

Curtin University

**School Breakfast and Nutrition
Education Program (SBNEP)
Foodbank WA
2020 Evaluation Report
15th December 2020**

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School Breakfast and Nutrition Education Program (SBNEP)

Evaluation Report 2020

Funders

Department of Education

Department of Health

Department of Primary Industries and Regional Development

15th December 2020

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Section 1: Introduction

The School Breakfast Program (SBP) provides food products and resources to assist schools to provide a nutritious breakfast for primary and/or secondary students. Foodbank WA provides specified food products to schools that register with the program free of charge. Funding enables Foodbank WA to purchase a regular supply of specified breakfast products and freight these products across WA, specifically to regional schools.

Foodbank WA describes the *Food Sensations*® for Schools (FSS) program as a fun and hands-on nutrition education program available to School Breakfast Program schools. It aims to improve knowledge, attitudes, and skills to encourage healthy eating and cooking for healthier bodies, minds, and futures.

The impact of COVID-19 from its height of impact in mid-March Term 1 to the return of students in Term 2 on the operations of a) School Breakfast Programs (SBP) including Foodbank WA having limited food product supply and b) ability of Foodbank WA to run *Food Sensations*® for Schools (FSS) is a consideration when interpreting the results in the 2020 reporting period.

1.1 Performance measures

The results are used to evaluate the two performance measures 1.2 and 2.2 where applicable. In addition, brief commentary is made about 3.1 of the performance measures.

OUTCOME 1: Provision of nutritious foods to students vulnerable to poor nutrition

1.2 Deliver a School Breakfast Program that meets the needs of participating schools

Quality improvement assessment of the School Breakfast Program. Satisfaction levels and recommendations cited by school coordinators in relation to:

- Quality and range of products
- Support offered and communication; and
- Online resources (i.e. SBP Toolkit)

OUTCOME 2: Students develop positive attitudes towards healthy eating and knowledge about food and nutrition.

2.2 Support the development of student's knowledge and skills in relation to healthy eating and nutrition.

Level of food and nutrition knowledge and skills demonstrated by students, in particular:

- ✓ Dietary guidelines
- ✓ Food selection
- ✓ Food preparation; and
- ✓ Safe food handling

OUTCOME 3: Building and maintaining partnerships to continue long-term sustainability of the program

3.1 Longer term sustainability achieved through the establishment and maintenance of a range of partnerships.

1.2 Methods

This evaluation contact has two reporting dates for data collected in 2019 and 2020.

Table 1 Reporting timeline

Report	Date of program delivery covered	Report date
1	1 st January 2019- 31 st December 2019	March 2020
2	1 st January 2020-31 st December 2020	December 2020

This report includes the results of three methods:

- ☐ Annual SBP coordinators annual online cross sectional survey – *2020 COVID-19 specific survey* (Section 2)
- ☐ *Food Sensations®* for Schools session feedback completed by a) secondary students (reporting pre and post evaluation design) (Section 3)
- ☐ *Food Sensations®* for Schools session feedback completed by b) teachers from primary and secondary classes (online cross sectional survey) (Section 3)

Table 2 Period for research and evaluation data report 2020

Target group	Reporting	Dates
SBP coordinators	Cross sectional survey	School Term 3 (20 th July to 28 th September 2020)
FSS secondary students	Pre and Post session survey	Programs commenced after 1 st January 2020 with final program completed on 9 th December 2020
FSS teachers from	Cross sectional survey two weeks after class session	Programs commenced after 1 st January 2020 and completed by 9 th December 2020 - final data collection on 10 th December 2020

Section 2: School Breakfast Program Evaluation Data

The SBP reporting this year was primarily to reflect the impact of the heightened COVID-19.

2.1 Methods

A new 2020 survey included a questionnaire covering how the COVID-19 pandemic at its height affected the way in which a school has operated their SBP and what the status and changes were in Term 3. The new survey used specific questions developed by the Foodbank WA team's knowledge of different impacts and a web review about COVID-19 changes in SBP delivery internationally. The level of SBP integration into schools was also assessed using one question from the 2019 questionnaire. Contact managers reviewed and approved the questions

The 2020 questionnaire contained 18 questions including open-ended questions in total and designed to take 5-10 minutes to complete. (Appendix A) The online questionnaire delivered using Qualtrics research web-based survey tool (Qualtrics, Provo, UT). An amendment to include the new SBP questionnaire using the existing survey processes was approved by Curtin University's Human Research Ethics Committee HRE2019-0289. (Appendix B)

Foodbank WA provided an excel spreadsheet with the 2020 confirmed schools and contacts. An Access database was purpose built to administer survey distribution and reminders to Principals and SBP coordinators. Prior to the questionnaire administration phase, a research information sheet and ethics approval document were sent to Principals early in the School Term 3 to invite them to participate in the 2020 Foodbank WA's SBP evaluation survey. Principals were asked to withdraw consent for their school to participate or if no response was received by the Curtin research team then it was assumed informed consent was provided to send the survey link. The online survey was open for 4 weeks in School Term 3 and two email reminders were sent to non-respondents. The follow-up processes used for the 2019 survey included the addition of a phone call to non-responding schools to check they had received the survey. This additional follow-up method was removed from the 2020 processes so as not to provide extra burden on schools due to COVID-19 impacts. Schools that withdrew consent or did not respond were considered lost to follow-up.

2.2 Response rate

At the start of Term 3 Foodbank WA had 416 schools registered for the 2020 School Breakfast Program (SBP). All schools were invited to participate in the evaluation, with an initial email sent to the School Principal with a research information sheet and then the survey link sent directly to the SBP coordinator or the School Principal if also the SBP coordinator. Six of the schools invited, requested to withdraw from the evaluation. Schools did not have to provide a reason for withdrawing. Of the 410 schools included, 334 schools provided evaluation, a response rate of 81.5% (Table 3).

Table 3 Responses rate– Schools

	Sample size	% of total schools	% total schools evaluated
Schools	416	-	-
Schools evaluated	410	98.6	-
Schools not evaluated*	6	1.4	-
Survey completed	334	80.3	81.5
Lost to follow-up#	76	18.3	18.5

*Schools not evaluated are those who withdrew consent or indicated their SBP had not commenced.
 #Lost to follow-up are participants who have been contacted multiple times for follow-up with no success.

The 2020 survey response rate is higher than earlier SBP surveys but less than the 2019 survey. The previous WA SBP survey response rates were 37.9% (2015), 74.7% (2016), 56.3% (2017) [1-3] and 92.2% (2019). This response rate for the WA 2020 survey is consistent with the three years of reporting for the Foodbank Victoria funded program which ranged from 79.0% in 2016 to 82.4% in 2018) [4-6].

2.3 Demographic characteristics – Schools and survey participants

Based on information provided to Foodbank WA at the time of registration in 2020, nearly half of the schools (48.3%) are located in either South or North Metropolitan regions. (Table 4) Half the schools were classified as primary only (50.2%). The number of enrolled students at schools ranges from six to 3000. Before the COVID-19 impact, two-thirds of schools (62.3%) ran the SBP five days of the week. The number of students attending the SBP across the school year ranges from two to 500. The demographic characteristics of schools responding to the SBP survey are similar to all schools registered for the SBP with Foodbank WA.

Table 4 School Demographics (n=416) as reported at start of 2020 in comparison to the SBP survey respondents

Characteristics		All SBP schools (n=416) %	SBP survey respondents (n=334) %
Education Region	South Metropolitan	30.5	33.5
	North Metropolitan	17.8	16.2
	Southwest	14.9	14.7
	Wheatbelt	9.6	9.3
	Kimberly	9.1	9.0
	Midwest	8.2	7.2
	Goldfields	7.5	7.5
	Pilbara	2.4	2.7
Geolocation	Metropolitan	42.3	42.5
	Provincial	35.3	35.9
	Very Remote	13.0	12.9
	Remote	9.4	8.7
Foodbank Branch	Perth	63.9	63.5
	Bunbury	12.0	12.0
	Mandurah	10.6	12.6
	Geraldton	5.5	4.5
	Kalgoorlie	5.5	5.1
	Albany	2.4	2.4
Sector	Public	89.7	90.1
	CEWA	5.3	5.1
	AISWA	4.6	4.2
	Other	0.5	0.6
School Type	Primary school	50.2	51.2
	Senior High School	16.6	16.8
	District High School	12.7	11.7
	Remote Community School	8.9	9.3

	Education Support Centre	4.8	5.4
	Clontarf Academy	3.8	3.6
	Senior College	1.2	0.3
	Other	1.6	1.7
Index of Community Socio Educational Advantage (ICSEA) Decile*	1	0.7	0.6
	2	1.9	2.1
	3	3.9	3.3
	4	4.8	5.8
	5	8.2	9.4
	6	10.9	9.4
	7	13.3	13.9
	8	13.8	14.8
	9	16.9	17.0
	10	25.1	23.6
Number of days SBP operates	1	11.3	11.1
	2	15.1	16.8
	3	8.4	7.3
	4	2.9	3.6
	5	62.3	61.3

*ICSEA not available for Education Support Centres for Yr10-12

Nearly all SBP surveys were completed by the Foodbank WA nominated SBP coordinator (95.5% of survey respondents), with most SBP coordinators identifying as the School Chaplain (26.4%), Teacher or Education Assistant (18.3%). (Table 5)

Table 5 Respondent demographic characteristics (n=333)

Characteristics		%
Nominated SBP coordinator	Yes	95.5
	No	4.5
Current position	Chaplain	26.4
	Teacher or Education Assistant	18.3
	Deputy Principal	13.8
	Principal	12.9
	Administration Staff	11.1
	Student Services/support Manager	4.2
	Youth/social worker	2.7
	Aboriginal and Islander Education Officer	2.1
	Clontarf Worker	2.1
	Canteen Manager	1.8
	Clontarf Director	1.5
	Parent/ P&C Committee	0.6
	SBP coordinator	0.3
	Other – specified (librarian, hospitality lecturer, college manager)	1.5
	Other – not specified	0.7

2.4 COVID-19 impact

Over half of schools (51.3%) had changes to their school's SBP this year due to Government restrictions during the height of the COVID-19 pandemic (n=334). Two-thirds of schools (35.0%) have since removed the changes that were made during this time and one-quarter of schools have seen these changes continue (n=334). Forty-four schools cancelled their SBP due to COVID-19 related restrictions, and two schools stated their SBP was cancelled and had not restarted at the time of the survey. Just under one-quarter of schools, (23.4%) had no changes to their SBP during this time. (Table 6)

Table 6 SBP Operation in 2020 - Changes made as result of Government restriction during COVID-19 (n=334)

Response	n (%)
Yes , the operation changed but these changes have since been removed	117 (35.0)
Yes , the operation changed and the program continues to operate differently	88 (26.3)
No , the operations did not change as the program continued to operate as usual	78 (23.4)
Yes , the operation changed as we cancelled the program	44 (13.2)
Other open-ended responses:	
- Yes the operation changed and the program remains cancelled	2 (0.6)
- Only changes related to access to food supply	2 (0.6)
- Continued to provide breakfast for student who came to school	2 (0.6)
- We were not running a SBP at that time	1 (0.3)

When asked about factors relating to SBP operation changes (respondents were able to select as many that applied n=411), one-quarter of schools (27.3%) identified the SBP format changed to a 'grab and go' style, 24.6% had increased hygiene requirements and 15.1% had a change in volunteer availability resulting in operation changes. Other factors listed were school closure and restrictions resulting in SBP cancellation (8.8%) and fewer students attending school (1.7%). (Table 7)

Table 7 Factors relating to changes in program operation (n=411)

Changes*	n (%)
Format changed, less sitting in and more "grab and go" style	112 (27.3)
Increased staff and volunteers hygiene requirements	101 (24.6)
Availability of volunteers	62 (15.1)
Location changed due to social distancing requirements	45 (10.9)
Increased teacher involvement	18 (4.4)
Operated for longer or staggered start times	14 (3.4)
Virtual breakfast club	3 (0.7)
Other open-ended responses:	
- Program cancelled from restrictions/school closed/reduced demand	36 (8.8)
- Fewer students attending school/SBP	7 (1.7)
- "COVID-19"	3 (0.7)
- Increase demand for food from students/community	3 (0.7)
- Use of disposable items	1 (0.2)
- No SBP planned in 2020/Not applicable	1 (0.2)
- Other variety of small responses	5 (1.2)

*Able to select multiple responses

Over 40% of schools (40.1%) reported reduced student involvement in the program was a reason for SBP changes (n=252). Other student-related factors resulting in SBP changes were a higher demand for food from families (14.7%), the SBP operating on an as needs basis (13.1%) and a different cohort

of students presenting to the SBP (13.1%). Twenty-one schools (6.3%) reported student involvement in the program increased. (Table 8)

Table 8 Student-related factors resulting in SBP changes (n=252)

Changes*	n (%)
Student involvement in the program decreased	101 (40.1)
More families were requesting food	37 (14.7)
Teachers supervised children on an as needs basis	33 (13.1)
Different students started requiring breakfast	33 (13.1)
Student involvement in the program increased	21 (8.3)
Other open-ended responses:	
- SBP cancelled	12 (4.8)
- Students not on campus due to school closure	3 (1.2)
- Same students requiring breakfast	1 (0.4)
- Social distancing requirements of students	1 (0.4)
- Not applicable	6 (2.4)
- Other variety of small responses	4 (1.6)

*Able to select multiple responses

Open-ended comments

Students not allowed on school site until 8:20 so mostly doing ad hoc breakfast for late kids

Due to COVID19 student attendance was less than usual

We did find that some families did require more support and food deliveries, which we undertook to support the family in the community.

students were online learning

When asked to expand on factors relating to SBP changes, 134 schools provided comments, which were collated into common responses. One-fifth of responses stating an increase in demand from the community saw changes to the SBP operations (21.6%). Other responses are described in Table 9.

