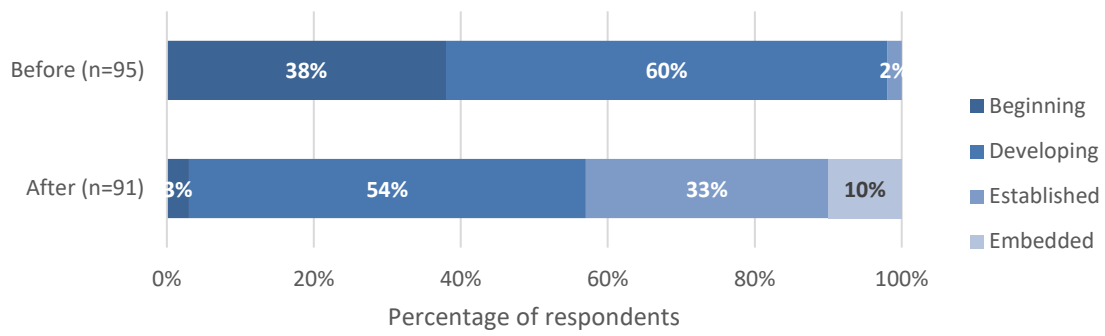


Figure 25: Responses to Knowledge Building component in Culture Change Matrix

Communication

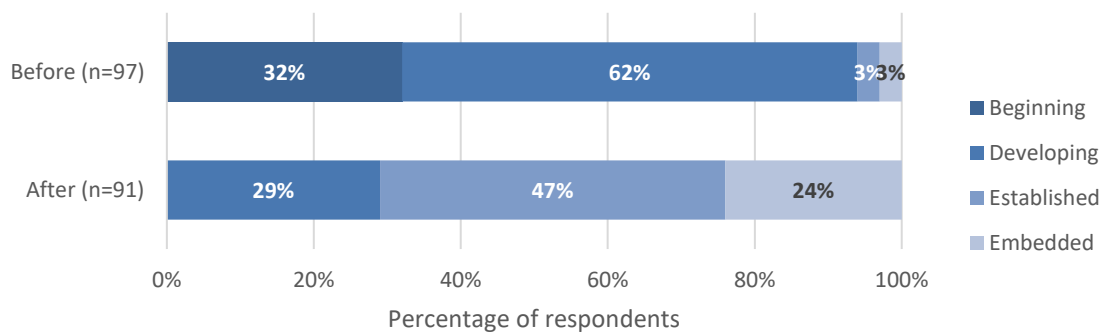


Figure 26: Responses to Communication component in Culture Change Matrix

Resources

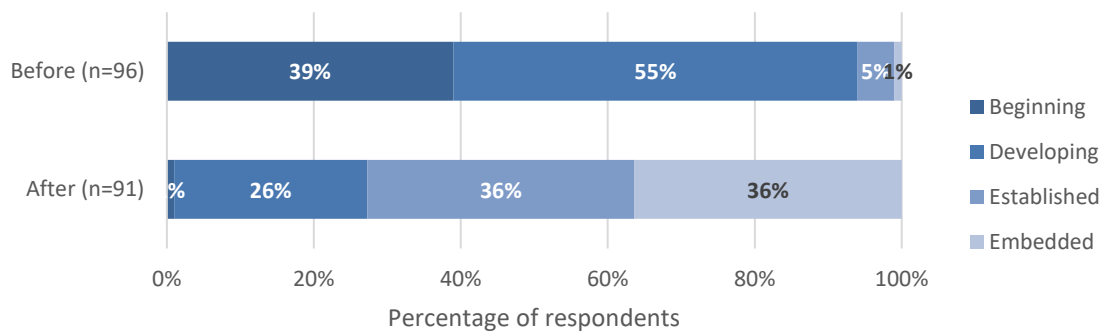


Figure 27: Responses to Resources component in Culture Change Matrix

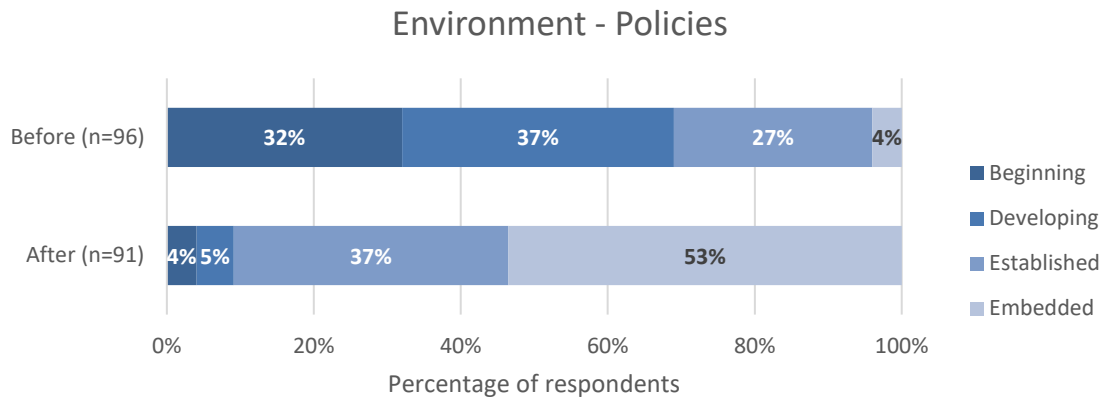


Figure 28: Responses to Environment – Policies component in Culture Change Matrix

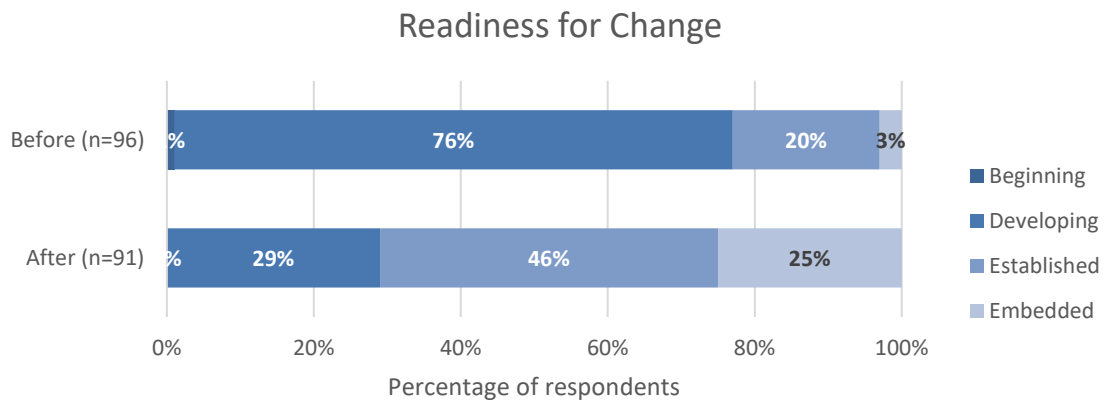


Figure 29: Responses to Readiness for Change component in Culture Change Matrix

Changes in perceived student support for healthy eating and drinking

There has been a statistically significant change in the perceptions of student support for healthy eating and drinking in participating schools.

To understand the significance of these changes, each scale item was converted to a numerical value (Very low=1, Very high=5). This provides an average score (pre and post) for the support for healthy eating and drinking. As can be seen in the graph below **Error! Reference source not found.**, the support for healthy eating increased from 3.03 to 3.58 (out of five), and support for healthy drinking increased from 3.55 to 3.85 (out of five).²²

