Executive Summary

Background

Three schools in Southern Tasmania received funding and practical support from the Tasmanian School Canteen Association (TSCA) to prepare cooked lunches for 20 days for up to 60 students. The lunches were based on the Australian Dietary Guidelines (2013)\(^1\) prepared from scratch using at least 50% Tasmanian produce, and included a main course and an accompaniment.

Key stakeholders (students, parents, canteen managers and volunteers, school principals, teachers and support staff) provided feedback on the School Lunch Pilot by participating in discussion groups, interviews or completing a short, written survey. The evaluation aimed to:

1. Determine what students, parents, canteen and school staff liked and disliked about the School Lunch Pilot
2. Identify the benefits and challenges the canteen/school staff observed with the School Lunch Pilot
3. Determine if school staff perceive any changes in behaviour or concentration among participating students
4. Determine the labour and food costs associated with providing the school lunches
5. Determine how much parents would be willing to pay if the school was to provide lunches on a regular basis
6. Determine the feasibility of collecting data on the number of student absent days in the participating classes during the 20-day intervention

Key findings

At the end of the pilot, 201 students were receiving school lunches.

Stakeholders spoke very highly of the School Lunch Pilot and liked the following aspects:

- Variety of the lunches and the opportunity to try new foods
- Convenience / less pressure on parents to prepare school lunches
- Children were more settled after lunch and after school
- Healthy lunches
- Lunches tasted good
- Children had more time to sit down and eat / social eating
- Not having to pay for lunch
- Warm lunches
- That children were learning manners and other personal skills
- Seeing the children’s responses to the lunches
- That there was less rubbish in the playground

Many participants said there was nothing they disliked about the pilot. However, a few stakeholders did not like:

- That there was only one option for lunch each day (however, special meals were prepared for children with dietary needs such as vegetarian or gluten free).
- Inconsistent serving sizes
Evaluation of the 2020 School Lunch Pilot

- When the meals were served late (only at one school)
- A few of the menu options

Canteen and school staff identified the following benefits of the School Lunch Pilot:

- Equality – food for all students
- Increased school attendance
- Increased school engagement
- Built a strong sense of community
- Promoted healthy eating

There were some challenges in providing the school lunches, these included:

- Insufficient infrastructure (eg. need commercial dishwasher, larger ovens, bigger sink, additional fridge/freezer, electric frypans, more cutlery and crockery, more trolleys)
- Allocating extra time to eat the lunches
- Canteen staff unfamiliar with new recipes (easier second time around)
- Securing ongoing funding

On average, the lunches cost $4.72, including $1.91 for ingredients and $2.81 for labour. If more students were involved in the lunch program the cost per lunch would decrease. Most parents (89%) were willing to pay $3 per child per day. Respondents suggested having a family discount for families with multiple children at school.

Most parents (90%) said they would like the school to provide a cooked lunch every day.

**Conclusion**

This pilot study found it was feasible to provide cooked school lunches for students at the three participating schools. The School Lunch Pilot was highly valued by the school community and all three canteen managers would like to continue to provide cooked lunches. Two schools reported that students were calmer and that there was an increase in attendance, particularly among students who were often absent from school.

One school sourced additional funding and made the lunches available to all students at the school, the other two schools each selected two classes to receive the lunches. The three schools involved in the pilot were specifically chosen because the canteen manager had good cooking skills and a supportive principal. The canteen managers also had access to cooking facilities other than the canteen kitchen – two canteen managers used other kitchens within the school and the other canteen manager had access to a commercial kitchen. Therefore, the findings from this study may not be applicable to all school canteens.

**Recommendations**

A larger study is needed to determine if the School Lunch Pilot can be upscaled. This would involve providing cooked lunches for all students, at a larger number of schools, for a longer duration of time.

It is recommended that the larger study:

- Include schools from around Tasmania with a variety of characteristics (school size, level of disadvantage, rural/urban location).
- Provide healthy lunches that are based on the Australian Dietary Guidelines (2013),\(^1\) are prepared from scratch and include minimally processed foods. The TSCA and dietitians from Public Health Services should be involved in the development of the lunch menu.
Evaluation of the 2020 School Lunch Pilot

- Allocate 20 minutes for students to sit down and enjoy their meal.
- Support schools to procure food from local producers.
- Include a simple alternate option (for example a cheese sandwich) for children who do not want the cooked lunch. The alternate option would not need to be advertised, to encourage children to taste new food.
- Provide additional infrastructure (such as a commercial dishwasher and larger ovens) to schools that need it.
- Support schools to pay their canteen manager for the additional hours worked.
- Support schools to recruit and retain volunteers to help prepare the lunches.
- Train canteen managers in portion control.
- Identify the benefits and challenges of providing the school lunches.
- Estimate the cost of providing the cooked lunches, including labour expenses.
- Determine why families do not participate in the school lunch program (if applicable)
- Assess the effect of the cooked lunches on attendance, behaviour and academic outcomes.

Day 1 lunch: Pasta with Bolognese sauce and green salad
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The School Lunch Pilot was funded by Healthy Tasmania and the evaluation was funded by the Crown through the Tasmanian Department of Health.

Thank you to the staff from the Tasmanian School Canteen Association (TSCA) and dietitians from Public Health Services, Department of Health for coordinating the School Lunch Pilot, helping to design the evaluation, develop the interview questions and written surveys, and assisting with data collection.

Thank you to the canteen managers and volunteers, students, parents, principals, teachers and support staff who took the time to share their thoughts on the School Lunch Pilot.

Thank you to Alicia, Erin, Emma and Beth for helping to conduct the student discussion groups.

Also, thank you to Reuben from MONA and the 24 Carrot program for the loan of cutlery and crockery for two of the three schools.

Cover design – Dr Michelle Kilpatrick


Abbreviations

TSCA: Tasmanian School Canteen Association
1 Introduction

Unhealthy diets are common among Australian children. Approximately 40% of Australian children’s daily energy comes from discretionary foods (those that are high in saturated fat, sugar and/or salt and have little nutritional value), 94% of children do not eat the recommended daily serves of vegetables and 27% do not eat the recommended daily serves of fruit. In addition to not eating foods that align with the Australian Dietary Guidelines, some children do not have enough food to eat. More than one in five Australian children under the age of 15 years live in food insecure households, which means when they run out of food they cannot afford to buy more. Among these children, at least once per month: 30% go to school without breakfast, 24% go to school without lunch or money to buy lunch and 17% go a whole day without eating anything.

While in an ideal world, children would be fed from home, for many reasons this is not happening. Schools are taking an increased responsibility for feeding children in need, with many Tasmanian schools providing breakfast to try and reduce the number of children who start the day hungry. Schools also provide an ideal setting to promote healthy eating due to their continuous and intensive contact with children.

The Tasmanian School Canteen Association (TSCA) is a not-for-profit health promotion organisation that supports schools to provide safe, nutritious and affordable food. Most Tasmanian schools that offer a food service have a school canteen, where students can purchase a variety of food at recess and/or lunch instead of bringing food from home or to supplement food brought from home. Instead of a canteen, many countries around the world have a school lunch program, where the school provides free or subsidised cooked lunches for all students. The students generally have one or two options and a salad bar for lunch. They sit down and eat together.