Table 9 Open-ended responses for other factors relating to SBP change (n=134)

Responses	n (%)
Increased demand for food from the school community	29 (21.6)
Students at home and ate breakfast at home	21 (15.7)
Reduced demand for food/SBP	13 (9.7)
Program cancelled due to Government restrictions	11 (8.2)
Increased demand for SBP/did not cancel SBP due to high demand	10 (7.5)
Increased hygiene requirements	6 (4.5)
"COVID-19"	6 (4.5)
Reduced volunteer availability	4 (3.0)
Took many months to reengage students in the program	4 (3.0)
Lack of supply of food from Foodbank WA	3 (2.2)
None/not applicable	24 (17.9)
Other (variety of small responses)	3 (2.2)

Open-ended comments included:

More demand due to some parents going to Job Seeker or job keeper.

There was A LOT more demand in parents needing food relief than ever before during COVID-19 restrictions and lockdown, many factors being supermarkets were out of stock in basic needs such as toilet (sic) paper, affordable staples that many of the demographic (sic) where our school is based (clarkson) rely on etc. Pasta, Baked beans, affordable cereals and so on. Panick (sic) buying seemed to affect many lower-class families

Parents were feeding their children at home - plus there was a huge drop in attendance.

While Breakfast Club has not been in operation since the Ed Dept rules on students not being on school grounds before 8:20, I have still been feeding various kids ion random days as they come to school later. I am doing an increased amount of recess and lunchtime sandwiches and fruit.

Looked into other ways to help our families. Food Bank boxes were distributed to those families in need.

The Education Department restrictions had the greatest impact on Breakfast club. These restrictions did not allow us to serve food in the same way. Food was delivered in individual bags to classrooms to cater for students still at school. Parents and volunteers were not allowed on site and many children did not attend school. Breakfast club was officially not allowed to operate in any way were children gathered and took food of a platter (for example), they could not sit at tables. So we reduced the food on offer and put toasted sandwiches in individual bags and supplied more fresh fruit to cater for student needs.

Coming back from the very short COVID break (4 weeks) we have seen an increased number of students needing breakfast and lunches.

Food supply related factors are described in Section 2.5

2.4.1 Cancellation during COVID-19

Of the 46 schools who reported cancelling their SBP during the height of COVID-19, 39 schools provided reasons for cancellation, with decision of school leadership to not run the program as the most commonly listed reason (71.4%).

*Table 10 Reasons for program cancellation (n=42)**

Reasons	n (%)
Decision of school leadership not to run the program	30 (71.4)
Hygiene and/or social distancing requirements made operation difficult	8 (19.0)
Demand for program decreased dramatically	2 (4.8)
Unable to get sufficient food from Foodbank WA	2 (4.8)

*Able to select multiple responses. One school responded all reasons for program cancellation. Other schools only reported one reason for program cancellation

Length of program cancellation ranged from two weeks to ongoing or permanent cancellation. The average length of program cancellation was 12.4 weeks with a median of 12 weeks cancelled. (Figure 1).

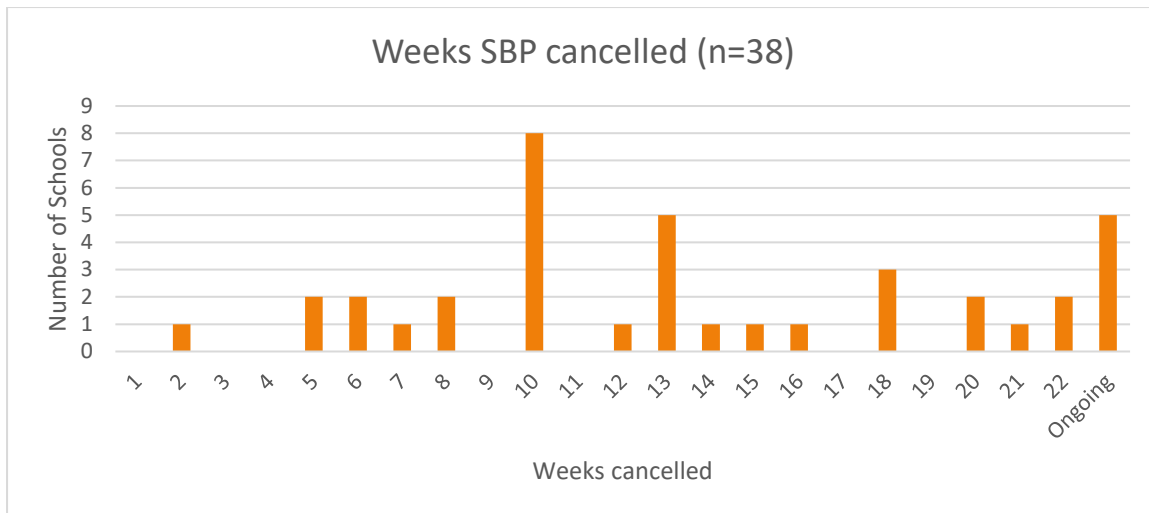


Figure 1 Length of SBP cancellation in weeks (n=38)

2.4.2 SBP resumption

The majority of SBPs had resumed by Term 3 (85.2%). Thirty-seven school's SBP remained cancelled at the time of the 2020 SBP survey (14.8%).

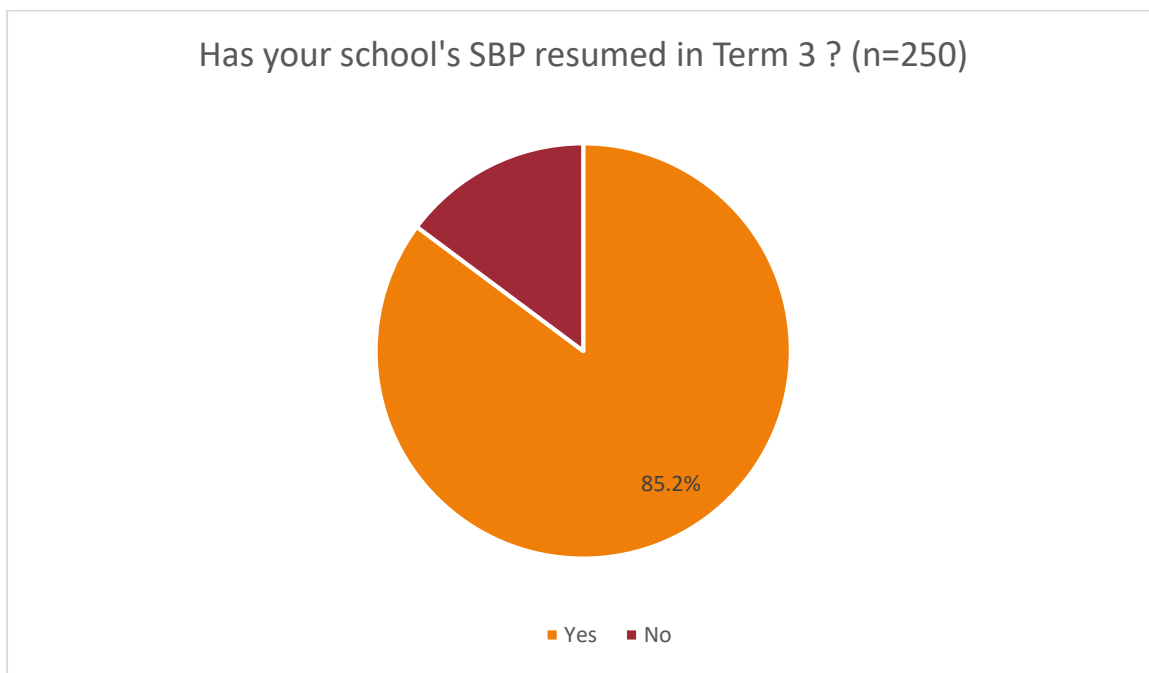


Figure 2 Percentage of SBP resumed following cancellation (n=250)

Over one-quarter of schools reported clear hygiene and sanitation guidelines (28.6%) and relaxed restrictions on number of individuals allowed in a closed space (i.e. room) (27.8%), enabled the SBP to resume running (see Table 11). Other reasons for SBP resumption include ability to source food from Foodbank WA (17.6%) and increased demand from students (14.2%). Participants could select as many reasons that applied.

Table 11 Factors that have enabled the program to start again (n=500)

Changes*	n (%)
Clear hygiene and sanitation guidelines and equipment supplied	143 (28.6)
Increased number of people allowed to gather in one setting	139 (27.8)
Able to source regular food supply from Foodbank WA	88 (17.6)
Increased demand from students	71 (14.2)
Increased numbers of volunteers	36 (7.2)
Other open-ended responses:	
- Able to source regular food supply from elsewhere	5 (1.0)
- School leadership approval	5 (1.0)
- Utilised student leadership as volunteers	2 (0.4)
- Students returned to school	1 (0.2)
- Hired school cleaner	1 (0.2)
- Changed location of SBP to classrooms	1 (0.2)
- SBP never stopped	8 (1.6)

*Able to select multiple responses

For the schools that had not resumed their SBP operations, participants were asked to comment on what would have to change to allow SBP to resume (n=37). Responses (n=31) included increased volunteers (15.8%), move to Phase 5 Government restrictions (15.8%), school leadership approval (15.8%) and the option to open the school gate at an earlier time (9.8%). Other responses included, staff training (n=1), canteen updates (n=1), increase in demand from students (n=1) and when able to share serving utensils (n=1). Five schools (16%) stated plans to resume their SBP in Term 4 (n=31).

Nearly two-thirds of schools (n=209) who made modifications to the SBP operations, were continuing these modifications at the time of the 2020 SBP (62.2%). The main modification recorded was changes to hygiene practices such as handwashing, use of hand sanitiser, appropriate cleaning and social distancing (63.2% of responses, n=125). When asked if modifications made because of COVID-19 would become permanent changes to the SBP operations, 42.7% stated yes with a further 19.7% indicating maybe (n=198).

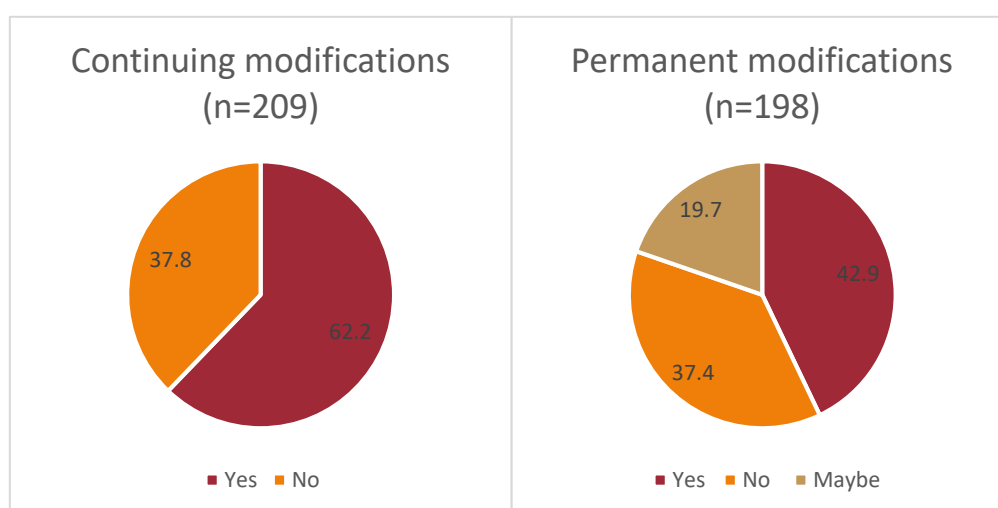


Figure 3 Percentage of school's who continue to include modifications in SBP operations (n=209) and percentage of school's who plan to make these changes permanent (n=198)

Over half of schools (55.3%) will continue to implement hygiene practices as a permanent change the SBP (n=76) see Table 12.