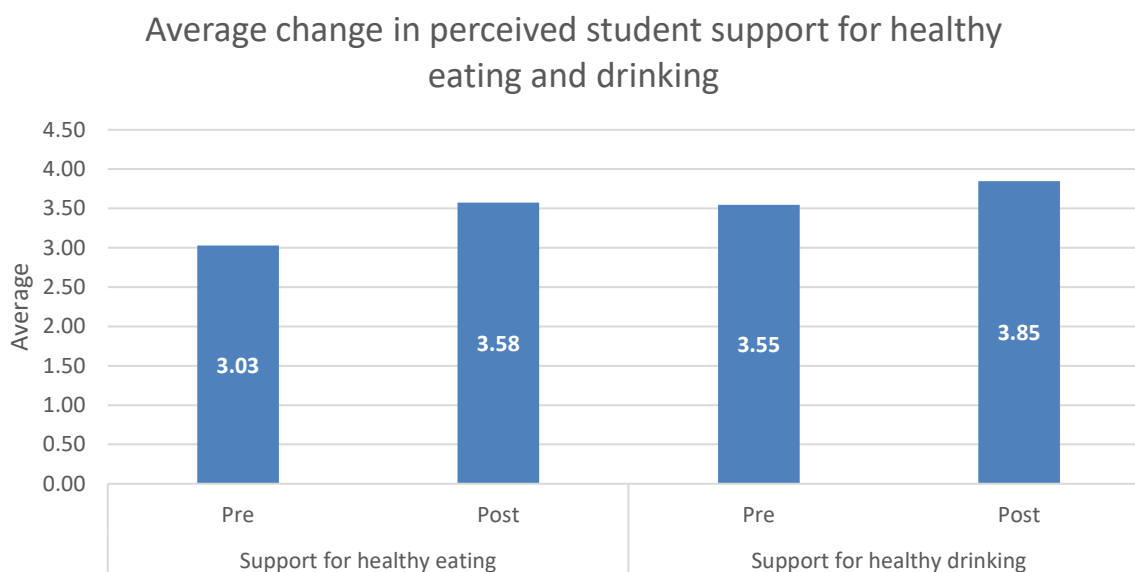


Figure 30: Average change in perceived student support for healthy eating and drinking (n=74)

²² Support for healthy eating: There is a significant difference between the post- responses and the pre-responses (paired Wilcoxon signed-rank test: $Z=194.5$, $d.f.=72$, $p<0.001$); Support for healthy drinking: There is a significant difference between the post- responses and the pre-responses (paired Wilcoxon signed-rank test: $Z=418.0$, $d.f.=72$, $p=0.013$)

Factors for success questionnaire

There were two versions of this questionnaire provided to schools:

- The version for round 1 included 25 options to select, and schools could tick a box if they felt that factor was essential.
- The version for rounds 2 through 8 included 29 options, and schools could select from the following for each factor: this was essential; this helped, but was not essential; we didn't have this, which made it more difficult; this was not a factor; N/A.

The tables below outline the full breakdown of these results for each version of the questionnaire.

Table 6: Factors for Success Round 1 complete results

Factor	Essential
Strong leadership from Principal and the executive team	4
Commitment from staff and the Executive team	4
School Board and P&C support	3
Consistency of staff driving activities	3
Highly functioning action group	2
Teachers modelling behaviour	2
Having a Fresh Tastes standing agenda item at school meetings	0
Fresh Tastes coordinator is dedicated to drive action	3
Support from ACT Health Fresh Tastes team	2
Relationship with ACT Health Fresh Tastes team	2
Availability of drinking water (water stations, water bottles)	1
Embedding healthy eating from young age (e.g. preschool)	3
Healthy food and drinks are a school priority	4
Having a food and drink policy that requires compliance	1
School pride	3
Active group of parents	4
Investment in time given to profile Fresh Tastes activities	2
Promotion of Fresh Tastes brand to community	0
Access to relevant local support from Fresh Tastes partners	4
Students involved in activities	5
Good relationship between canteen manager and school	2

Canteen support and activities / training	2
Access to relevant professional learning	3
Access to resources aligned to Australian Curriculum	3
Ease of alignment to school planning requirements	1

Table 7: Factors for Success Rounds 2 – 8 complete results

Factor	Essential	Helped, but not essential	Didn't have this, which made it more difficult
Having a supportive principal	43	8	2
Having a supportive school executive	37	12	1
Having support from parents/families	30	20	1
Having support from students	38	13	0
Having support from P&C/School Board/Community Council	27	18	1
having resources linked to Australian Curriculum/Early Years Learning Framework	34	16	0
having a functional Fresh Tastes Action Group	36	11	4
having students running Fresh Tastes activities	18	16	4
having students as part of Fresh Tastes Action Group	10	5	5
having the ACT Public School Food & Drink Policy (ACT public schools only)	31	8	1
having a school food & drink policy (non-govt schools only)	9	4	3
being able to get support from ACT Health's Fresh Tastes team	43	9	0
being able to obtain Fresh Tastes grants/funding	40	11	1
having access to Fresh Tastes partner services	32	18	0
having access to TQI'd professional learning	26	22	0
having staff time allocated to Fresh Tastes	11	13	11
having other teachers within the school involved in Fresh Tastes activities	30	13	8
having an ability to link Fresh Tastes to annual school planning documents	22	21	3
having an awareness of Fresh Tastes within school community	26	20	1

having access to Fresh Tastes resources e.g website, newsletter articles	33	17	1
experiencing changes in school staff	9	15	5
having a passionate Fresh Tastes Coordinator	39	10	1
having changes occur in the school's nominated Fresh Tastes Coordinator	8	11	4
having a good relationship between the canteen and school	30	6	5
having access to canteen support and training through Fresh Tastes	22	7	1
having appropriate school infrastructure e.g. access to water, garden	43	6	3
having a school that prioritises healthy food and drink	39	12	1
having teachers role-model consumption of healthy food & drinks	31	19	0
having a dedicated school budget to support food & drink activities	28	10	6