Julie Dunbabin, Executive Officer of the TSCA, was awarded a 2018 Churchill Fellowship to investigate the factors that enable school lunch programs to impact positively on student health and wellbeing. During October to December 2019, she visited seven countries (United States of America, France, Italy, Scotland, England, Finland and Japan) and met with school kitchen staff, teachers, principals, non-government organisation staff, government officials, parents, academics, students and dietitians. She found providing school lunches to all children was key to children being well fed so that they could grow, learn and develop social skills to the best of their ability.

Tasmanian school canteens are capable of producing bulk meals. During the COVID-19 lockdown in April 2020, some schools prepared meals in their canteens to help emergency food relief agencies respond to the increased community demand for meals. This suggests it may be possible for school canteens to produce cooked lunches for students. However, it is not known if it would be feasible for school canteens to provide cooked lunches for all students, or if cooked lunches would be accepted by students and their parents.

During 2020, the TSCA received funding from Healthy Tasmania to conduct the School Lunch Pilot study. Funding was available for three schools to provide cooked lunches for up to 60 students at each school for 20 days. The meals were to be prepared from scratch using local, seasonal and minimally processed foods. The lunch was a sit-down meal. Students were allocated 20 minutes to eat it, in addition to the usual scheduled lunch time.
The study was evaluated to determine the feasibility, benefits and challenges of providing nutritious cooked school lunches to a sample of Tasmanian school children. The specific aims of the evaluation were to:

1. Determine what students, parents, canteen and school staff liked and disliked about the School Lunch Pilot
2. Identify the benefits and challenges the canteen/school staff observed with the School Lunch Pilot
3. Determine if school staff perceive any changes in behaviour or concentration among participating students
4. Determine the labour and food costs associated with providing the school lunches
5. Determine how much parents would be willing to pay if the school was to provide lunches on a regular basis
6. Determine the feasibility of collecting data on the number of student absent days in the participating classes during the four-week intervention
2 Methods

2.1 Brief overview of the School Lunch Pilot

The pilot had funding to support three schools. Schools were eligible if they met the following criteria:

- Strong relationship with the TSCA
- A canteen manager with good cooking skills
- Supportive principal and school staff

Three schools were selected and an invitation email from Julie Dunbabin (Executive Officer of TSCA) was sent to the principal and canteen manager, who replied via email or phone. Two schools agreed to participate. One school declined because the canteen manager was unable to commit to the four-week pilot due to personal reasons. A fourth school was invited and agreed to participate. TSCA staff met with the principal and canteen manager of each school to discuss the pilot in more detail and answer any questions.

The schools were given funding and practical support from the TSCA to provide a cooked lunch for up to 60 children for 20 days. The lunches were provided to the students free of charge. The school decided what classes would participate in the pilot. An information sheet, a copy of the menu, and a consent form were sent home with all children in the selected classes.

The menu was created by the three school canteen managers with input from the TSCA and community dietitians from Public Health Services, Department of Health. A two-week menu was designed and repeated for weeks three and four. The menu followed the principles below.

- Each lunch consisted of both a ‘main’ option and an ‘accompaniment’ (sweet or savoury).
- Lunches were prepared in large quantities, using simple recipes that were sized by the TSCA staff.
- Where possible, at least 50% of fresh produce was locally sourced (including from the school garden) and based on what was in season.
- The lunches were based on the Australian Dietary Guidelines (2013)\(^1\) and made up of ingredients from the five food groups (vegetables, fruit, dairy and alternatives, lean meat and alternatives, breads and cereals) with minimal processed/packaged foods.
- Lunches were centred around vegetables and fruit.
- Water was the only drink provided. Fruit-based smoothies were the exception to this, when they were included as a meal accompaniment.
- Discretionary choices (foods that are high in added fat, sugar and/or salt and are not necessary for good health) and deep-fried food were not included on the menu.
- Food waste was minimised through creativity with recipes and ingredients, combining preparation of meal components across days, managing leftovers, composting and waste management.
- Items were adapted for students with allergies/ intolerances or special dietary requirements, so they had appropriate foods.

A pictorial version of the menu was developed by the TSCA and sent to each school (see Figure 1). The lunches were provided during Term 4 2020, with one school providing the first meal on the last day of Term 3.
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Figure 1 A pictorial version of the school lunch menu

The menu was repeated for weeks 3 and 4. For most of the main menu options, the canteen managers could choose to make either a meat or vegetarian option, for example, meat or vegetarian lasagne.
2.2 Data collection

The interview questions and short written surveys were developed in consultation with TSCA staff and dietitians from Public Health Services, Department of Health. Students, parents, canteen managers, principals, teachers, support staff, and canteen volunteers were all invited to provide feedback for the evaluation using a combination of discussion groups, interviews and surveys. The canteen managers were all interviewed and the school principal decided whether discussion groups, interviews or surveys were used for the other stakeholder groups.

Each school was visited at least once by the researcher (KS) to observe the lunch pilot in action and to conduct discussion groups and interviews. Thirteen student discussion groups were conducted while children were eating recess or lunch. Each discussion group included two to five children. To increase the number of children who could participate in the evaluation, three University of Tasmania students, and a research assistant conducted some of the discussion groups. All school staff and parent interviews were conducted by the same person (KS), including three parent interviews that were conducted over the phone. Notes were taken during each interview and discussion group. All discussion groups and interviews were recorded and transcribed.

2.3 Data analysis

Data were sorted and analysed thematically using the qualitative data analysis software NVivo. Quotes from stakeholders have been included. The findings were often similar across the three schools and have been combined together. When there were inconsistencies across the schools, it is reported in the text how many schools the findings apply to.

When identified themes were present under both ‘likes’ and ‘benefits’, the theme is reported only under ‘likes’. As all stakeholders were asked what they liked about the school lunches but only canteen and school staff were asked to report the benefits.

The term ‘school staff’ includes the school principal, assistant principal, teachers and support staff. ‘Canteen staff’ includes the canteen manager, other paid canteen staff and volunteers. ‘Principals’ includes the three school principals and an assistant principal. ‘Parents’ includes parents and caregivers.

2.4 Limitations and strengths

The study limitations need to be considered when interpreting the findings in this report. The study was small, with funding only available for three schools and schools needed to have a canteen manager with good cooking skills and a supportive principal to be eligible for the School Lunch Pilot. Due to the small sample and the eligibility criteria, the findings are unlikely to be applicable to all schools.

Only families involved in the School Lunch Pilot were invited to provide feedback for the evaluation. Feedback was not collected from families who declined to participate in the pilot, to identify their reasons for not participating. However, several children who opted in and out of the lunches and the parent of at least one child who withdrew from the pilot (only two children withdrew) participated in the evaluation, suggesting we were able to capture a variety of perspectives about the pilot.

This study also had several strengths. The evaluation included students, parents, canteen managers, canteen staff and volunteers, principals, teachers and support staff, ensuring opinions from a wide range of key stakeholders were obtained.
Using a qualitative approach, including observation, semi-structured interviews, and open-ended questions in the surveys, enabled an in-depth understanding of the stakeholder’s views of the School Lunch Pilot. This information will be valuable for further studies in this area and for schools that would like to consider providing cooked school lunches.