Table 12 Currently implemented and planned permanent modifications to SBP responses

Modifications	Current at time of survey (n=125) n (%)	Permanent (n=76) n (%)
Hygiene practices (i.e. handwashing, hand sanitiser, social distancing, cleaning)	79 (63.2)	42 (55.3)
Grab and go food distribution method/disposable plates/paper bags	18 (14.4)	7 (9.2)
Teachers/volunteers serve food (no self-serve)	9 (7.2)	-
Increased efficiency of SBP (i.e. cleaning up)	2 (1.6)	6 (7.9)
Later start time/reduced length of SBP	2 (1.6)	3 (3.9)
Students receive food in classrooms	4 (3.2)	2 (2.6)
Fewer volunteers permitted at SBP	6 (4.8)	2 (2.6)
Volunteers/upper students only involved in food preparation	2 (1.6)	2 (2.6)
Change in venue to accommodate more students	2 (1.6)	-
Prepared for the future if required to lockdown	-	2 (2.6)
"Not applicable"	-	4 (5.3)
Other variety of small responses	3 (2.4)	6 (7.9)

Open-ended comments included

We will probably keep the reduced time window as the school as a whole are trying to encourage students to come to school(sic) on time rather than very early or late.

We will continue the same way as I (sic) feel it works better, everything is more spread out and less congested.

Breakfast club has become more popular with take away style menu

Each block does breakfast club for their classes.

*Distancing, wrapping food individually, staggering times, more strategic use of volunteers,
Grab & go*

Washing of hands. Because a lot of students don't wash their hands when they eat.

We will continue with Keep Cups for Breaky Club as several students prefer to take their drink and sit outside or with their friends, which also helps reduce the number of students in the room as we have fed up to 160 students at one time. On average 130 students.

2.4.3 Term 3 SBP operation model

When asked to describe the model of the school's SBP at the time of the 2020 survey, just under half of schools (43.8%) report the SBP has resumed, but maintained changes made because of COVID-19. A further 27.8% of schools stated the program continues to run with a pre-COVID-19 model with no changes and 17.9% of schools report they have returned to the pre-COVID-19 mode of operation (Table 13).

Table 13 SBP model at time of survey (n=324)

Responses	n (%)
Resumed program, but some changes adopted as a result of COVID-19 have been retained	142 (43.8)
Program continues to run pre-COVID-19 model with no changes made during this time	90 (27.8)
Returned to pre-COVID-19 model of operation	58 (17.9)
Have not yet resumed the SBP, but plan to do so	32 (9.9)
Do not plan to resume the SBP	2 (0.6)

Twenty-nine of the 32 schools who reported, *'have not yet resumed the SBP, but plan to do so'*, reported a scheduled timeline for resuming the SBP. Over half of these school's will resume the SBP in Term 4 (58.6%). Three schools plan to resume when Phase 5 Government guidelines are introduced, three schools will resume when leadership advises, two schools will resume in 2021 and a final school will resume *"in the future"* (n=29). Two schools reported, *'do not plan to resume the SBP'*, with reasons being *'leadership will reassess based on need in future'* and *'replaced by 'food nodes' in each block for students needing food'*.

2.5 School's SBP products and Foodbank WA services

OUTCOME 1: Provision of nutritious food to students vulnerable to poor nutrition

1.2 Deliver a School Breakfast Program that meets the needs of participating schools.

Performance Measures- Quality improvement assessment of the School Breakfast Program.

Satisfaction levels and recommendations cited by school coordinators in relation to:

- quality and range of products
- support offered and communication
- online resources (i.e. SBP toolkit etc.).

Participants were asked to select as many changes that were the result of supply factors. Common changes were stockpiling Foodbank WA foods (19.0% of responses), difficulty sourcing foods from Foodbank WA during Term 2 (18.6%), rationing remaining stock (18.2%) and the need to use more single serve or packaged foods (17.0%). Other responses indicated the multiple strategies had been used.

Table 14 Changes resulting from food supply factors (n=247)

Changes	n (%)
Stockpiled Foodbank WA foods due to less student demand <ul style="list-style-type: none"> - shared stock with nearby schools - food delivered to families in need - ordered fewer quantities of food items due to excess stock 	47 (19.0)
Difficulty sourcing from Foodbank during Term 2 <ul style="list-style-type: none"> - bread, Weetbix - suspended SB due to low stock - low stock - supplies redirected 	46 (18.6)
Rationed remaining food stocks until availability improved <ul style="list-style-type: none"> - distributed items on as needs basis 	45 (18.2)
The need for more single serve or packaged foods <ul style="list-style-type: none"> - takeaway containers - single serve items for use by teachers in classrooms - yoghurt, tinned fruit, toast 	42 (17.0)
Sourced alternative supply arrangements for products that were not available through Foodbank WA <ul style="list-style-type: none"> - sourced through agency - school purchased items from local supermarkets - principal purchased items - items: bread, baked beans, tinned spaghetti - difficult to source items due to supermarket ration restrictions 	39 (15.8)
Other open-ended responses: <ul style="list-style-type: none"> - SBP not operating or cancelled - Practicing social distancing and proper hygiene - No food available - No changes/not applicable 	7 (2.8) 6 (2.4) 1 (0.4) 14 (5.7)

The open-ended responses received (n=133) about the food supply were organised into similar content responses. These indicated that some schools had sufficient stock or had stockpiled foods due to less students at school but that for a period the limited stock available at Foodbank WA had an impact on the SBP operation.

Table 15 Open-ended responses about food supply and sourcing factors affecting program (n=133)

Responses	n (%)
No sourcing issues, had sufficient amounts of food to sustain program running	32 (24.1)
Limited stock from Foodbank resulted in the program cancelling or limited program capacity	26 (19.5)
Stockpiled food as demand reduced with fewer students at school	17 (12.8)
Program was cancelled due to reasons other than sourcing issues	13 (9.8)
Foodbank supply of takeaway suitable foods was not available, hence had to source these items elsewhere	11 (8.3)
Had to source items from other sources	12 (9.0)
Panic buying at supermarkets and quantity restrictions resulted in low stock	4 (3.0)
Reduced stock available from other usual suppliers (i.e. local business)	3 (2.3)
Excess foods was delivered to those in need in the community	3 (2.3)
No food supply issues as school is small	3 (2.3)
Travel restrictions and reduced volunteers limited access to Foodbank warehouse	3 (2.3)
Increased student attendance increase food supply demand	2 (1.5)
Remote location already limits availability of fresh foods	1 (0.8)
Other responses (variety of small responses)	3 (2.3)

Open-ended comments included:

Our breakfast club reduced to only toast, to avoid shared use of utensils, plates, bowls etc. As such, we only needed bread, margarine and vegemite. Because the need was small (reduced numbers of students attending school) we were able to cope with the reduced supply from our normal bread provider (Coles Second Bite). The school paid for our own margarine and vegemite rather than access foodbank for simply vegemite.

Foodbank ran out of stock and supporting families in financial(sic) difficulties and therefore we sourced elsewhere

A number of Aboriginal (sic) students chose to remain at home which meant some items were stockpiled.

We had move to single serve items that can be accessed by teachers in the first minutes of class for kids whom ordinarily access breakfast club

We have enough supply and we distributed to students family during the one-week Home School pack. Then school reopen and back to normal again in Week 2, Term 2.

Due to the shortage at Foodbank we sourced food from local churches as well as local shopping centres

2.6 Partnerships and collaborations involved in the running of the SBP

OUTCOME 3: Building and maintaining partnerships to continue long-term sustainability of the program.

3.1 Longer term sustainability achieved through the establishment and maintenance of a range of partnerships.

Due to the nature of the 2020 COVID-19 situation, this outcome was not measured. The pressure on all supplies of food from producers, supermarkets, and charitable agencies during 2020 indicated

that Schools were not able to rely on community agencies and partnerships to provide additional food. There were also restrictions on the use of volunteers due to lockdown and social distancing requirements.

2.7 SBP integration

Three-quarters of schools (75.3%) reported their SBP has become part of the organisational practice of the school in 2020 and this was similar to the response of 79.2% in 2019. (Table 16). This is evidenced by the high numbers of SBPs that continued or adapted operations during COVID-19 to provide food to children and the wider community at a time of increased need for some families.

Table 16 SBP integration into school

Responses	2019 n=413 (%)	2020 n=324 (%)
Program has become part of the organisational practice of the school	327 (79.2)	244 (75.3)
Extracurricular activity offered by the school	56 (13.6)	72 (22.2)
Food relief/as needs basis for hungry students	15 (3.6)	6 (1.9)
Pastoral care	7 (1.7)	1 (0.3)
Other (variety of small responses)	8 (1.9)	1 (0.3)

2.8 Final comments

Over one-quarter of schools provided further comments regarding the SBP operations, with one-fifth of these comments (19.8%) describing how the school put in efforts to allow the SBP to continue running during this time (i.e. hygiene, social distancing etc.). Other comments related to the SBP continuing as usual, operate with fewer students and comments stating the value of the SBP for student wellbeing. These comments are grouped into similar responses and are described below (Table 17).

Table 17 Further comments regarding SBP operation (or non-operation) (n=96)

Responses	n (%)
Changes made to accommodate hygiene/social distancing requirements, enabling SBP to continue	19 (19.8)
SBP continues to operate with fewer students and/or on an as needs basis	11 (11.5)
SBP continues as normal/back to normal operation	11 (11.5)
No comment/not applicable	11 (11.5)
The SBP is integral to the school and student wellbeing	10 (10.4)
SBP is busier than pre-COVID-19	8 (8.3)
Unfortunate that the program remains cancelled	6 (6.3)
Food supply shortages remains an issue	5 (5.2)
Changes in volunteers	5 (5.2)
Thank you, appreciative comments	4 (4.2)
Reduced food wastage	1 (1.0)
Other comments (irrelevant to SBP running)	5 (5.2)

Open-ended comments included:

There will always be a need for the School Breakfast Program. Unfortunately there is always a shortage of families' finance and food. Hopefully the SBP will be back to full capacity next year.

We were happy to make any changes during COVID to keep the Breakfast Club going, but also understood the Government restrictions at its peak in WA. We are enjoying serving the students breakfast again and still social distancing with our tables more spread out.

Children now serve themselves. Extra cleaning takes place. All dishes are added to the dishwasher at the end of each day.

We serve over 120 students each week and this number has not decreased during COVID. Our program is an essential service at the school and foodbank Mandurah WA have ensured we have been able to run the program without interruption throughout this year. Thank you Foodbank. We are truly grateful

Breakfast club is busier: we put it down to the need for belonging, connnection(sic), pastoral care

Our Breakfast Program is unique in the fact that we provide simple, single serve, takeaway foods that can be eaten without crockery/cutlery. Our food items are served on a napkin and can be eaten on-the-go, we do not have a 'dining area,'as such, moreover, we serve from the school canteen and the students sit on the benches in the undercover area. We continue to obtain our bread from Bakers' Delight (free donation to us), and fruit from The Fruit Box as the supply from Foodbank is inadequate. Our supply of spaghetti, UHT milk and tinned fruit remains from Foodbank. Staff often purchase napkins, cheese, butter, muesli bars, Milo and yogurt on a weekly basis from the supermarket with their own funds as these things are not available from the Breakfast Club Program.

We have less food wastage as a result because student consumption is being requested rather than 'help yourself'. We also have less cleaning at the end of the morning which is helpful as this was something that was hindering us because of time table clashes.

Our Breaky Club has become a huge part of our school community now. We have anywhere from 130-160 students each day (twice a week). The children are learning to do dishes, the primary school students are getting to know high school students, everyone starts the day in a very happy mood with warm food in their tummy. If a student has had a bad start to their day at home, their "happiness" levels are increased due to the hub of the Breaky Club.