Nineteen options were similar across the two questionnaire versions, with 6 options unique to the Round 1 version, and 10 options unique to the Round 2 – 8 version. The tables below indicate what schools thought to be most essential.

Table 8: Most essential consolidated key success factors

Round 1 options	Round 2-8 options	Total (n=58)
Strong leadership from Principal and the executive team	Having a supportive Principal	46
Support from ACT Health Fresh Tastes team	Being able to get support from ACT Health's Fresh Tastes team	44
Availability of drinking water (water stations, water bottles)	Having appropriate school infrastructure e.g. access to water, garden	43
Healthy food and drinks are a school priority	Having a school that prioritises healthy food and drink	42
Fresh Tastes coordinator is dedicated to drive action	Having a passionate Fresh Tastes Coordinator	41
Commitment from staff and the Executive team	Having a supportive school Executive	40

Table 9: Most essential key success factors unique to round 1 questionnaire

Round 1 options	Total (n=6)
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Consistency of staff driving the activities	3
School pride	3
Embedding healthy eating from a young age (e.g. preschool)	3

Table 10: Most essential key success factors unique to rounds 2-8 questionnaire

Round 2–8 options	Total (n=52)
Being able to obtain Fresh Tastes grants / funding	39
Having support from students	37
Having access to Fresh Tastes resources e.g. website, newsletter, articles	32
Having the ACT Public School Food & Drink Policy (ACT public schools only)	30

Schools in rounds 2 to 8 were able to select from the following options for each category:

- This was essential
- This helped, but was not essential
- We didn't have this, which made it more difficult
- This was not a factor
- N/A

The figure below presents these results for the rounds 2 to 8 questionnaire.