2.5 Ethical and Department of Education approval

The protocol for the School Lunch Pilot and the evaluation were approved by the Tasmanian Social Sciences Human Ethics Committee (ID 23254) and the Education Performance and Review Committee, Department of Education (FILE 2020-22).

Written consent from both a parent/caregiver and the child were required for a child to participate in the School Lunch Pilot and the evaluation. Verbal assent was also obtained from children before each discussion group.

Parents who participated in a discussion group provided written consent. Verbal consent was obtained before each interview. The surveys were voluntary and consent was assumed when people completed them. To encourage parents to participate in the evaluation, a $10 canteen voucher was given to all parents who participated in a discussion group or interview and to the first 10 parent surveys that were returned to each school.

3 Findings

3.1 Description of schools and study participants

School enrolments were in the range of 100-150 for two schools and 200-250 for the third school. One school expanded the trial to include the whole school (Kinder to Grade 6), however, only students, parents and teachers from four classes (Grades 3-6) provided feedback for this evaluation. At the other two school the lunches were provided to children in Grades 3-4 and Grades 3-6. The Socio-Economic Indexes For Areas (SEIFA) score, is an indicator of socioeconomic disadvantage. Two schools in the pilot had a SEIFA score of 1 (high disadvantage) and the other school had a SEIFA score of 10 (low disadvantage).

At one school the canteen manager was interviewed and all other stakeholders completed short written surveys. Another school had a combination of interviews (canteen manager, canteen staff, school staff, parents) and discussion groups (student and parents) while the third school had a combination of interviews (canteen manager, volunteers and school staff), discussion groups (students) and short surveys (parents). The number of participants using each evaluation method are shown in Table 1.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Evaluation method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interview</td>
</tr>
<tr>
<td>Canteen managers (paid staff)</td>
<td>4</td>
</tr>
<tr>
<td>Canteen volunteers</td>
<td>3</td>
</tr>
<tr>
<td>Students</td>
<td>0</td>
</tr>
<tr>
<td>Parents</td>
<td>3</td>
</tr>
<tr>
<td>Principal/Assistant principal</td>
<td>3</td>
</tr>
<tr>
<td>Teachers/Support staff</td>
<td>5</td>
</tr>
</tbody>
</table>
3.2 Observations of the School Lunch Pilot

All schools followed the same menu but there was variability in the way the schools provided the lunches. One school split the menu and served the accompaniment at recess and the main at lunch. Another school provided the lunches three days per week over six weeks, instead of five days per week over four weeks. These differences were initiated by the school principal and the canteen manager.

3.2.1 Resources

All schools had an on-site canteen kitchen and additional facilities to prepare the meals. In addition to the canteen kitchen, two schools used the kitchens for the students cooking classes, as these were not in use due to COVID-19 restrictions. Another used a commercial kitchen offsite and transported the hot meals to the school for serving. The offsite kitchen was a 5-minute drive from the school.

The TSCA provided practical support, crockery (enamel bowls and cups that would not break when dropped) and cutlery that were on loan from the Museum of Old and New Art (MONA) store and through the TSCA’s relationship with MONA’s 24 Carrot Kitchen Garden Programs, and purchased baking trays and trolleys when needed.

Local supermarkets and larger chain supermarkets were the main supplier of groceries. Where available, schools worked with local producers, butchers, and businesses to get the “best deals”. One school also accessed some ingredients through the food relief organisation Foodbank. Two schools used produce from their school garden.

3.2.2 Meal preparation

The canteen managers prepared the meals from scratch with help from volunteers or paid staff. At one school a teacher aide was reassigned to help with the meal preparation and service for the duration of the pilot. That school also had two regular parent helpers and six other volunteers who helped once or twice. Another canteen manager had two family members help with preparation and service (usually one per day) and four Grade 5/6 students were rostered to help serve the meals each day. The third school had eight volunteers, two to four helped each day on a staggered schedule.

One canteen manager shopped daily, as there was limited storage space, and had cut meat delivered. Another canteen manager shopped weekly – they picked up the meat from the butcher and the groceries were delivered to the canteen.

Because the canteen staff were cooking the school lunches, the canteen could not operate as normal and this affected the ability for students not in the pilot to buy their lunch. At one school the lunches were provided three days per week, to allow the canteen to operate as normal the other two days. Another school usually offered a canteen service one day a week. On that day, instead of the usual canteen menu, students not involved in the School Lunch Pilot could pre-order the cooked lunch. The third school sourced additional funding, which enabled them to provide the cooked lunches to the entire school, including staff.

3.2.3 Service

The lunches were designed to be a sit-down meal. Twenty minutes were allocated for eating the meal, in addition to the normal lunch time break. At two schools, students ate in the classroom while at the third school lunch was mostly eaten outside in an undercover area but when the weather was poor, lunch was eaten in the classroom.
The lunches were taken to the classroom/eating area on trolleys. At two schools the meals were served for the children by the canteen staff/teacher and at the other school students served themselves or were served by the class teacher, depending on what class they were in. When the children were served by someone else, they often said if they wanted a big or small serve. Children were encouraged to try all the meals and were allowed seconds (or thirds) once everyone had been served. The accompaniment was served after the main course (except at the school that served the accompaniment for recess).

3.2.4 Washing dishes

After the meal, all students scraped their plates clean. Each school had a different process for washing the dishes. At two schools the scraped plates were put in tubs of soapy water and then either taken to the canteen, pre-washed by the volunteers and put through the domestic dishwasher, or taken to the commercial kitchen and put through a commercial dishwasher by the canteen manager/volunteer. At the third school the dishes were washed in the classroom sink by the older students, or the teacher aide or class teacher for the younger students.

3.2.5 Waste

Food waste was minimised through creativity with recipes and ingredients, combining preparation of meal components across days, managing leftovers and waste management. Food scraps such as vegetable peelings, were composted or fed to the school worm farms. Plate waste was given to staff member’s goats, chickens and a sheep. At two schools, any leftover meals (that had not been served to children) were given to students from classes not participating in the lunch pilot. One school targeted the children that were known to go without lunch while the other fed the Grade 5/6 students who helped serve the lunch that day, with any remaining food (very little) given to chickens. At the third school, leftover meals (n=14) were given to families in need. Food that had not left the kitchen was frozen and kept for the next rotation of that meal or incorporated into other meals.

While measurement of food waste was not a specific aim of the evaluation, the schools were asked to either weigh or take a photo of the food waste each day. However, there were a lot of days where no data were recorded, meaning it was not possible to accurately estimate the amount of waste. A larger pilot study could collect more robust data on the amount of food waste.

3.3 Number of children participating in the School Lunch Pilot

At the end of the trial, 201 students were participating in the School Lunch Pilot (includes all students at the school that expanded the pilot to include the whole school). Thirty-six students who did not originally sign up for the pilot joined after seeing what the school lunches were like. Two (one each at two schools) children withdrew from the pilot.

The following special dietary needs were catered for: vegetarian, semi-vegetarian (eats chicken but not red meat or fish) egg free, nut free, dairy free, and gluten free.