We have shifted the structure of the day by opening gates later and having students attend class immediately. Previously students would arrive very early and sit in the heat or cold during breakfast, before being dismissed for class. The new 'trickle effect' of students getting to class has brought on a calmer and more orderly start to the day.

There are 59 schools who indicated they would be willing to provide a case study of their COVID-19 experiences to Foodbank WA.

Section 3: Food Sensations® for Schools

Secondary School Students & Teacher Surveys

Evaluation Data

3.1 Methods

Foodbank WA's *Food Sensations*® programs aims to improve the knowledge, attitudes, and skills to improve healthy food consumption. All registered School Breakfast Program schools are eligible to receive a free *Food Sensations*® for Schools (FSS) session. FSS is based on the social cognitive theory and a program logic model was been developed in 2019 to explain how the program impacts on attitudes, knowledge and skills in a one session delivery format (Appendix C).

FSS is delivered to primary and secondary schools from K to 12 classes, however only the secondary school sessions are evaluated. Students typically receive one session, which can be between 45 to 120 minutes dependent on the time of day, and class that selects the program. With the statewide delivery of the secondary schools program, it is difficult to have a standard time and lesson plan content as Foodbank WA facilitators tailor the session structure and content to fit the needs of the class and/or school. Since 2019, Foodbank WA facilitators have prioritised 90-minute sessions as a minimum for secondary school students. The cooking module is prioritised, and other lesson plans are delivered in full or partially dependent on time.

Foodbank WA facilitators consider their consistent messages are focused on the

- Australian Guide to Healthy Eating food groups with particular emphasis on grain (cereal) foods mostly wholegrain and/or high fibre cereal and milk, yoghurt, cheese and/or alternatives (mostly reduced fat) and
- Emphasising knife safety and hand washing during the cooking lesson.

There is currently no international agreement on how to measure nutrition knowledge and food literacy in children/adolescents and measures published to date are specifically designed around intervention behaviour change. Best practice in delivery of programs with a food literacy/cooking element is difficult to determine due to the variable study design, duration, and measurement outcomes. A review of intervention programs and validated tools with the secondary school age group was used in 2019 to align suitable questions for inclusion in a pre and post session evaluation (Appendix D). A review of lesson plans, previous evaluation questions and potential literature review generated validated questions were aligned with the performance measures and discussed with Foodbank WA facilitators. Several reviews and some initial piloting in Term 2 2019 tested comprehension and ability to detect change.

The secondary students and teachers (primary and secondary) evaluation tools have been designed to measure FSS effectiveness in achieving the contract performance measures with prioritise attitudes supported by improved knowledge and skills.

A teacher's survey based on the previous contract questions was edited and designed for email distribution using online completion. Teachers from primary and secondary schools who hosted a FSS session are contacted two weeks after session completion and invited to participant in one

online survey (Appendix E). All evaluation tools were approved by the Department of Education. Curtin University Human Research Ethics Committee approved processes and questionnaires for both target group surveys (HRE2019-0289).

Foodbank WA facilitators send out the *FSS* specific research information sheet to School Principals outlining the aim of the research and details of how to withdraw consent if they do not wish their school to be involved. An evaluation protocol has been prepared for Foodbank WA facilitators to inform teachers of the research requirements, enable secondary students to withdraw consent. A pilot was commenced at the end of Term 2 2019, minor edits were made to questionnaires and evaluation commenced in Term 3 2019 and has continued where possible around the heightened COVID-19 time period in Term 2 2020 to mid-December 2020.

3.2 Response rate

During 2020 year, 105 sessions were delivered in 42 schools; 32 primary schools and 10 secondary schools in Western Australia. There were 19 secondary school sessions delivered and these sessions accounted for 18.1% of the sessions in 2020. The 2020 session delivery to secondary schools was less when compared with the Term 3 and 4 2019 delivery.

All secondary students were invited to provide pre and post evaluation.. All nineteen sessions were evaluated with 258 secondary students providing some evaluation data, with 211 providing matched data pre and post session (Table 18).

Table 18 Overall statistics report – Primary target group (Students)

Students	2020 n	2020 % of total sessions	2020 % total – evaluated participants	2019 n	2019 % of total sessions	2019 % total – evaluated participants
Schools- Primary	32	-	-	27	-	-
Schools- Secondary	10	-	-	11	-	-
FSS sessions total (primary & secondary)	105	-	-	100	-	-
Secondary school sessions	19	18.1	-	26	26.0	-
Secondary school sessions evaluated	19	18.1	-	21	21.0	-
Secondary students evaluated (total)	258	-	-	323	-	-
Completed T1- Prequestionnaire	248	-	96.1	312	-	96.6
Completed T2- Post questionnaire	221	-	85.7	291	-	90.1
Matched (pre-post questionnaires)	211	-	81.8	280	-	86.7

During the evaluation phase, 92 teachers were sent the survey link two weeks after the in class, session and 61 teachers (66.3%) completed this survey (Table 19).

Table 19 Overall Statistics Report – Secondary target group (primary and secondary teachers)

Teachers	2020 n	2020 % of teachers evaluated	2019 n	2019 % of teachers evaluated
Sessions	105	-	100	
Teachers evaluated#	92	-	96	
Primary teachers	79	85.9	74	77.0
Secondary teachers	13	14.1	22	22.9
Lost to follow-up*	32	34.8	45	46.9
Follow-up total	61	66.3	51	53.1

#Seven teachers were responsible for more than one session and one teacher was not included as not present at the session

*Lost to follow-up, a) did not respond to several contact attempts, b) teacher left position after session, or c) email bounced.

3.3 Demographic characteristics—FSS schools

Over two-thirds of all 2020 schools who had FSS delivery were located in the Perth metropolitan area (70.0%) and nearly all schools were a part of the public sector (97.5%). Over half of all schools had an Index of Community Social Economic Advantage (ICSEA) decile score of eight or higher (55.0% of schools) and only 7.5% of schools had a decile score below four. (Table 20)

*Table 20 Primary and secondary school demographic characteristics (n=40)**

Characteristics		%	Primary %	Secondary %
Education Region	South Metropolitan	35.0	36.7	30.0
	North Metropolitan	35.0	36.7	30.0
	Wheatbelt	5.0	6.7	-
	Goldfields	7.5	3.3	20.0
	Midwest	7.5	6.7	10.0
	Southwest	10.0	10.0	10.0
Sector	Public	97.5	100.0	90.0
	AISWA	2.5	-	10.0
School Type	Primary school	72.5	96.7	-
	Senior High School	15.0	-	60.0
	District High School	5.0	-	20.0
	Education Support Centre	5.0	3.3	10.0
	Clontarf Academy	2.5	-	10.0
ICSEA Decile	1	-	-	-
	2	5.0	6.7	-
	3	2.5	-	10.0
	4	5.0	6.7	-
	5	12.5	16.7	-
	6	5.0	-	20.0
	7	15.0	10.0	30.0
	8	15.0	20.0	-
	9	25.0	23.3	30.0
	10	15.0	16.7	10.0

*Two primary schools were not included as no demographic data received (Waikiki Primary School and Ravensthorpe Primary School).

3.4 Demographic characteristics- Secondary students

Secondary student sessions were conducted mostly among Home Economics and Food Technology classes (70.2%), with other sessions run with Engagement program students (9.7%), Education Support students (9.3%), and among generic year groups (5.8%) (n=258) (Table 21) Delivering FSS in classes where the knowledge, attitudes etc. can be reinforce was a 2019 report recommendation and Foodbank WA have significantly changed the class type in 2020 to be predominately home economics/food technology classes (70.2%). Sessions were mostly 120 minutes (39.5% of sessions) or 100 minutes in length (31.0% of sessions) with less 60 to 90 minute sessions when compared to 2019.

The secondary student sessions are generally composed of delivery of a) an education module (different modules to choose from) and b) cooking activities. Dependent on time allocation for the session Foodbank WA facilitators may choose to deliver the full module/s or adapt for partial delivery. Full module delivery was similar to 2019, with modules *Sugar in Drinks* (67.4% of sessions), and *Homemade vs Takeaway* (15.5% of sessions) mostly delivered. Partial delivery was of *Homemade vs Takeaway* in 5.0% of sessions. The cooking module was delivered at most sessions (94.1%), which increased from 84.2% in 2019.

Table 21 Session delivery (secondary students)

Delivery Characteristics		2020 % (n=258)	2019 % (n=323)
Class	Home Economics/Food Technology	70.2	13.9
	Engagement program students	9.7	19.2
	Education support	9.3	-
	Generic year group	5.8	15.2
	Mixed student group	-	22.3
	Health and Physical Education	-	14.2
	Science	-	9.9
	Maths	-	5.3
Length	60 minutes	-	6.5
	90 minutes	10.9	54.2
	95 minutes	12.8	-
	100 minutes	31.0	-
	120 minutes	39.5	33.4
	Other length/unreported	-	9.9
Full lesson delivery (first topic)	Sugar in Drinks	67.4	66.9
	Homemade vs Takeaway	15.5	23.8
	Calcium	7.0	-
	Cooking	5.0	-
	Value for money	5.0	-
Full lesson delivery (second topic)	Sugar in Drinks	-	-
	Homemade vs Takeaway	-	-
	Cooking	89.1	84.2
Partial lesson delivery	Homemade vs Takeaway	5.0	-
	Australian Guide to Health Eating	-	6.5

Students were asked to self-report year level, age, and sex on the pre-program questionnaire. Sessions were primarily conducted with students in Year 7 to 10 (89.5%, covering ages 12 to 18 years with a relatively equal mix of sex (Table 22).

Table 22 Secondary student demographics characteristics

Characteristics	Responses	2020 %	2019 %
Secondary students (self-reported)			
Year level		(n=248)	(n=316)
	7	26.3	25.9
	8	9.3	20.9
	9	27.0	20.6
	10	14.1	22.2
	11	18.1	5.1
	12	5.2	5.4
Age		(n=244)	(n=310)
	11	-	0.6
	12	18.9	23.5
	13	15.1	17.1
	14	23.4	20.3
	15	17.6	22.6
	16	14.8	8.4
	17	7.8	6.1
	18	2.5	1.3
Sex		(n=246)	(n=315)
	Female	56.9	51.7
	Male	42.7	47.3
	Identify as other	0.4	1.0

3.5 Secondary students attitudes towards healthy eating and knowledge about food and nutrition

OUTCOME 2: Students develop positive attitudes towards healthy eating and knowledge about food and nutrition.

2.2 Support the development of student's knowledge and skills in relation to healthy eating and nutrition. Level of food and nutrition knowledge and skills demonstrated by students, in particular:

- ✓ Dietary guidelines
- ✓ Food selection
- ✓ Food preparation
- ✓ Safe food handling

Under 40% of secondary students participating in FSS were regularly preparing and cooking meals at home at least once per week (39.8%) and 27.6% were never or rarely involved at home (Table 23). A slightly greater proportion of 2019 students were cooking at home at least twice per week (43.4%).

Table 23 Frequency of preparing and cooking meals at home

Responses	2020 (n=246) n (%)	2019 (n=309) n (%)
Always (5-7 days a week)	16 (6.5)	30 (9.7)
Often (2-4 times a week)	82 (33.3)	104 (33.7)
Sometimes (2-4 times a month)	80 (32.5)	77 (24.9)
Rarely (1-12 times a year)	31 (12.6)	61 (19.7)
Never	37 (15.0)	37 (12.0)

The FSS sessions have improved knowledge and skills related to the dietary guidelines, food selection, food preparation, and safe food handling. Students improved in ten of the 12 knowledge, attitudes, or intention questions matched in the pre and post questionnaire. The question raw frequencies and statistically significant differences are explained in this section.

Knowledge questions

The raw frequencies for questions related to selecting the Australian Guide to Healthy Eating distinguishing nutrients in two food groups, interpreting the level of a nutrient from a Nutrition Information Panel and the time required for hand washing for safe food handling is presented in Table 24.

Question responses were coded as correct or incorrect. Table 24a presents the frequencies of responses at pre and post session. The majority of students could correctly identify the amount of nutrient in a food product using the Nutrition Information Panel (77.2%), and distinguishing nutrients in milk (69.2%) before the session. Half or less could identify the correct time for hand washing (51.0%) and distinguishing nutrient in grain food group (47.6%).