Key Success Factors

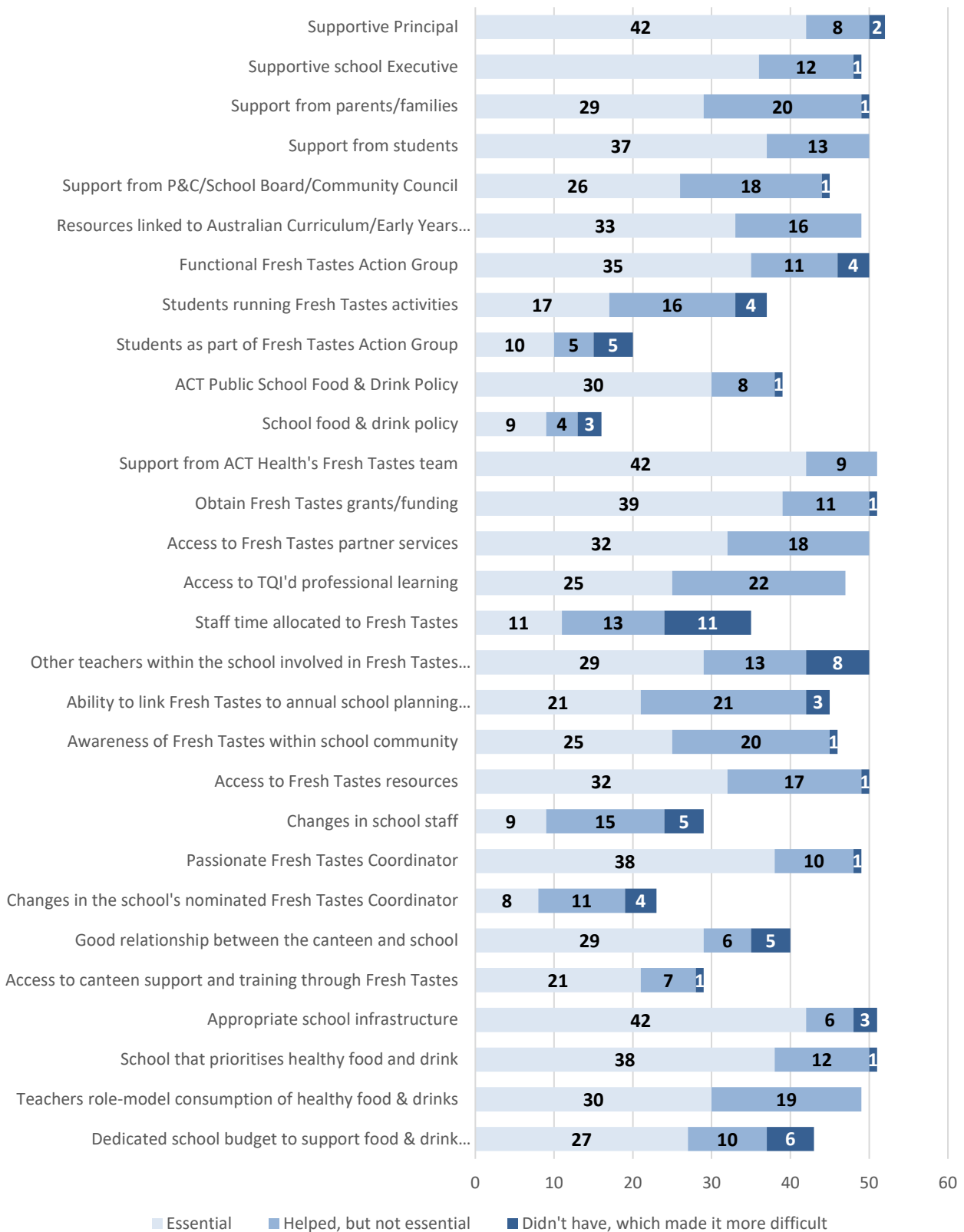


Figure 31: Responses to Key Success Factors questionnaire (rounds 2-8) (n=52)

Results from Strengths Map

Table 11: Opportunities identified on Strengths Map for Cooking Food Action Area

Opportunity identified	Total schools
Family involvement in cooking activities	27
Teacher training	13
Cooking in school's annual teaching and planning documents	8
Inclusion of cooking in/outside of curriculum	2
Use preschool cooking facilities regularly	1

Table 12: Opportunities identified on Strengths Map for Growing Action Area

Opportunity identified	Total schools
Family involvement	27
Use of garden outside curriculum	15
Gardening in school's annual teaching and planning documents	16
Teacher training	14

Table 13: Opportunities identified on Strengths Map for Food From Home Action Area

Opportunity identified	Total schools
Increase family/parents/student support for healthy eating and drinking	30
Provision of information to families about healthier food and drinks	9
Promote fresh food for fruit and vegetable break	9
Family involvement in healthy food and drink	1

Table 14: Opportunities identified on Strengths Map for Classroom Learning Action Area

Opportunity identified	Total schools
Consistency of canteen and classroom messages about nutrition	17
Teachers role-modelling healthy food and drink consumption	15
Inclusion of Food&Me in annual teaching and planning documents	9
Promote fresh food for fruit and vegetable break	5

Opportunity identified	Total schools
Teacher training	4
Remove red food rewards	4
Teacher confidence to teach nutrition	3

Table 15: Opportunities identified on Strengths Map for Healthy Food and Drink Guidelines Action Area

Opportunity identified	Total schools
Continue monitoring and improving effectiveness of policy	48
Increase family/parents/student support for healthy eating and drinking	12
Continue to promote non-red food fundraising activities	11
Focus on increasing school priority for healthy eating	6
Provision of information to parents (esp. multicultural families)	3
Teacher role-modelling healthy food	2
Student lunchboxes	1

Table 16: Opportunities identified on Strengths Map for Food for Sale Action Area

Opportunity identified	Total schools
Consistency of canteen and classroom messages about nutrition	21
Continue to promote non-red food fundraising activities	20
Promotion of healthy food and drinks at school events	20
Promotion and pricing of green foods	8
Canteen menu review	7
Increase family/parents/student support for healthy eating and drinking	7
Substitution of sugary drinks with healthier options	2
Full implementation of National Healthy School Canteen Guidelines	1
Continue ensuring effectiveness of policy	1
Promotion of healthy food & drinks	1