3.4 Cost per meal

The canteen managers and TSCA staff estimated the average cost per lunch was $4.72 (across the schools the total cost ranged from $3.02 to $7.21, Table 2). This included $1.91 for ingredients (across the schools, the ingredient cost ranged from $1.44 to $3.03 per lunch) and $2.81 for labour (across the schools the labour cost per meal ranged from $1.58 to $5.09, Table 2).
If more students were involved in the lunch program, the cost per lunch would likely decrease, as schools could reduce the cost of ingredients by taking advantage of more bulk deals. The labour costs per meal would also decrease. For the pilot study, funding was available to allow the schools to employ a canteen manager to work six hours per day, with the same amount allocated to each school. The differing labour costs per meal reflect the different number of students that were fed at each school – the more students that were fed, the cheaper the labour costs per meal. For the school that provided the lunches to all students (School 3), a reduction in cost was evident, as the estimated cost was calculated for all students, not just those who participated in the evaluation. This school had the lowest cost per meal of $3.02 ($1.44 for ingredients and $1.58 for labour, Table 2).

All three schools had at least two people preparing the meals. One school had two paid canteen staff (one paid through other funding) and volunteers, while the other two schools had one paid canteen staff member and support from volunteers. One school had up to four volunteers helping each day (at staggered times). Canteen managers and principals said the cooked lunches would not have been possible without the help from the volunteers. If the School Lunch Pilot is to be scaled up, it will be important for schools to have mechanisms in place for recruiting and retaining volunteers.

**Table 2 Ingredient, labour and total cost per meal, averaged across all students and by school**

<table>
<thead>
<tr>
<th>Expense</th>
<th>Average (^1)</th>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredients per meal ($)(^2)</td>
<td>1.91</td>
<td>2.07</td>
<td>3.03</td>
<td>1.44</td>
</tr>
<tr>
<td>Labour per meal ($)(^3)</td>
<td>2.81</td>
<td>5.09</td>
<td>4.18</td>
<td>1.58</td>
</tr>
<tr>
<td>Total cost per meal ($)</td>
<td>4.72</td>
<td>7.16</td>
<td>7.21</td>
<td>3.02</td>
</tr>
</tbody>
</table>

\(^1\)Cost averaged over the 201 children that received the cooked lunches.
\(^2\)Ingredient expenses depend on the price schools paid for ingredients, use of produce from the school garden, and the number of children who received the lunches.
\(^3\)All schools were allocated the same total labour expense (one canteen manager for six hours per day). The different labour cost per lunch at each school reflect the different number of children who received the cooked lunches. The labour cost per meal decreased as the number of children receiving the lunches increased.

### 3.5 Favourite and least favourite lunches

Children were asked what their favourite and least favourite meals were. Numbers are higher than the number of children who participated in the evaluation, as children often said more than one meal. Some students said they liked all the meals and could not choose a favourite while others did not have a least favourite.

The most popular meal was the spaghetti Bolognese, followed by the lasagne, chilli con carne and the baked potato (Figure 2). The soups were the least favourite meals, with pumpkin soup being the least popular followed by the minestrone soup (Figure 3). It is possible soups may be more appealing to children if they were provided in winter (rather than Term 4 which is late spring/early summer).
3.6 What students, parents, canteen and school staff liked about the School Lunch Pilot

Students, parents and school staff spoke very highly of the School Lunch Pilot. Their feedback has been classified into the key themes below. Some students spoke of specific meals that they liked and this is covered in section 3.5.

3.6.1 Variety of the lunches and opportunity to try new foods

Students and parents liked the variety in the menu and that children had the opportunity to try different foods. Parents said children were eating food that they had previously refused to eat and “fussy” eaters were more willing to taste new foods. It was thought that the classroom provided a safe environment where children were happy to try different foods, especially when their peers were eating it. Several parents said their child had asked them to make
different meals at home after they had tried them at school and the canteen managers said some parents had requested the recipes.

“It's nice to, like, taste different things.” Student

“We've had some ‘yeah I don’t like that’. I said that's fine you don't have to like it but I’d really love it if you’d try it. You know. And so I'll just give them literally a tablespoon. And often yeah, they'll taste it. ‘Okay, I'll have some more’ or ‘Can I have some more?’” Canteen manager

“As the mum of a very fussy eater, it was great to hear he was trying things he has never wanted to try before. He was hearing and seeing everyone else enjoying the lunches, so he did too.” Parent

“Yeah minestrone, [child’s name] said it looked like spew. Yeah. But then he tried it and said but oh my God it is so good.” Parent

“And there's very few who really haven't tried new stuff, which I think is really good. It just gives them that opportunity to, well to try it, and try it in what they know is a safe environment. They know everybody's going to do the same, everybody's eating the same, everybody. There's no pressure, there's no pressure for them.” Canteen manager

3.6.2 Convenience / Less pressure on parents

The School Lunch Pilot took pressure off parents to provide a packed lunch, with many commenting that the mornings were less stressful when they did not have to worry about what to give their child for lunch. Several parents expressed frustration at often preparing a lunch that their child would not eat and they appreciated not having to come up with new ideas to keep lunches interesting. Parents enjoyed the convenience of not having to make lunches and found they had more time in the mornings. School staff felt that giving students a substantial, healthy meal for lunch removed pressure from parents as they knew their child would be fed a nutritious meal at school.

“No morning arguments about lunch boxes.” Parent

“Not having to make sandwiches that my child wouldn't even eat.” Parent

“Not having to make lunches and think of new lunch box items to help keep my son interested in his lunch.” Parent

“Also good that there’s no "competition" between him and his friend as to what they are having for lunch in their lunch boxes.” Parent

“It made the morning school routine less stressful and enjoyable for both the kids and I.” Parent
“Also less pressure on the parents to have like a really healthy dinner on the table, if they’re working or whatever.” Principal

Of the 47 parents who completed the survey, 45 (96%) enjoyed not having to make school lunches (Figure 4). The remaining two parents did not answer the question but one noted they still had to make lunch for another child. Children who made their own lunches also enjoyed not having make lunch during the pilot.

Figure 4 Number of parents who liked not having to make school lunches.

3.6.3 Children more settled after lunch and school

Some students said after having the cooked lunch they could concentrate more in the afternoon and had plenty of energy. Numerous parents noticed their child was more settled when they came home from school, they were happier and were not immediately wanting something to eat.

“I liked that it filled me up until after school... it helped me concentrate after lunch, it made me get more work done.” Student

“I found my daughter was more settled when she came home from school, like she seemed like she wasn't like cranky and tired.” Parent

“My child was satisfied enough not to want an after school snack - happy to go scooter riding and not return home until 5.30pm for dinner!!” Parent

“We have a lot of after school activities, she wasn't as hungry at the end of the school day.” Parent

“Our son is coming home happier and content.” Parent

3.6.4 Healthy lunches

The lunches were healthy, with the menu based on the Australian Dietary Guidelines.¹ All the main courses were centred around vegetables and nine of the ten desserts were fruit based. All three canteen managers mentioned that they added more vegetables than what was in the recipe.
“There’s generally five or six vegetables in most meals... They’ve had onion, carrot, zucchini, cauliflower, broccoli, kale... in the meat lasagne.”
Canteen manager

“I mean I love the freedom that I can, here’s the recipe, now add whatever veggies you want. Yeah, so we just like pile, pile, pile them in.” Canteen manager

Parents and children made positive comments about the foods being healthy. Some children said the food was better for their health and wellbeing.