Table 24a Dietary guidelines, food selection, and food safety knowledge improvements

Knowledge questions		Pre-session n(%)	Post-session n (%)
		n= 248	n=219
Distinguishing nutrients in grain food group	Correct	118 (47.6)	132 (60.3)
	Incorrect	130 (52.4)	87 (39.7)
		n=247	n=219
Distinguishing nutrients for milk food group	Correct	171 (69.2)	154 (70.6)
	Incorrect	76 (30.8)	64 (29.4)
		n=246	n=218
Interpret Nutrition Information Panel (sugar in cereal)	Correct/100g	190 (77.2)	170 (77.6)
	Incorrect	56 (22.8)	49 (22.4)
		n=249	n=220
Time required for hand washing	Correct	127 (51.0)	191 (86.8)
	Incorrect/ Don't know	122 (49.0)	29 (13.2)

Matched Pre and post questionnaire responses were analysed using chi-square analysis. The results demonstrated that students improved in ability to select the distinguishing nutrients in the grain

food group (χ^2 49.02 df 1) and milk food group (χ^2 7.83 df 1). There was also a statistically significant improvement at end of session in ability to interpret a nutrient level using a Nutrition Information Panel (χ^2 77.20 df 1) (Table 24b). There was no significant improvement in the ability to identify the correct time for washing hands for the 212 students providing matched data (χ^2 0.606 df 1)

Table 24b Dietary guidelines, food selection, and food safety knowledge statistical improvements

Knowledge questions	P value*
Distinguishing nutrients in grain food group (n=209)	<0.001
Distinguishing nutrients for milk food group (n=207)	0.005
Interpret Nutrition Information Panel (sugar in cereal) (n=208)	<0.001
Time required for hand washing (n=211)	0.436

Attitude questions

Students were asked about their agreement with five statements about selecting and preparing food scored from strongly agree (1) to strongly disagree (5). Table 25 includes the raw frequencies pre and post session where the agreement levels pre-session ranged from 86.0% (*healthy food can be delicious*) to *I like to try new food* (72.3%).

Table 25 Food literacy attitudes

Attitude questions	Response	Pre-session n=247 (%)	Post-session n=219 (%)
I know how to choose foods that will give me a strong mind and healthy body	Strongly agree	46 (18.6)	89 (40.5)
	Agree	158 (64.0)	120 (54.5)
	Not sure	34 (13.8)	11 (5.0)
	Disagree	9 (3.6)	-
	Strongly disagree	-	-
Making healthy food choices is important to me	Strongly agree	69 (27.8)	89 (40.6)
	Agree	136 (54.8)	106 (48.4)
	Not sure	27 (10.9)	16 (7.3)
	Disagree	16 (6.5)	8 (3.7)
	Strongly disagree	-	-
I like to try new foods	Strongly agree	70 (28.1)	79 (36.1)
	Agree	110 (44.2)	100 (45.7)
	Not sure	44 (17.7)	21 (9.6)
	Disagree	17 (6.8)	13 (5.9)
	Strongly disagree	8 (3.2)	6 (2.7)
I think healthy food is easy to cook	Strongly agree	40 (16.2)	77 (35.3)
	Agree	126 (51.0)	111 (50.9)
	Not sure	69 (27.9)	24 (11.0)
	Disagree	10 (4.0)	4 (1.8)
	Strongly disagree	2 (0.8)	2 (0.9)
Healthy food can be delicious and tasty	Strongly agree	96 (38.6)	100 (46.1)
	Agree	118 (47.4)	98 (45.2)
	Not sure	24 (9.6)	16 (7.4)

	Disagree	10 (4.0)	2 (0.9)
	Strongly disagree	1 (0.4)	1 (0.5)

All food literacy related attitudinal questions statistically significantly improved in agreement from before the session to at the end of the session (Table 26). Paired t-tests were used to compare mean response (strongly agree (1) to strongly disagree (5). The lower the score the better the agreement with the statement When compared to the 2019 results, '*Healthy food being delicious and tasty*' was the only statement that showed no statistically significant improvement in agreement.

Table 26 Food literacy attitudes statistical change

	Pre-session mean \pm (SD)	Post-session mean \pm (SD)	P value
Attitudes			
I know how to choose foods that will give me a strong mind and healthy body (n=209)	2.05 \pm 0.66	1.65 \pm 0.58	<0.001
Making healthy food choices is important to me (n=211)	1.98 \pm 0.79	1.74 \pm 0.74	<0.001
I like to try new foods (n=211)	2.10 \pm 1.00	1.92 \pm 0.96	<0.001
I think healthy food is easy to cook (n=208)	2.23 \pm 0.78	1.81 \pm 0.76	<0.001
Healthy food can be delicious and tasty (n=209)	1.81 \pm 0.80	1.65 \pm 0.70	<0.001

*Coded- 1 strongly agree to 5 strongly disagree, paired t-tests

Skill and intention questions

Students reported an increase in their self-assessment of their food preparation and skill ability to perform tasks '*follow a simple recipe to prepare a healthy meal*', and '*cut up vegetables or fruit to put in a meal or snack*'. (Table 27 a/b/c), using a four point scale from *cannot do this, not sure I can do this, can do this with help and can do this on my own*. At the start of the session, over half of students (n=247) indicated they could prepare and cook a healthy meal on their own (58.7%) and by the end of the session this increased to 75.7%. At the start of the session, over three-quarters could follow a simple recipe to prepare a healthy meal on their own (74.1%) and by the end of the session, this rose to 83.1%. At the start of the session, the majority of students indicated they could *cut vegetables and fruit to put in a meal or snack* (85.8%) and this rose to 92.7%.

The responses *I cannot do this* and *I am not sure I can do this* are combined, and *I can do this with help* and *I can do this on my own* to enable valid chi-square analysis. When analysing matched pre and post data, Self-perceived abilities *to prepare and cook a healthy meal* was not statistically different for matched participants (n=201) but following a simple recipe to prepare a healthy meal and ability to *cut up vegetables and fruit to put in a meal or snack* statistically significantly improved (p<0.05).

Table 27a Self-assessment of ability to prepare and cook a healthy meal

	Pre-session n=247	Post-session n=218
I cannot do this	7 (2.8)	3 (1.4)
I am not sure I can do this	15 (6.1)	7 (3.2)
I can do this with help	80 (32.4)	43 (19.7)
I can do this on my own	145 (58.7)	165 (75.7)

*Chi-square X^2 calculated 2x2 table (can't do vs can do) $n=194$, $p=0.110$

Table 27b Self-assessment of ability to follow a simple recipe to prepare a healthy meal

(n=209)	Pre-session n=247	Post-session n=219
I cannot do this	9(3.6)	2 (0.9)
I am not sure I can do this	17 (6.9)	8 (3.7)
I can do this with help	38 (15.4)	27 (12.3)
I can do this on my own	183 (74.1)	182 (83.1)

*Chi-square X^2 calculated 2x2 table (can't do vs can do) $n=201$, $p<0.001$

Table 27c Self-assessment of ability to cup up vegetables and fruit to put in a meal or snack

(n=210)	Pre-session n=247	Post-session n=219
I cannot do this	6 (2.4)	1 (0.5)
I am not sure I can do this	5 (2.0)	4 (1.8)
I can do this with help	24 (9.7)	11 (5.0)
I can do this on my own	212 (85.8)	203 (92.7)

*Chi-square X^2 calculated 2x2 table (can't do vs can do) $n=209$, $p=0.026$

3.6 Process Evaluation- Secondary students

The majority of secondary students indicated they enjoyed the session (95.4%), enjoyed the cooking component (95.0%), and enjoyed tasting new foods (88.0%), which is similar to responses evaluated in 2019. Over two-thirds (71.7%) of students planned to make one of the *Food Sensations*® recipes at home. This was a small increase from the 66.9% of students in 2019 (Table 28).

Table 28 End of session responses

Statements	Agree n (%)	Not sure n (%)	Disagree n (%)
Enjoyed session (n=218)	208 (95.4)	6 (2.8)	4 (1.9)
Enjoyed cooking (n=219)	208 (95.0)	6 (2.7)	5 (2.3)
Enjoyed tasting the food (n=217)	191 (88.0)	20 (9.2)	6 (2.8)
Tasted a new food (n=220)	183 (83.2)	38 (17.3)	37 (16.8)
Will make one of the recipes at home (n=219)	157 (71.7)	49 (22.4)	13 (6.0)

Of those students who were not sure if they would or disagreed to making a recipe at home ($n=44$), the main reasons were *not usually involved with cooking at home* (20.5%), *won't remember the recipes or skills* (15.9%), *unsure why* (13.6%), and *usually cook different things at home* (13.6%).

Students provided a range of responses when asked what they learned at the session. Students were able to list up to two responses, with the main response being *learning how to cook a new recipe* (16.3% of students), similar to responses in 2019. Other responses were *learning how to cook healthy food and cooking in general, learning about sugar in drinks, nutrition composition of foods and knife skills* (Table 29).

Table 29 Students' open-ended comments about what they learned at the program

Responses *	2020 (n=215) n (%)	2019 (n=288) n (%)
Learn how to cook a new recipe	35 (16.3)	67 (23.2)
Healthy food is easy to cook	22 (10.2)	22 (7.6)
How to cook or improve cooking skills	19 (8.8)	23 (8.0)
Healthy food tastes good	16 (7.4)	17 (5.9)
Sugar in drinks	16 (7.4)	14 (4.9)
Knife skills and safety	12 (5.6)	29 (10.1)
Nutrition composition of healthy and unhealthy foods	12 (5.6)	28 (9.7)
How to cut and onion	8 (3.7)	-
How to prepare/cook healthy food specific	7 (3.3)	10 (3.5)
It is good to cook and try new foods	7 (3.3)	5 (1.7)
Importance of healthy eating	7 (3.3)	-
Learn how to be healthy	6 (2.8)	22 (7.6)
Teamwork is important	5 (2.3)	12 (4.2)
How to wash hands	5 (2.3)	-
Learning about nutrients in food	5 (2.3)	-
Learning about food groups	5 (2.3)	-
Unsure/Nothing	4 (1.9)	13 (4.5)
Healthy recipes	4 (1.9)	-
Didn't like food	3 (1.4)	-
Healthy food is cheap	2 (0.9)	-
Food safety and hygiene	1 (0.5)	8 (2.8)
Other/not relevant	14 (6.5)	18 (6.2)

*Students able to record two options for this question

3.7 Demographic characteristics—Teachers (Primary and Secondary)

Of the 61 teachers providing evaluation, 53 teachers were general class teachers, (86.3%). The remaining were specialist teachers (6.6%), Education Support and Family Liaison Officers, Mentor and Program manager. Fifty-one teachers were primary school teachers (83.6%) and 10 teachers were from secondary schools (16.4%) (Table 30)

Table 30 Class demographic characteristics as reported by teachers

Characteristics	Responses	2020 %	2019 %
Role		(n=61)	(n=51)
	Class teacher	86.9	86.3
	Specialist teacher	6.6	7.8
	Other	6.6	5.9
Primary and Secondary students (teacher reported)			
School type		(n=61)	(n=51)
	Primary	83.6	72.5
	Secondary	16.4	27.5
Year level		(n=121)*	(n=103)*
	K-PP	6.6	3.9
	1	6.6	2.9
	2	16.4	5.8
	3	21.3	10.7
	4	26.2	14.6
	5	39.3	17.5
	6	36.1	11.6
	7	8.2	6.8
	8	6.6	5.8
	9	11.5	6.8
	10	8.2	7.8
	11	8.2	2.9
	12	3.3	2.9
Students who identify as Aboriginal and/or Torres Strait Islander as a percentage of the class		(n=61)	(n=50)
	None	10 (16.4)	14.0
	1-25%	41 (67.2)	80.0
	26-50%	7 (11.5)	4.0
	51-100%	3 (4.9)	2.0

*Teachers able to select multiple year levels, as some sessions delivered to mixed year groups

3.8 Teachers assessment of students attitudes towards healthy eating and knowledge about food and nutrition

OUTCOME 2: Students develop positive attitudes towards healthy eating and knowledge about food and nutrition.

2.2 Support the development of student's knowledge and skills in relation to healthy eating and nutrition. Level of food and nutrition knowledge and skills demonstrated by students, in particular:

- ✓ Dietary guidelines
- ✓ Food selection
- ✓ Food preparation; and
- ✓ Safe food handling

Nearly all teachers agreed the session improved students' knowledge and skills regarding session content (agreement ranged from 93.4-98.4%). (Table 31)

Table 31 Teacher responses on session content, delivery and relation to curriculum delivery

Statements	Total Sample	Primary Sample	Secondary Sample	Total Sample	Total Sample
	Agree	Agree	Agree	Neutral/ Not sure	Disagree
	n (%)	n (%)	n (%)	n (%)	n (%)
Knowledge and skills provided					
Improved students' knowledge about healthy foods (n=61)	59 (96.7)	50 (82.0)	9 (14.8)	1 (1.6)	1 (1.6)
Provided students with knowledge of how to prepare healthy foods (n=61)	60 (98.4)	50 (82.0)	10 (16.4)	1 (1.6)	-
Provided students with skills to prepare healthy foods (n=61)	58 (95.1)	50 (82.0)	8 (13.1)	3 (4.9)	-
Provided students with knowledge of how to handle food safely (n=61)	57 (93.4)	49 (80.3)	8 (13.1)	4 (6.6)	-

Teachers reported agreement that students displayed *improvement in positive attitudes to healthy foods* (77.0% agree) and students *discuss or bring in cooking from the Food Sensations® recipe book* (60.7% agree) (Table 32). With the other two behaviours, Teachers were more likely to report neutral or not sure about whether there were *improved healthy food choices within the school* (36.1%) or whether students were *bringing healthier food to school* (34.4%).

Table 32 Teacher reports on behaviours displayed following session

Student Behaviours (teacher reported)	Total Sample Agree n (%)	Primary Sample Agree n (%)	Secondary Sample Agree n (%)	Total Sample Neutral/ Not sure n (%)	Total Sample Disagree n (%)	Total Sample Not applicable n (%)
Improved positive attitudes to healthy foods (n=61)	47 (77.0)	41 (67.2)	6 (9.8)	11 (18.0)	2 (3.3)	1 (1.6)
Discuss or bring in cooking from the <i>Food Sensations</i>® recipe book (n=61)	37 (60.7)	31 (50.8)	6 (9.8)	14 (23.0)	7 (11.5)	3 (4.9)
Improved healthy food choices e.g. at canteen (n=61)	27 (44.3)	22 (36.1)	5 (8.2)	22 (36.1)	7 (11.5)	8 (8.2)
Bringing healthier food to school (n=61)	29 (47.5)	25 (41.0)	4 (6.6)	21 (34.4)	7 (11.5)	4 (6.6)

3.9 Process evaluation- Teachers

There was a high level of agreement reported for session delivery and activity related questions (agreement ranged from 83.3-98.3%). Questions asking about session support of curriculum delivery registered lower level of agreement (agreement ranged from 60.7-91.8%) and higher not sure/neutral response (Table 33).

Table 33 Process evaluation responses to FSS

Statements	Total Sample Agree n (%)	Primary Sample Agree n (%)	Secondary Sample Agree n (%)	Total Sample Neutral/Not sure n (%)	Total Sample Disagree n (%)	Total Sample Not applicable n (%)
Delivery of session						
Activities encouraged all the students in the class to participate (n=60)	59 (98.3)	49 (81.7)	10 (16.7)	1 (1.7)	-	-
Activities were appropriate for students' age (n=61)	58 (95.1)	49 (80.3)	9 (14.8)	2 (3.3)	1 (1.6)	-
Activities were accessible for all students (n=60)	59 (98.3)	50 (83.3)	9 (15.0)	1 (1.7)	-	-
Activities were culturally responsive (n=61)	52 (85.2)	43 (70.5)	9 (14.8)	7 (11.5)	1 (1.6)	1 (1.6)
School and community contexts was considered in the learning activities (n=60)	50 (83.3)	41 (68.3)	9 (15.0)	6 (10.0)	1 (1.7)	3 (5.0)
Learning activities were engaging for students (n=60)	58 (96.7)	50 (83.3)	8 (13.3)	1 (1.7)	1 (1.7)	-
Support curriculum delivery						
Assisted me to deliver curriculum objectives/learning outcomes of the curriculum (n=61)	55 (90.2)	47 (77.0)	8 (13.1)	6 (9.8)	-	-
Improved my understanding of healthy eating (n=61)	37 (60.7)	31 (50.8)	6 (9.8)	19 (31.1)	5 (8.2)	-
Improved my confidence in ways to structure practical teaching about healthy eating (n=61)	45 (73.8)	39 (63.9)	6 (9.8)	14 (23.0)	2 (3.3)	-
I intend to include more education on healthy eating in my classroom/s in the next 6 months (n=61)	51 (83.6)	43 (70.5)	8 (13.1)	8 (13.1)	2 (3.3)	-
Foodbank WA's Teachers pack including <i>Food Sensations</i>®	56 (91.8)	47 (77.0)	9 (14.8)	4 (6.6)	1 (1.6)	-

support materials will assist me to deliver the curriculum (n=61)						
Motivated me to go to the Superhero Foods HQ website to source materials (n=61)	45 (73.8)	39 (63.9)	6 (9.8)	13 (21.3)	3 (4.9)	-
I have already been to the Superhero Foods HQ website to source material (n=60)	37 (61.7)	32 (53.3)	5 (8.3)	14 (23.3)	9 (15.0)	-
I already regularly include lessons about healthy eating and food preparation in my teaching (n=61)	48 (78.7)	38 (62.3)	10 (16.4)	7 (11.5)	6 (9.8)	-

Nearly half of teachers (47.2%) commented on the benefits of hand on practical learning and activities, including cooking as the most valuable aspect of the session (Table 34).

Table 34 Teachers open-ended comments about what were the most valuable aspect/s of the session

Responses	2020 (n=53) n (%)	2019 (n=49) n (%)
Hands-on tasks/practical components/cooking activity	25 (47.2)	20 (40.8)
Learning about healthy food/nutrition	3 (5.7)	3 (6.1)
Engaging session, student participation	6 (11.3)	7 (14.3)
Eating and tasting new foods	4 (7.5)	2 (4.1)
How easy it is to cook healthy meals	4 (7.5)	-
Recipes	1 (1.9)	4 (8.2)
Learning how to prepare and cook healthy meals	4 (7.5)	5 (10.2)
Learning about nutrition composition of foods	3 (5.7)	3 (6.1)
Motivation, renewed confidence	1 (1.9)	3 (6.1)
Program activities and structure (general)	2 (3.8)	2 (4.1)

Nearly three-quarters of teachers reported school interest in further professional learning opportunities regarding nutrition and healthy eating (73.8%). Interest was high in topics *food label reading, cooking in the classroom and general nutrition and healthy eating* (Table 35). This was consistent with 2019 reporting.

Table 35 Nutrition topics for professional development

Topic	2020 (n=61) n (%)	2019 (n=51) n (%)
Food label reading	38 (62.3)	34 (66.6)
Cooking in the classroom	37 (60.7)	31 (60.8)
General nutrition and healthy eating	34 (55.7)	32 (62.7)
Assessing sugar in drinks	34 (55.7)	28 (54.9)
Creating a healthy school environment	33 (54.1)	21 (41.2)
Using superhero Foods resources	26 (4.6)	16 (31.4)
Other – carbon footprint of foods	1 (1.6)	-
Other – energy drinks and coffee	1 (1.6)	-

Other – how to engage parents	1 (1.6)	-
Other – healthy and easy meals for low socioeconomic children	-	1 (2.0)

There were 37 responses to suggestions for improving the session. The greatest response listed when asked how the session could be improved was ‘*nothing*’, ‘*no changes required*’ or ‘*great program*’ (54.1% of responses). This was slightly higher than 2019 reporting at 44.8%. Other responses included ensuring recipes and facilities are appropriate and more knife skills (Table 36).

Table 36 Suggestions for improvement of session

Responses	2020 (n=37) n (%)	2019 (n=29) n (%)
None/no changes/great program/continue program	20 (54.1)	13 (44.8)
Ensure appropriate/adequate ingredients, recipes and facilities	5 (13.5)	2 (6.9)
Positive comments (general)	3 (8.1)	3 (10.3)
More knife skills	2 (5.4)	-
Target parents as well as students	1 (2.7)	
Longer duration of session/time comments	1 (2.7)	4 (13.8)
Increased complexity of nutrition content	1 (2.7)	
More guidance during cooking	1 (2.7)	
Materials seemed worn out	1 (2.7)	
Think more about safety	1 (2.7)	
Ensure time for questions	1 (2.7)	
More interactive/engaging	-	3 (10.3)
Be consistent with messages – i.e. Zombie Foods messages inconsistencies	-	1 (3.4)
Eat together as a group at a set table	-	1 (3.4)
Follow-up evaluation for students	-	1 (3.4)
Be more environmentally friendly	-	1 (3.4)

Thirty-eight teachers made a final comment about the session. All comments were positive, highlighting the benefits of FSS, facilitators, and session structure. Many comments focused on student enjoyment and the desire to run future sessions.

Open-ended comments included:

Absolutely fabulous program delivered by very experienced, energetic, approachable and great role models for our youth – Secondary school teacher

The students absolutely loved the session. The ladies who ran it were amazing and did a fantastic job. I would definitely be encouraging my school and other schools to utilise this program. Thank you. – Secondary school teacher

Please continue this valuable program – Secondary school teacher

100% would support this year in and out. Extremely valuable to our demographic – Primary school teacher

Thank you. Fabulous sessions and a great way to engage younger students in making health choices for life – Primary school teacher

The three ladies who came to our school were extremely organised, professional and knowledgeable. It was a fabulous session and my entire class, including myself, were thrilled. Many of my students have taken the books home and have made some of the recipes with their families, including me! – Primary school teacher

Section 4: Summary and Recommendations

2020 Performance Measures

OUTCOME 1: Provision of nutritious food to students vulnerable to poor nutrition

Foodbank WA is providing a School Breakfast Program that meets the needs of participating schools (1.2)

- Schools are very thankful for being able to access Foodbank WA supplied product and resources.
- COVID-19 situation resulted in schools to continuing to provide for students using a variety of modifications or strategies such as 'grab and go', with only a small proportion of schools ceasing their SBP for a period.
- COVID-19 situation indicated the adaptation of SBP to a community focus to feed some families in need.
- Foodbank WA supply issues had limited impact on SBP delivery that was resolved when supply resumed.

SBP RECOMMENDATIONS

1. IMPROVING SBP INTEGRATION- Focus on providing resources/advice to schools where the SBP is not considered integrated into the organisational practice of the school.

OUTCOME 2: Students develop positive attitudes towards healthy eating and knowledge about food and nutrition.

Foodbank WA is providing a program that support the development of student's knowledge and skills in relation to healthy eating and nutrition (2.2)

- Secondary students report statistically significant increases in level of food and nutrition knowledge and skills demonstrated by students, in particular:
 - Dietary guidelines
 - Food selection
 - Food preparation
- Teachers reported positive impact on primary and secondary student's level of positive attitudes, knowledge, and skills.
- FSS delivery has focused on secondary classes with longer session where the curriculum can reinforce the learning outcomes (i.e. Home Economics and Health and Physical Education).

FSS RECOMMENDATIONS

1. DELIVERING A BEST PRACTICE PROGRAM Consider best practice principles for nutrition education and food literacy program delivery requiring a minimum of four sessions. Foodbank WA is delivering a theoretically based experiential program adapted to different developmental levels of children and adolescents in line with best practice with the exception of duration. One off sessions make it difficult to determine impact on behaviour change with evaluation.
2. NEED FOR AN ADOLESCENT SPECIFIC PROGRAM Just over 40% (41.8) of secondary school students attending FSS sessions in 2019 and 2020 indicated they are preparing and cooking meals at home at least twice a week and this supports the need for a statewide adolescent specific program to support food literacy development and improve positive dietary intakes.

References

1. Edith Cowan University. Evaluation of Foodbank WA's School Breakfast and Nutrition Education Program; 2016.
2. Edith Cowan University. Evaluation of the Foodbank WA School Breakfast and Nutrition Education Program; 2017.
3. Edith Cowan University. Evaluation of the Foodbank WA School Breakfast and Nutrition Education Program Final Report; unpublished report, 2018
4. MacDonald, F. Evaluation of the School Breakfast Clubs Program Interim Report 2017; The Victoria Institute, Victoria University: Melbourne, 2017.
5. MacDonald, F. Evaluation of the School Breakfast Club Interim Report 2018 The Victoria Institute, Victoria University: Melbourne, 2018.
6. MacDonald, F. Evaluation of the School Breakfast Clubs Program Final Report 2019; The Victoria Institute, Victoria University: Melbourne, 2019.