“I thought that it was a good chance to get people to chuck out the junk in their lunchbox and instead try something healthy.” Student

“I liked that you had a healthy yet filling lunch and you’re full afterwards. Even the desserts are healthy.” Student

“That we were getting more fruit and vegetables than at home.” Student

### 3.6.5 Tastes good

The students were generally very happy with the menu, with many saying they liked that the lunches tasted good. Some commented on specific meals that they liked, and favourite meals are shown in section 3.5. Many parents said their child would talk about the lunches when they came home from school, often talking about the foods that they liked or disliked. Several parents said they had been told the cooked lunch was better than what they made at home.

“I don't know how you made it but it's really delicious.... it's like, I feel like I'm in heaven when I'm eating the food.” Student

“It’s like you’re at that one rich friend's house that always spoils the guests.” Student

“I like all the food.” Student

“They enjoyed it. Said it was better than mine a few times.” Parent

### 3.6.6 Sitting down to eat / social eating

Parents and students liked that there was dedicated time to sit down and eat lunch in a social environment. Children enjoyed being able to sit and talk with their friends while they ate and several likened it to eating at a restaurant. Parents liked the social aspects of sharing a meal and that their child had more time to eat their lunch without being distracted by play.

“It was kind of like having lunch at a restaurant.” Student

“I liked how I could sit and have a conversation with my friends and have a cooked meal.” Student

“Knowing that my child was eating healthy food each day and being supported to take time to sit and eat and not be distracted by play.” Parent

“Students enjoyed the relaxed time sitting and chatting with their peers whilst eating their lunch.” Teacher
“I think the kids ate more per day, because everyone sat down and there was an opportunity to have seconds instead of rushing out the door to play with half a sandwich in their hand.” Parent

3.6.7 Not having to pay for lunch

Parents and students liked that the lunches were free. However, many parents said they would be willing to pay for the convenience of not having to make lunches and the peace of mind that their child was having a healthy lunch (see section 3.11 for how much parents would be willing to pay).

“What I liked about the school lunches was the food was delicious and the fact it was for free!” Parent

“I like it cos my mum doesn’t have to pay any more money to buy food.” Student

“A big saving on making his lunch - both $ and time wise.” Parent

3.6.8 Warm lunches

The children liked having a warm lunch although, as the weather warmed up during Term 4, a few children thought it would be nice to have a cold lunch on hot days.

“What I liked was that every single lunch that we had was still hot.” Student

“We got cooked meals instead of sandwiches.” Student

“They’re hot and delicious!” Student

“Oh, they just love it. I guess it’s having a warm meal as well, which is really exciting.” Teaching staff

“I kind of think that there should be some cold food, just for when there are hot days.” Student

3.6.9 Manners and other personal skills

The School Lunch Pilot gave children the opportunity to develop personal skills such as manners and basic eating etiquette. Students said please and thank you when they were being served and ate the lunches using a knife and fork. At some schools, children learnt to set their cutlery correctly on the table before their lunch was served. At one school, children in the older classes dished their own foods, which gave them more control over what they were eating, and they also washed their own dishes.

“Seeing the kids being so respectful when they’re, you know, saying thank you for their food.” Principal

“Children develop skills in co-operation, time management and eating etiquette.” Principal

“I like it how we get to serve our own food and we get to learn stuff about that.” Student
“They had the roles of washing their own dishes, which was teaching them different skills as well. So they would have to wash and it was, you know, a lot more than just eating the food. There were different skills that they got from the whole project.” Parent

“They’re quite happy to dish up. And it’s been good for them. Some of them have never washed up before, so it’s been really interesting.” Teaching support staff

3.6.10 Seeing the children’s responses

All three canteen managers and the canteen volunteers said they enjoyed the children’s reactions to the meals – their excitement when they found out what they were going to be eating that day and seeing the children’s faces when they were serving the meals.

“And just seeing their faces, like it, they smiled, they smiled and as you’re walking around they’re asking what are we having today and just that, that they were really kind of immersed in the whole situation themselves too, they were, well most children, are really on board and enthusiastic and, yeah, it’s just that they just looked happy, the kids just looked happy.”

Canteen manager

“Just seeing the look on the students faces. And then, feeling their built-up excitement each day like ‘what’s for lunch? What’s for lunch?’” Canteen manager

“The best part is watching the kids when serving them... Some are very enthusiastic, others are a bit ‘oh yeah’.” Volunteer

3.6.11 Cooking the meals

The canteen managers enjoyed preparing the meals and said it was easier than what they were expecting, especially the second time through the menu when they were more familiar with the recipes. The canteen managers appreciated the support they received from the TSCA.

“The actual cooking which is always good fun.” Canteen manager

“I've really like enjoyed it, really enjoyed it... it's been a real privilege, honestly.” Canteen manager

The canteen manager’s all felt the workload was manageable with the help of other staff or volunteers.

“The actual preparation and cooking was much easier than we thought.”

Canteen manager

3.6.12 Less rubbish

At the school that made the cooked lunches available to all children, some parents and staff commented that there was less food waste and rubbish in the school grounds. This was not mentioned at the other two schools, possibly because only two classes were involved in the pilot and most of the school was still bringing packed lunches.

“There's been a lot less rubbish in the playground. Lot less food scraps and no packaging.” Canteen manager
3.7 What students, parents, canteen and school staff disliked about the School Lunch Pilot

Most students and parents spoke highly of the pilot and said there was nothing that they disliked about the school lunches.

“I loved it all, it was so good.” Student

“Nothing. It was fantastic.” Parent

“I liked all of it, I couldn't fault it.” Parent

“No negatives whatsoever.” Parent

Some students just commented on specific lunches that they did not like (see section 3.5 for the least favourite lunches) or specific ingredients such as not liking kidney beans or sultanas. One student did not like that there were vegetables. Dislikes related to the pilot, rather than specific meals, are discussed below.

3.7.1 Only one lunch option

A few children did not like that they had no choice in what they ate for lunch. There was only one main option each day, however, the meals were modified for children with special dietary requirements to ensure they were given appropriate food (for example vegetarian or gluten free, see section 3.3 for the different dietary requirements).

Children were encouraged to try each meal. At one school, if a child did not like the meal the canteen staff put together components of the meal they thought the child would like, in a large enough portion to fill them up. At the other two schools, if the child did not like the meal or refused to try it, there was no other option for them and a few children said if they did not eat all the main meal, they would not be allowed dessert. As a result, some children opted in and out of the pilot if they were reluctant to try new foods or they did not like what was being served on a particular day. If children did not have the cooked lunch and had not brought lunch from home, they did not eat any lunch that day. One parent who provided a ‘back-up’ lunch, said if her child did not like the cooked lunch, they were only allowed to have one thing from their lunch box and they were coming home hungry. It is important to note that these rules were made by the school and not recommended by the TSCA. The TSCA had recommended an alternate lunch, such as cheese on toast, be available for students who did not want the cooked lunch. There is no data on how many children went without lunch, however, canteen staff said that children who thought they would not like the meal often wanted more after they had tried a small amount. If the school lunch project is scaled up, it will be important for the TSCA and project dietitians to have adequate resourcing to provide education and support to the schools to assist them in managing these matters.