Appendices

Default Question Block**School Breakfast Program COVID-19 Survey for 2020**

It is well established that each school runs their School Breakfast Program in different ways. For example, as an official 'breakfast club' versus 'as needs' supply.

We are interested in finding out how the COVID-19 pandemic at its height (March 2020 to return of students to school in Term 2) affected the way in which your school ran the School Breakfast Program at that time, and what is happening in your school now.

Survey Consent

I have read the research information sheet provided and understand its contents and I believe I understand the purpose, extent and possible risks of my involvement with this research.

My questions have been answered to my satisfaction and I can ask further questions at any time.

My participation is voluntary and I have the right to stop the survey and withdraw at any time or decline to answer questions.

The data I provide will be de-identified and any data that may identify me personally or my school will not be used in reports or publications.

I understand that by continuing with this survey I have agreed to participate.

What is your current position or role at the school?

- ☐ Principal
- ☐ Deputy Principal
- ☐ Teacher or Education Assistant
- ☐ Chaplain
- ☐ Aboriginal and Islander Education Officer (AIEO)
- ☐ Canteen Manager
- ☐ Administration Staff
- ☐ Parent/P&C Member
- ☐ Other (specify)

Are you the nominated Foodbank WA School Breakfast Program Coordinator for your school?

- ☐ Yes
- ☐ No

The following questions relate to School Breakfast Program activities at your school during the heightened COVID-19 pandemic period between mid-March and the end of May 2020.

Did the operation of your School Breakfast Program change at any time as a result of Government restrictions put in place in response to COVID-19? (Select the response that best suits your school's response)

- ☐ Yes, the operation changed but these changes have since been removed
- ☐ Yes, the operation changed and the program continues to operate differently
- ☐ Yes, the operation changed as we cancelled the program

- ☐ No, the operation did not change as the program continued to operate as usual
- ☐ Other (Specify)

The next five questions ask about what changes occurred in the areas of a) program operation, b) food supply and sourcing, c) student-related factors and/or d) other factors.

In relation to the operation of your program, can you indicate if these changes were the result of any of the following factors. (Select as many that apply)

- ☐ Availability of volunteers
- ☐ Increased teacher involvement
- ☐ Format changed- less sitting in and more grab and go style
- ☐ Location changed due to social distancing requirements
- ☐ Operated for longer or staggered start times
- ☐ Increased staff and volunteers hygiene requirements
- ☐ Virtual breakfast club
- ☐ Other (specify)

Can you indicate if these changes were the result of any of the following food supply factors. (Select as many that apply and explain the change in more detail)

- ☐ The need for more single serve or packaged foods
- ☐ Difficulty sourcing supply from Foodbank WA during Term 2
- ☐ Sourced alternative supply arrangements for products that were not available through Foodbank WA
- ☐ Rationed remaining food stocks until availability improved
- ☐ Stockpiled Foodbank WA foods due to less student demand
- ☐ Other (specify)

Can you tell us more about food supply and sourcing factors that affected your program, particularly why the food supply or your sourcing changed.

Can you indicate if these changes were the result of any of the following student-related factors. (Select as many that apply)

- ☐ Student involvement in the program decreased
- ☐ Student involvement in the program increased
- ☐ Different students started requiring breakfast
- ☐ More families were requesting food
- ☐ Teachers supervised children on an as needs basis
- ☐ Other (specify)

Do you feel there are any other factors that influenced change in your program? (for example, was there more demand from some families for food or were parents feeding children at home etc.

If your program was cancelled, can you indicate if this was the result of any of the following factors. (Select all that apply)

- ☐ Decision of school leadership not to run the program
- ☐ Limited volunteers or staff to assist in program delivery
- ☐ Demand for program decreased dramatically
- ☐ Hygiene and/or social distancing requirements made operation difficult
- ☐ Unable to get sufficient food from Foodbank WA
- ☐ Other (specify)

What was the length of time (in weeks) that your program was or has been cancelled?

The remaining questions ask about your program operation today. Now that it is Term 3, has your program resumed?

- ☐ Yes
- ☐ No

What factors have enabled the program to start again? (Select as many that apply)

- ☐ Increased number of people allowed to gather in one setting
- ☐ Clear hygiene and sanitation guidelines and equipment supplied
- ☐ Increased numbers of volunteers
- ☐ Increased demand from students
- ☐ Able to source regular food supply from Foodbank WA
- ☐ Other (specify)

- ☐ Other (specify)

What would have to change for your program to resume operation?

Are any of the modifications made to your program during the initial COVID-19 period still being implemented today? If yes, tell us what changes are still being implemented.

- ☐ Yes (specify)

☐ No

Are you considering making any of these changes permanent? If yes, please specify what changes and why.

☐ Yes (specify)

☐ No

☐ Maybe

Which of the following best describes your school's program model? (Select the best response)

☐ Program continues to run pre-COVID-19 model with no changes made during this time

☐ Returned to pre-COVID-19 model of operation

☐ Resumed program, but some changes adopted as a result of COVID-19 have been retained

☐ Have not yet resumed the School Breakfast Program, but plan to do so (please elaborate)

☐ Do not plan to resume the School Breakfast Program (please elaborate)

Do you wish to provide any further feedback about how your school's program is operating (or not operating) today?

To what degree do you think the School Breakfast Program is integrated into your school?

☐ A program that is part of the organisational practice of the school

☐ An extracurricular activity offered by the school

☐ Other (explain)

We are interested in finding out more about how your school's program experience during COVID-19. Are you interested in providing a case study of your experiences to Foodbank WA, and open to being contacted directly?

Yes

☐

No

☐

Please provide your name, school and contact details if you are interested in providing a case study of your experience or you can choose to email us separately at SBPCoordinatorSurvey@curtin.edu.au.

☐ Name

☐ School

☐ Contact Details

Thank you for your participation in this research.



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14-Aug-2020

Name: Andrea Begley
Department/School: School of Public Health
Email: A.Begley@curtin.edu.au

Dear Andrea Begley

RE: Amendment approval

Approval number: HRE2019-0289

Thank you for submitting an amendment request to the Human Research Ethics Office for the project **WA Nutrition Education Support in Schools**.

Your amendment request has been reviewed and the review outcome is: **Approved**

The amendment approval number is HRE2019-0289-05 approved on 14-Aug-2020.

The following amendments were approved:

The proposed change includes an additional survey sent to School Breakfast Program (SBP) Coordinators in Term 3, 2020 to determine if schools in Western Australia ran a SBP during the height of the COVID-19 pandemic and what school experiences are with the SBP during and post COVID-19.

School principals will be emailed a research information sheet regarding the survey two weeks prior to survey release. Principals will have the opportunity to withdraw their school from the research.

The survey will be sent to SBP coordinators in Term 3 of 2020 with a four week timeline from "go live" to the survey close date. SBP Coordinators will be contacted via email with an email script (see attached) and research information sheet. SBP Coordinators will be asked to provide informed consent at the time of completing the survey by agreeing with the consent statements at the start of the survey.

Condition of Approval

It is the responsibility of the Chief Investigator to ensure that any activity undertaken under this project adheres to the latest available advice from the Government or the University regarding COVID-19.

Any special conditions noted in the original approval letter still apply.

Standard conditions of approval

1. Research must be conducted according to the approved proposal
2. Report in a timely manner anything that might warrant review of ethical approval of the project including:
 - proposed changes to the approved proposal or conduct of the study
 - unanticipated problems that might affect continued ethical acceptability of the project
 - major deviations from the approved proposal and/or regulatory guidelines
 - serious adverse events
3. Amendments to the proposal must be approved by the Human Research Ethics Office before they are implemented (except where an amendment is undertaken to eliminate an immediate risk to participants)
4. An annual progress report must be submitted to the Human Research Ethics Office on or before the anniversary of approval and a completion report submitted on completion of the project
5. Personnel working on this project must be adequately qualified by education, training and experience for their role, or supervised

6. Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, that bears on this project
7. Changes to personnel working on this project must be reported to the Human Research Ethics Office
8. Data and primary materials must be retained and stored in accordance with the [Western Australian University Sector Disposal Authority \(WAUSDA\)](#) and the [Curtin University Research Data and Primary Materials policy](#)
9. Where practicable, results of the research should be made available to the research participants in a timely and clear manner
10. Unless prohibited by contractual obligations, results of the research should be disseminated in a manner that will allow public scrutiny; the Human Research Ethics Office must be informed of any constraints on publication
11. Ethics approval is dependent upon ongoing compliance of the research with the [Australian Code for the Responsible Conduct of Research](#), the [National Statement on Ethical Conduct in Human Research](#), applicable legal requirements, and with Curtin University policies, procedures and governance requirements
12. The Human Research Ethics Office may conduct audits on a portion of approved projects.

Should you have any queries regarding consideration of your project, please contact the Ethics Support Officer for your faculty or the Ethics Office at hrec@curtin.edu.au or on 9266 2784.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Bowater', with a stylized flourish at the end.

Amy Bowater
Ethics, Team Lead

Appendix 1. FSS Evaluation Program Logic Model

NAME OF PROGRAM/PROJECT:
Food Sensations® for Schools (FSS) Program Evaluation 2019 to 2020

SITUATION:
<p>Foodbank WA has been refunded for 2019-2020 to deliver FSS (n=67 schools).</p> <p>Secondary students and teachers (primary and secondary) are to be involved in evaluation processes.</p> <p>Outcome 2 Students develop <u>positive attitudes</u> towards healthy eating and knowledge about food and nutrition.</p> <p>2.2 Support the development of student's knowledge and skills in relation to healthy eating and nutrition</p> <p>Performance measures- Level of food and nutrition <u>knowledge</u> and <u>skills</u> demonstrated by students, in particular:</p> <ul style="list-style-type: none">- dietary guidelines;- food selection;- food preparation; and- safe food handling. <p><i>Performance measures method- Annual reporting against measures –Food Sensations session feedback completed by teachers and secondary students (reporting pre and post information)</i></p> <p>Outcome 3: Building and maintaining partnerships to contribute to long-term sustainability of the program</p> <p>3.2 Schools are referred to other nutrition and health promotion programs as required.</p> <p><i>Performance measures- List types of programs being referred and number of teachers provided with referral information</i></p>

PRIORITIES:
<ul style="list-style-type: none">• Improve dietary intakes and food literacy in school aged children.• Evidence from the 2011-12 National Nutrition and Physical Survey demonstrated that 9-13 yr. olds and 14-18 yr. old were not achieving any food group recommendation with the exception of cereals in 9-11yr olds and there was high intake of discretionary foods contributing up to 41% of total energy).• Adolescents are developing independence at this stage of the lifecycle and require food literacy skill development (planning, selecting, preparing and eating) to be able to feed themselves in a health promoting way.