“I didn’t like that we couldn’t choose what we had and that we were just given stuff. That was a bit inconvenient because some people don't like certain things.” Student

“Some students were opting in and out depending on what was being served each day.” Teacher

“I just had things out of my own lunch box instead if I didn’t like it.” Student
“Teacher was quite strict on making them try it. And then if they didn't like it, they were only allowed to only go and get one thing out of their lunchbox, so she was coming home hungry.” Parent

“Only once (I was hungry) because I didn’t like it and I didn’t have any other food.” Student

“One of the ones who won't eat isn't bringing other food so he's not eating at all.” Teacher

School staff reported the number of students who brought lunch from home, in case they did not like the cooked lunch, decreased over time as children became familiar with the lunches and were happy to eat them. One teacher noted that parents tended to provide a lot more discretionary food choices for the ‘back-up’ lunch than what they would usually include in the child’s packed lunch. Discretionary foods are those high in fat, sugar, and/or salt and are not a necessary part of the diet, for example potato crisps, muesli bars and confectionary.

3.7.2 Inconsistent serving sizes

Students and parents said the serving sizes of the lunches were inconsistent, with some meals being small and others very large. One of the challenges mentioned by the canteen managers was that they had not used the recipes before and therefore did not know how big the serving sizes would be (see section 3.9.3). The recipes were sized by the TSCA, to ensure that there were the correct number of servings at each school. It is possible the canteen staff who were serving the meal were not aware what the serving size was meant to be. If the school lunch pilot is to be scaled up, it will be important for the project dietitians to have adequate resourcing to develop standardised recommendations for mealtimes and ensure all recipes align with these recommendations. The use of standardised serving utensils would also be helpful.

“I kinda don’t like the fact, like the serving sizes, sometimes you get a small amount and sometimes a whole heap.” Student

“Sometimes didn't have enough.” Student

“Some proportions were a little too small for a growing student!” Parent

“They mostly enjoyed all of the dishes but some portions sizes were a little small.” Parent

3.7.3 Meals served late

At one school there were a lot of comments about the meals being served late. Children were allocated 20 minutes to eat lunch but when the lunch was served late, they were not always able to finish the meal before the bell rang for play time. The children did not like missing out on their play time. Teachers from that school said when the meals were late, the children would eat very quickly or not eat all of their meal, so they could get outside to play. It should be noted that children usually only have 5-10 minutes to eat their lunch.

“Sometimes had to wait ages to eat the lunch but it was worth it.” Student

“I didn't like that sometimes we were late out to play.” Student
Evaluation of the 2020 School Lunch Pilot

“Students don't like to miss their play time causing some to rush through and not finish as much of their meal.” Teacher

3.7.4 Menu options

Children and parents were generally happy with the menu and liked the variety (see section 3.6.1). Although some would have liked a second option (section 3.7.1). A couple of parents thought the children did not need dessert and parents at the school that split the meal and served the accompaniment at recess thought the recess option could have been healthier. The canteen manager from that school said if they continued with the pilot, they would provide more fruit for recess instead of the sweet items.

One parent thought the meals could have been healthier and suggested sushi, rice paper rolls and salads as possible options. Another parent thought some of the meals were not foods that children would usually eat.

“I don't think the kids needed to have a dessert with their meal and it was quite a lot of food for some of the children. I feel the food could have been healthier.” Parent

“I found sometimes that maybe the recesses could have been a little bit healthier.” Parent

“There was a couple of meals that were not so much what a child would normally eat and therefore my child didn't like those days.” Parent

3.8 Perceived benefits of the School Lunch Pilot

Canteen and school staff were asked what they thought the benefits of the School Lunch Pilot were. Some of the benefits have been reported in section 3.6 under what was liked about the School Lunch Pilot. These include trying new foods, less pressure on parents to prepare lunch, eating healthy lunches, using manners and developing personal skills, and less rubbish in the playground. Benefits on behaviour and concentration are reported separately in section 3.10, as this was a separate aim of the pilot. In addition to those benefits, the following benefits were identified.

3.8.1 Equality

School and canteen staff were aware of students who often came to school with insufficient lunch (small or no lunch, or food of low nutritional value). The School Lunch Pilot was seen as an equitable opportunity for all children to eat healthy food, irrespective of their socioeconomic background, as all children ate the same food and were able to have as much as they needed. Staff from all three schools noticed that particular children who usually did not eat much lunch were now having a full meal. Some felt that these students would be more equipped to learn after having a healthy lunch.

“I think the thing that was best was just the equity of it, that every child was being fed the same. You have the same level, the quantities, they, they could serve themselves, they got what they needed.” Canteen manager

“Every child receives a healthy lunch, every day.” Principal

“A few students who sometimes do not eat much at lunch were eating a full meal.” Teacher
“If they've got a well-fuelled fuel tank, their engines running right, whole systems good to go, they can learn.” Canteen manager

3.8.2 Increased school attendance

Staff at two schools noted that some children were attending school more often during the School Lunch Pilot, particularly children who usually had very low attendance. It was believed that they were often absent from school because there was not suitable food at home that they could take to school for lunch and their increased attendance was attributed to the cooked lunches. For example, one child only attended school for a total of 15 days during the first three terms of the year, but in Term 4 attended school all 20 days that the cooked lunches were provided.

“We had more students coming more regularly. We also have students who had very low attendance coming a lot more of the time.” Principal

“A lot of them turned up when they hadn't in the past because there's been decent food here.” Teacher

“Parents feel that they're going to be judged if they don't have the right food for their kids..., the attendance calls would be 'the pay hasn't come in yet so I couldn't go to the shop and buy them lunch, so they're staying at home.’” Principal

3.8.3 Increased school engagement

In addition to increased attendance, some schools reported an increase in school engagement, particularly among students who were previously disengaged. It was reported that these students were more willing to be at school and were more active learners. This was thought to be because the children were not hungry or worried about when they were next going to eat.

“I think the biggest benefit was that the children were able to be active learners in the classroom because their bodies were full of food and their minds were able to function because they weren't worried about when their next food was coming.” Principal

“Really big positive changes in the disengaged students... Just being here more regularly and wanting to be here. And also their parents wanting them to be here.” Principal

“Students were positively engaged in all classroom activities after lunch.” Teacher

3.8.4 Building community

School and canteen staff believed the School Lunch Pilot gave students a sense of belonging and helped build community engagement at the school. Staff felt that providing cooked lunches made the children feel valued and supported and was a way to show them that they cared.

Several schools had volunteers helping with the pilot that had not volunteered at the school before, including retirees who had no links to the school. The canteen managers enjoyed working with the volunteers, with one often referring to them as ‘my valuable volunteers’. Volunteers enjoyed the opportunity to be involved in the pilot and found it very rewarding.
addition to helping the children, some volunteers mentioned the benefits they themselves gained from being involved, such as developing food preparation skills and having new recipes to use at home.