PRIORITIES:

INPUTS	OUTPUTS		OUTCOMES		
	Activities	Participants	Short-term	Medium-term	Long-term
<p>Dept of Education, Department of Health (DoH) and Dept of Primary Industries and Regional Development have funded Foodbank WA to deliver FSS to n=67 schools in 2019 and 2020.</p> <p>DoH's Health Promotion Strategic Framework 2017-2021 priority for healthier eating in WA include increasing the knowledge, skills and confidence necessary to choose a healthy diet. Targeted interventions indicate the need to Invest in programs that increase food and nutrition knowledge and skills of parents, children and other groups most vulnerable to poor nutrition. [1]</p> <p>Foodbank WA have an established program and</p>	<p>Conduct FSS delivery to more than one class in each school (60 to 120 minutes)</p> <p>Experiential learning improves self-efficacy (confidence) to select and eat healthy foods by performance accomplishments and verbal persuasion (encouragement).</p> <p>Hands on successful cooking and eating experiences provide observational learning and peer modelling to support behaviour change (preparing and tasting healthy foods)</p> <p>Overall enjoyment of FSS may improve emotional states for trying new behaviours at</p>	<p>Secondary school students (estimated minimum n=18 to 20 schools) in Year 7 to 12 (per year)</p> <p>Teacher/s (estimated minimum n=134) attached to FSS session delivery from primary and secondary schools (n=67)</p>	<p>PROCESS INDICATORS</p> <p>Response rate greater than 2017 contract evaluation (number of schools 38%, 14% secondary students, 41% teachers)[36]</p> <p>Students respond positively to FSS delivery including level of agreement about enjoyment of session, cooking and tasting new foods.</p> <p>Students self-reported involvement with home meal preparation.</p>	<p>IMPACT INDICATORS</p> <p>Self-reported change in knowledge about healthy foods and nutrients in food groups from AGHE (Dietary Guidelines)</p> <p>Self-reported improvement in accuracy in reading a nutrition information panel.</p> <p>Self-reported change in attitudes to food preparation and healthy foods</p>	<p>OUTCOME INDICATORS</p> <p>Improved dietary choices from the core foods in the AGHE</p> <p>Reduced intake of discretionary foods (high fat, sugar and salt)</p> <p>Increased involvement with meal planning, selection and preparation at home.</p>

INPUTS	OUTPUTS		OUTCOMES		
	Activities	Participants	Short-term	Medium-term	Long-term
<p>experienced facilitators (n=5) involved in the delivery of FSS in the metropolitan and regional areas (particularly the Pilbara-separate contract)</p> <p>FSS lesson plan curriculum is evidence based and designed to link to achievement standards in learning areas in the Australian Curriculum. https://www.australiancurriculum.edu.au/</p> <p>FSS for secondary students consists of six lesson plans, a combination of which can be delivered in one session (60-120 minutes) either as full and/or partial lessons.</p> <p>Deliver as a minimum AGHE and COOKING lessons. Additional content either full lesson plan or partial lesson plan from SUGAR IN DRINKS (food label reading),</p>	<p>home (and potential food selection from canteen).</p> <p>Provide resource information for Teacher/s to expand on FSS program delivery after/before Foodbank WA's delivery.</p>		<p>Teachers provide quality assessment of suitability and effectiveness of FSS activities</p> <p>Teacher/s respond positive to experience with FSS program</p> <p>Teachers consider Foodbank WA Facilitators effective in FSS delivery.</p> <p>Teachers reporting using Superhero Food resources to support additional curriculum delivery.</p>	<p>Self-reported food literacy practices (selecting and preparing foods including hand washing knowledge, following recipes, using a knife to cut vegetables or fruit, cooking at home, tasting a new food, intention to make recipe at home.</p> <p>Self-reported learning from FSS session (qualitative)</p> <p>Teachers self-reported feedback on FSS impact on knowledge, attitudes and skill development.</p>	

INPUTS	OUTPUTS		OUTCOMES		
	Activities	Participants	Short-term	Medium-term	Long-term
HOMEMADE VS TAKEAWAY FOODS, CALCIUM IN FOODS					

ASSUMPTIONS	EXTERNAL FACTORS
<p>1. FSS one session program delivery can impact on knowledge, attitudes, self-efficacy (confidence) of primary and secondary students</p> <p>2. FSS is being delivered in a classroom setting that will continue to support key messages from the program as to work towards outcome indicators.</p> <p>3. School active withdrawal of consent and parent 'opt out' of secondary students survey approval should increase response rates.</p> <p>4. The partial delivery of FSS lesson plans is considered sufficient duration and of implementation fidelity to support attitude, knowledge and skill change in students.</p>	<p>1. Level of secondary school involvement in food preparation at home before FSS program experience as this will influence secondary student's abilities to practice classroom lesson activities (individual agency).</p> <p>2. Type of class session delivered e.g. home economics vs health and PE as potentially home economics classes may support further food literacy development to a greater extent than other classes.</p> <p>3. One session program delivery does not enable assessment of dietary or food literacy behaviour change.</p> <p>4. WACHS staff could attend FSS and FSA training and deliver additional programs in schools in their regions.</p> <p>5. Teachers need to be directed to DoH Refresh.ED website http://www.refreshedschools.health.wa.gov.au and other key nutrition education and food literacy resources to support curriculum delivery.</p>

EVALUATION PLAN:

Study design: Cross sectional surveys approved by Department of Education and Department of Health

1. Secondary school students' pre (start) and post (end) of program paper questionnaires designed to achieve contract performance measures, align with lesson plan objectives and based on questions sourced from validated published questionnaires.

EVALUATION PLAN:
2. Teacher's survey – two (2) week after FSS delivery online survey (Qualtrics) designed to achieve contract performance measures using questions previously used in past contracts and Foodbank WA team developed questions.

1. Chronic Disease Prevention Directorate, *WA Health Promotion Strategic Framework 2017-2021*. 2017, Department of Health: Perth, Western Australia.
2. Edith Cowan University, *Evaluation of the Foodbank WA School Breakfast and Nutrition Education Program Final Report*. 2018 unpublished report.

Food Sensations in Schools

Start of Program Questions

First Name: _____



Read each question and mark one (1) answer you think is right for you.

Your year: 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐
Gender: Female ☐ Male ☐ Other _____
Your age: 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐

These questions ask you *what you know* about selecting and eating foods (Tick 1 ☒).

- I know how to choose foods that will give me a strong mind and healthy body**
strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐
- What are two of the main nutrients you get from eating the grains, cereal and bread food group?**
Protein & Fibre ☐ Calcium & Protein ☐ Carbohydrate & Fibre ☐ Iron & Calcium ☐
Iron & Carbohydrate ☐
- What are two of the main nutrients you get from eating the milk, yoghurt and cheese food group?**
Protein & Fibre ☐ Calcium & Protein ☐ Carbohydrate & Fibre ☐ Iron & Calcium ☐
Iron & Carbohydrate ☐
- How much sugar per 100g is in this breakfast cereal. (Use the nutrition information below)**
22.9g ☐ 0.6g ☐ 14.6g ☐ 76.2g ☐ 4.4g ☐

NUTRITION INFORMATION

Servings Per Pack: 10 Serving Size: 30g	Average Quantity per Serving	Average Quantity per 100g
Energy	480kJ	1610kJ
Protein	2.1g	7.0g
Fat-total - Saturated	1.1g 0.2g	3.8g 0.6g
Carbohydrate - Sugars	22.9g 4.4g	76.2g 14.6g
Dietary Fibre	2.2g	7.3g
Sodium	80mg	265mg

Please continue survey over page.

Food Sensations in Schools

Start of Program Questions



These statements ask *what you think* about selecting and preparing foods to eat (Tick 1 ☒).

5. Making healthy food choices is important to me

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

6. I like to try new foods

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

7. I think healthy food is easy to cook

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

8. Healthy food can be delicious and tasty

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

These questions ask about *how you usually* select and prepare foods (Tick 1 ☒).

9. Before I eat or prepare food, I need to wash my hands for how many seconds?

10 seconds ☐ 20 seconds ☐ 30 seconds ☐ 40 seconds ☐ I don't know ☐

10. I can prepare and cook a healthy meal

I cannot do this ☐ I am not sure I can do this ☐ I can do this with help ☐

I can do this on my own ☐

11. I can follow a simple recipe to prepare a healthy meal

I cannot do this ☐ I am not sure I can do this ☐ I can do this with help ☐

I can do this on my own ☐

12. I can cut up vegetables or fruit to put in a meal or snack

I cannot do this ☐ I am not sure I can do this ☐ I can do this with help ☐

I can do this on my own ☐

13. How often do you help prepare a healthy meal with your family?

Never ☐ Rarely (1-2 times a year) ☐ Sometimes (2-4 times a month) ☐

Often (2-4 times a week) ☐ Always (5-7 times a week) ☐

Hand back to your teacher or Foodbank WA staff when finished. Thank you.

☐ I understand that by continuing with this survey I have agreed to participate.

- ☐ K-PP
- ☐ Year 1
- ☐ Year 2
- ☐ Year 3
- ☐ Year 4
- ☐ Year 5
- ☐ Year 6
- ☐ Year 7
- ☐ Year 8
- ☐ Year 9
- ☐ Year 10
- ☐ Year 11
- ☐ Year 12

[illegible]

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
Provided students with knowledge of how to handle food safely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Indicate your level of agreement with the delivery of the *Food Sensations in Schools* session activities.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know/not applicable
Activities encouraged all the students in the class to participate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Activities were appropriate for students' age	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Activities were accessible for all students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Activities were culturally responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School and community contexts was considered in the learning activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning activities were engaging for students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Indicate your level of agreement as to how the *Foods Sensations in Schools* session (including materials) supports your curriculum delivery.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know/unsure
Assisted me to deliver curriculum objectives/learning outcomes of the curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved my understanding of healthy eating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved my confidence in ways to structure practical teaching about healthy eating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to include more education on healthy eating in my classroom/s in the next 6 months	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Foodbank WA's Teachers pack including Food Sensations support materials will assist me to deliver the curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivated me to go to the Superhero Foods HQ website to source materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have already been to the Superhero Foods HQ website to source material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I already regularly include lessons about healthy eating and food preparation in my teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In the last two (2) weeks have you seen any of your students who attended the *Food Sensations in Schools* session display the following behaviours or actions?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know/unsure
Discuss or bring in cooking from the Food Sensations recipe book	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved healthy food choices (e.g. canteen)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bringing healthier food to school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved positive attitudes to healthy foods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would your school be interested in further professional learning opportunities in the area of nutrition and healthy eating offered by Foodbank WA?

- ☐ Yes
- ☐ No
- ☐ Unsure

What nutrition topics would you be interested in? (select all that apply)

- ☐ Food label reading
- ☐ Assessing sugar in drinks
- ☐ Creating a healthy school environment
- ☐ Cooking in the classroom
- ☐ General nutrition and healthy eating
- ☐ Using Superhero Foods resources
- ☐ Other (specify)

What were the most valuable aspect/s of the *Food Sensations in Schools* session?

What suggestions for improvement do you have for these sessions?

Do you have any final comments?

Food Sensations in Schools

End of Program Questions

First Name: _____



Read each question and mark one (1) answer you think is right for you.

These questions ask you *what you know* about selecting and eating foods (Tick 1 ☒).

1. I know how to choose foods that will give me a strong mind and healthy body

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

2. What are two of the main nutrients you get from eating the grains, cereal and bread food group?

Protein & Fibre ☐ Calcium & Protein ☐ Carbohydrate & Fibre ☐ Iron & Calcium ☐
Iron & Carbohydrate ☐

3. What are two of the main nutrients you get from eating the milk, yoghurt and cheese food group?

Protein & Fibre ☐ Calcium & Protein ☐ Carbohydrate & Fibre ☐ Iron & Calcium ☐
Iron & Carbohydrate ☐

4. How much sugar per 100g is in this breakfast cereal. (Use the nutrition information below)

22.9g ☐ 0.6g ☐ 14.6g ☐ 76.2g ☐ 4.4g ☐

NUTRITION INFORMATION		
Servings Per Pack: 10 Serving Size: 30g	Average Quantity per Serving	Average Quantity per 100g
Energy	480kJ	1610kJ
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Carbohydrate - Sugars	22.9g 4.4g	76.2g 14.6g
Dietary Fibre	2.2g	7.3g
Sodium	80mg	265mg

Please continue survey over page.

Food Sensations in Schools

End of Program Questions



These statements ask *what you think* about selecting and preparing foods to eat (Tick 1 ☒).

5. Making healthy food choices is important to me

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

6. I like to try new foods

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

7. I think healthy food is easy to cook

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

8. Healthy food can be delicious and tasty

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

Now that I have attended the Food Sensations Session, I will select and prepare foods at home in the following ways (Tick 1 ☒).

9. Before I eat or prepare food, I need to wash my hands for how many seconds?

10 seconds ☐ 20 seconds ☐ 30 seconds ☐ 40 seconds ☐ I don't know ☐

10. I can prepare and cook a healthy meal

I cannot do this ☐ I am not sure I can do this ☐ I can do this with help ☐
I can do this on my own ☐

11. I can follow a simple recipe to prepare a healthy meal

I cannot do this ☐ I am not sure I can do this ☐ I can do this with help ☐
I can do this on my own ☐

12. I can cut up vegetables or fruit to put in a meal or snack

I cannot do this ☐ I am not sure I can do this ☐ I can do this with help ☐
I can do this on my own ☐

Please continue survey over page.

Food Sensations in Schools

End of Program Questions



These questions ask you *what you thought* about today's session (Tick 1 ☒).

13. I enjoyed the Food Sensations session

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

14. I enjoyed cooking in today's session

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

15. I enjoyed tasting the food my class made today

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

16. I tasted a new food today

agree ☐ not sure ☐ disagree ☐

17. I will make one of the recipes I made today at home

strongly agree ☐ agree ☐ not sure ☐ disagree ☐ strongly disagree ☐

If you are not sure or disagree, why?

18. Today in the Food Sensations session I learnt

Please return your survey to your teacher or Foodbank WA staff member. Thank you.