Several schools were involving the wider community by working with local producers, butchers and businesses to get donated food and the “best deals” and one school was also establishing links with the local community garden.

One canteen manager said the School Lunch Pilot had sparked a lot of interest in the community and they were often asked how the cooked lunches were going.

“Shared food is a great way of making, giving everyone a chance to talk, to share experiences, it gives our kids, shows them that we value, value good food for starters, value nutrition, but also value them... you go out there and you can see everyone's happy, you know, they're all smiley, they're all talking about their food, they're talking about their day, all that sort of thing, it really does build a good, a good community a good sense of belonging.” Principal

“We've had quite a few volunteers come that haven't volunteered for anything else before. So being able to get these people involved in the school and you go down and talk to them, they're so enthusiastic about it. That, you know, that sends a good message out to the community as well, that it's (the school is) a positive place.” Principal

“It's been very rewarding. I'm retired. I'm so pleased I've got the time to put in.” Volunteer

“And it's actually been really good. I've enjoyed it. And learnt a lot about preparing food. A positive experience.” Volunteer

“The whole project has tickled the community in ways that you wouldn't think was possible. Yeah. So it's sort of like I can't go anywhere now without like “How's it going?” like being bombarded by people yeah... it's sparked a lot of conversation in the community which is really like, nice and exciting.” Canteen manager

3.8.5 Promotes healthy eating

School and canteen staff thought the cooked lunches promoted healthy eating by giving students the opportunity to try, and enjoy, healthy foods. This benefit may also extend to the children’s families as children asked their parents to make some of the school lunch meals at home and parents asked for the recipes. One parent said they were continuing with the healthy lunches and were often giving their children stir-fries to take to school for lunch.

“It also promotes healthy eating, which is really important too.” Principal

“Children learn about healthy eating.” Principal

“We've had a couple of parents that have requested recipes... hopefully the overflow will be that parents might just take the curry chicken recipe or the spaghetti bol recipe home and go okay instead of just opening a jar of Domino’s and bit of mince and throwing it over pasta. Oh we could chuck some silverbeet, could put a carrot in... just awesome.” Canteen manager
3.9 Challenges of running the School Lunch Pilot

There were several challenges that schools had to overcome to provide the lunches and these are listed below.

3.9.1 Insufficient infrastructure

Preparing the lunches using the school canteen’s small domestic kitchen was a challenge for the canteen managers. However, all canteen managers were able to access other facilities including the school kitchens where students learn to cook and a commercial kitchen located near the school. The canteen managers said it would not be possible to provide cooked lunches to the whole school using the existing canteen kitchen. When the canteen managers and principals were asked what additional equipment would be needed, the following items were identified:

- a commercial dishwasher to wash and sterilise the dishes, and reduce the amount of time volunteers and canteen staff spent washing dishes
- a bigger sink for washing pots
- bigger ovens
- more cutlery and crockery
- additional fridge/freezer
- additional electric fry pans
- more trolleys to deliver the meals to the classroom
- a covered outdoor area where the students could eat their lunch (this was considered to be “dream stuff” rather than a necessity)

“Trying to do it in a domestic kitchen, it is ah, impossible.” Canteen manager

“The ovens are quite small, we had to cram all the vegetables onto trays… And then we had to do, put the chicken in, sort of sort of juggling oven space. We had to be really mindful of time management.” Canteen manager

“The ideal would be to have this kitchen doubled the size, commercial stuff in it, and a seated area.” Canteen manager

“The big pull-down dishwasher, you know, something that they could just get the loads through, and then they knew that they were safe they knew that they’ve been disinfected. To really help the people in there to, you know, do what they (volunteers) came to be there for, which is to interact with the kids and talk about healthy food and promote that. But now we see them come in and they’re in there, scrubbing lots of dishes.” Principal

“I would at least need a bigger sink because I’ve only got a tiny little sink and you try washing those big stock pots it’s just crazy. I’d need an industrial dishwasher… ideally, you’d need another freezer. You’d need another fridge. No maybe not another fridge but you definitely need another freezer. Yeah, that’d be the main, big, big items. Oh, and trolleys.” Canteen manager
3.9.2 Allocating time for the lunches

It was recommended that the schools allocate 20 minutes for lunch, to give students time to sit down and enjoy the meal. As most schools usually allow 5 to 10 minutes to eat lunch, some changes to the school timetable were required. All three schools started lunch early. Two principals said the longer lunchtime was a challenge, however, one of these principals also felt that the benefits of having well fed children outweighed the 10-minute loss of class time. Some teachers found the reduced class time a challenge and also commented on the extra workload associated with setting up and supervising the lunches and doing the dishes.

“It's always going to be a challenge because you can't fit everything into a day. So it's just prioritising and healthy eating is a good thing to prioritise for that time, especially in that lead up before lunch where lots of the kids are bouncing off the walls.” Principal

“I think some of them (teachers) found it a bit overwhelming at first to, to balance it within their classroom routine but I think as the week, the couple of weeks, gone by that, sort of, they found it a bit easier to work into their daily routine and haven't been as overwhelmed with the whole process, which is a positive.” Canteen manager

“The setup and organisation required to allow adequate eating time for the students did impact on learning time during that block of the day.” Teacher

3.9.3 Unfamiliar with new recipes

Using the recipes for the first time provided some challenges for the canteen managers, regarding the quantities produced (too much, not enough) and timing the preparation so the meals were ready on time. However, they all said it was a lot easier the second time around when they were more familiar with the recipe.

“A lot of these recipes I've never cooked before. So it was getting to know the recipe so like second time around, it's like yeah I remember how to do that now.” Canteen manager

“Well, the first round it was the quantities getting the quantities, right. But it really hasn't been difficult. It's been surprisingly easy. Timing is the factor, like the key to get the timing right so that they get the meals when they expect it. But it hasn't been, I don't think it's been difficult at all.” Canteen manager

3.9.4 Securing ongoing funding

Although funding was not a challenge for this pilot study, as the TSCA provided financial support, schools discussed the need to access additional funding to keep the cooked lunches going. Extra funding is necessary to pay for ingredients, cover the increase in the canteen managers hours, and to purchase equipment needed to make the canteen kitchen more suitable for preparing lunches for the whole school (described in section 3.9.1).

Some schools were developing partnerships with local producers, businesses and community gardens to try and reduce the cost of the ingredients.

“It would be great to sustain it but I suppose it's a challenge for the school to sustain it financially.” Principal
“If we wanted to expand it and things like that, it would need a much larger workforce. Whether it’s volunteers, or more actual canteen staff and we’d need access more to local produce, donations and food that sort of, sort of thing.” Principal

“He (a local producer) said they’re happy to donate for free, and also give us a good cut price.” Canteen manager

3.10 Perceived changes in behaviour or concentration among participating students

Staff at one school reported no changes in behaviour or concentration. However, two schools reported “huge” and “massive” improvements in behaviour. One principal said there was a noticeable improvement by the second week and the “whole energy in the room was calmer”. One staff member said it was not just the food that helped settle the children but also the sense of belonging that the school lunches provided.

“Students were positively engaged in all classroom activities after lunch. I can't say there was a huge difference in concentration though.” Teacher

“Still had high-flying kids but even they settled down a bit.” Principal

“Huge, huge differences... The concentration levels were higher and more sustainable. A lot of students who are, that we categorise as vulnerable families, were a lot more engaged, not having as many emotional dysregulated times in the classroom, not as many outbursts and crying and all those sorts of things, were all less.” Principal

“It does build a community and that helps with your behaviour, it helps with those sense of belonging for some of our kids with trauma, especially.” Principal

“These healthy lunches have made a massive difference in some of those student’s behaviour.” Principal

A Support Teacher from one school wrote a letter to the TSCA describing the positive changes they had observed in a student with an intellectual disability. They said since the School Lunch Pilot began the student “is more settled, has demonstrated some emotional resilience, and is more cooperative, less explosive and impulsive.”

3.11 How much parents would be willing to pay if cooked lunches were provided on a regular basis

Most (89%) parents reported they would be willing to pay $3 to $5 per day for a cooked school lunch (Figure 5). Parents who had multiple children at the school said it would be helpful if the school offered a family discount, with additional children receiving the meals at a discounted price. On average it cost $4.72 (ingredients and labour) to make the main course and accompaniment (see section 3.4 for costing). The cost per meal would likely decrease if more students were having the cooked lunches. For example, at the school where all students were invited to participate in the lunch pilot, the average lunch price was $3.02. This suggests most parents would be happy to pay for the lunches if they were provided at cost price or were subsidised. Several parents said they would like the cost of the lunches to be added to the school levies that are paid at the start of the year or to pay at the start of each term. Two
parents, who were less supportive of the pilot, said they would not be willing to pay anything. A couple of parents said if they had to pay, they would like more input in to the foods provided.

“I’d happily do $20 a week. If not, a bit more just to not have to think about it (making a school lunch).” Parent

“Of course I would pay because it’s the same as going to the supermarket and buying them school lunches anyway. The convenience factor of it was really good.” Parent

**Figure 5 Amount parents would be willing to pay, per child, for a cooked school lunch.**

When parents were asked if they would like the school to provide a cooked lunch every day, 90% (52/58) of parents said yes, four were unsure and two said no. One parent who said ‘no’ was supportive of the School Lunch Pilot but thought the cooked meals should just be provided once or twice a week so children would have something to look forward to. Some parents who would like the school to provide a cooked lunch every day said their children would only participate a couple of times per week. This was partly due to perceived price, with some parents thinking they would only be able to afford a cooked lunch one or two days a week. Other parents said a cooked lunch would be a treat, similar to buying lunch from the canteen and their children could participate on the days that their favourite meals were served.

“Mine would happily do it every day.” Parent

“Although I’d love to see the availability of lunches daily, it probably isn’t an option for me to purchase daily - depending on price, I’d probably do twice per week.” Parent

“If lunches were ‘paid’ would probably do more as a treat, like canteen, so buy less often.” Parent

“Yeah, I mean, once or twice a week would be alright, but yeah, every day, and then they can have the option.” Parent
3.12 Feasibility of collecting data on the number of student absent days

Actual data on school attendance was not collected as we did not ask for permission to do this in the consent form. However, there was anecdotal evidence that it would be feasible to collect absent day data, as school staff were aware of an increase in attendance during the pilot among children who were often absent from school.

3.13 Future School Lunch Programs

All three canteen managers would like to continue providing the cooked lunches. Although it was not a specific aim of the evaluation, the canteen managers and principals spoke about changes they would make to the School Lunch Pilot to enable them to provide cooked lunches to the whole school. Some suggestions to reduce the workload and help keep costs down included dropping the accompaniment and only serving a main course, or only providing lunches a couple of days a week. However, one canteen manager wanted to provide recess, lunch and dessert to ensure the children were well fed throughout the day.

As mentioned in section 3.9.1, some new equipment was considered necessary to allow the pilot to be upscaled to the entire school and schools were thinking about how they could fund a School Lunch Program (see section 3.9.4). At one school volunteers were considered essential for making the lunches possible and the principal and canteen managers spoke about the importance of keeping them engaged.

“Money is always a challenge. Even with that grant, it still costs us a fair bit to run, staffing is our biggest cost. And so, you know, we’re hoping that we can continue something similar next year across the board for the whole school... But it is, it's money holds you back. It’s, like I said, our volunteers, if we didn't have volunteers, it wouldn't work.” Principal

“It's fantastic. We'd love to keep going, you know, with, like I said, we want to expand it. We think it's really positive.” Principal

“I'd do it (school lunch) every day if I could, definitely.” Principal

“My vision. I'd like to say five days a week, all kids, whole school.”

Canteen manager

The following suggestions were made by students and parents:

- Have cold food options on hot days
- Only provide the cooked lunches during Terms 2 and 3 (colder months)
- Have two lunch options each day
- Have a longer menu (more than a two-week cycle) so the children do not lose interest.
4 Conclusion

This pilot study found it was feasible to provide cooked school lunches for students at the three participating schools. The School Lunch Pilot was highly valued by the school community and all three canteen managers would like to continue with the cooked lunches. Two schools reported that students were calmer and that there was an increase in attendance, particularly among students who were often absent from school.

One school sourced additional funding and made the lunches available to all students at the school, the other two schools selected two classes to receive the lunches. The study only included three schools, which were specifically chosen because the canteen manager had good cooking skills and supportive principal and school staff. The canteen managers also had access to cooking facilities other than the canteen kitchen. Therefore, the findings from this study may not be applicable to all school canteens.

5 Recommendations

A larger study is needed to determine if the School Lunch Pilot can be upscaled. This would involve providing cooked lunches for all students, at a larger number of schools, for a longer duration of time.

It is recommended that the larger study:

- Include schools from around Tasmania with a variety of characteristics (school size, level of disadvantage, rural/urban location).
- Provide healthy lunches that are based on the Australian Dietary Guidelines (2013),¹ are prepared from scratch and include minimally processed foods. The TSCA and dietitians from Public Health Services should be involved in the development of the lunch menu.
- Allocate 20 minutes for students to sit down and enjoy their meal.
- Support schools to procure food from local producers.
- Include a simple alternate option (for example a cheese sandwich) for children who do not want the cooked lunch. The alternate option would not need to be advertised, to encourage children to taste new food.
- Provide additional infrastructure (such as a commercial dishwasher and larger ovens) to schools that need it.
- Support schools to pay their canteen manager for the additional hours worked.
- Support schools to recruit and retain volunteers to help prepare the lunches.
- Train canteen managers in portion control.
- Identify the benefits and challenges of providing the school lunches.
- Estimate the cost of providing the cooked lunches, including labour expenses.
- Determine why families do not participate in the school lunch program (if applicable).
- Assess the effect of the cooked lunches on attendance, behaviour and academic outcomes.

“I'd love to expand it across the board. I think it (a school lunch program) would be great if we did it in all schools, you know, across Tassie full stop and actually had it set up so all the kids had a good meal. I think it would make a big difference.” Principal
6 References


6. Dunbabin, J (2020). Investigate the factors that enable school lunch programs to impact positively on student health and wellbeing: Julie’s School Lunch Journey.