



Foodbank WA Regional Strategy Project

Food Sensations Program

End of Year Report – Student Surveys

Peel, South West, Wheatbelt, Goldfields, Midwest and Kimberley regions

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INTRODUCTION

The Foodbank *Food Sensations Program* is a nutrition education and cooking program based on the WA Department of Health's FOODcents program. Food Sensations aims to improve the food choice and preparation skills of disadvantaged groups, via the provision of nutrition education and hands-on cooking classes.

The program is adapted for delivery to three separate groups:

- School students (Primary and Secondary);
- Parent groups; and
- Health Professionals and Teachers (Educator Training Days)

Food Sensations sessions delivered in regional and remote WA areas are adapted to consider food accessibility challenges and alternative cooking methods.

METHOD

From March to September 2011, the Regional Food Sensations program was run in the Peel, South West, Wheatbelt, Goldfields, Mid West, Pilbara and Kimberley regions of Western Australia to 1,688 primary and high school students, 140 teachers and 55 parents. The project team included two Foodbank Nutritionists, who travelled in collaboration with other Government and Non Government agency staff wherever possible.

Student sessions were delivered within a classroom, home economics room or wet area within a 60-90 minute timeframe. Session content included a highly interactive nutrition session exploring a number of themes such as healthy eating pyramid/plate, meal planning, budgeting, convenience foods or food label reading. This was followed by a hands-on healthy cooking session and a sit down meal, reinforcing how easy it is to prepare and enjoy cheap, healthy and tasty meals.

Participating students completed written evaluation surveys where appropriate. Pre-session surveys were posted to schools for completion the day before or morning of the Foodbank session, to reduce paperwork during the session. Post-session surveys were completed immediately after the Foodbank session to assess any short term change in knowledge or attitudes. In some cases, students who completed a pre-session survey were absent on the day of the session and therefore did not complete a post-session survey (or vice versa). Surveys belonging to these students were excluded due to a missing paired survey.

It was ascertained that there was no 'one size fits all' survey tool and therefore alternative evaluation methods were utilised. In the cases where the standard Foodbank evaluation tools were deemed inappropriate, pictorial tools with simplified question wording and a teacher "survey script" were utilised. In more challenging environments, a hands-up approach or verbal feedback was used.

This report contains **student** evaluation results from all regions visited, except the East Pilbara, where separate funding was utilised. East Pilbara findings and Teacher evaluation can be found in separate reports. Evaluation results for parent sessions and Educator Training Days held in 2011 have not yet been analysed, however will be available in early 2012.



RESULTS – STUDENT SURVEYS

Demographics

Overall, 532 students completed both a pre and post written survey. Approximately half of all respondents were female (56%) and 24% identified themselves as Aboriginal and/or Torres Strait Islander. Respondents were aged between 7 and 18 years (year 2 to year 12). (Table 1 to 4)

Table 1: Gender

	n	%
Male	236	44.4
Female	295	55.6
Total	531	100.0

**1 student did not respond to the question*

Table 2: Age

	n	%
7 years	1	0.2
8 years	8	1.5
9 years	21	4.0
10 years	43	8.1
11 years	138	26.0
12 years	154	29.1
13 years	39	7.4
14 years	38	7.2
15 years	45	8.5
16 years	32	6.0
17 years	10	1.9
18 years	1	0.2
Total	530	100.0

**2 students did not respond to the question*

Table 3: Year

	n	%
2	2	0.4
3	3	0.6
4	26	4.9
5	21	4.0
6	143	27.0
7	169	31.9
8	44	8.3
9	5	0.9
10	59	11.1
11	35	6.6
12	23	4.3
Total	530	100.0

**2 students did not respond to the question*



Table 4: ATSI

	n	%
Aboriginal	106	20.1
Torres Strait Islander	12	2.3
Aboriginal and Torres Strait Islander	7	1.3
Neither	402	76.3
Total	527	100.0

**5 students did not respond to the question*

Regional Food Sensation Recipes

Depending on the produce available in their town, different student groups made different recipes. For recipes attempted by 30 or more students, the majority enjoyed making the fruit crumble cups (81%) and the fried rice (80%). Most students also enjoyed making the fruit kebabs (78%), fantastic fried noodles (72%) and stuffed spuds (71%). When asked which recipes they would try to make at home ($n \geq 30$), most students said the fried rice (67%) or the fruit crumble cups (56%) (Table 5 and 6).

Table 5: Did you like the food that you made today?

	n	% (yes)
Kangaroo Bolognaise	12	91.7
Easy Pizza	17	88.2
Braised Beef and Pasta	16	87.5
Chicken Noodle Soup	12	83.3
Fruit Crumble Cups	430	80.9
Fried Rice	30	80.0
Fruit Kebab	302	78.1
Apple Pikelets	15	73.3
Fantastic Fried noodles	366	72.1
Stuffed Spud	72	70.8
Chicken and Veg Kebabs	407	62.4
Pita Bread Toasties	437	60.9
Veggie Pikelets	415	56.9
Meat & Veggie Rissoles	18	50.0
Tuna Patties	48	47.9
Tuna Pasta Salad	10	10.0

**Multiple response question. Different students groups made different recipes therefore "n" varies*



Table 6: Which recipes will you try to make at home?

	n	% (yes)
Fried Rice	30	66.7
Chicken Noodle Soup	12	66.7
Kangaroo Bolognaise	12	58.3
Fruit Crumble Cups	430	55.6
Easy Pizza	17	47.0
Fruit Kebab	302	41.4
Fantastic Fried noodles	366	37.4
Chicken and Veg Kebabs	407	35.4
Stuffed Spud	72	33.3
Pita Bread Toasties	437	32.0
Veggie Pikelets	415	28.7
Tuna Patties	48	25.0
Braised Beef and Pasta	16	18.7
Apple Pikelets	15	13.3
Meat & Veggie Rissoles	18	11.1
Tuna Pasta Salad	10	10.0

**Multiple response question. Different students groups made different recipes therefore "n" varies*



Student Attitudes

As shown in Figure 1, the vast majority of students enjoyed taking part in the food sensations session (96%) and indicated that the session taught them about healthy food (95%), how to cook healthy food (91%) and how to select healthy food to eat (89%).

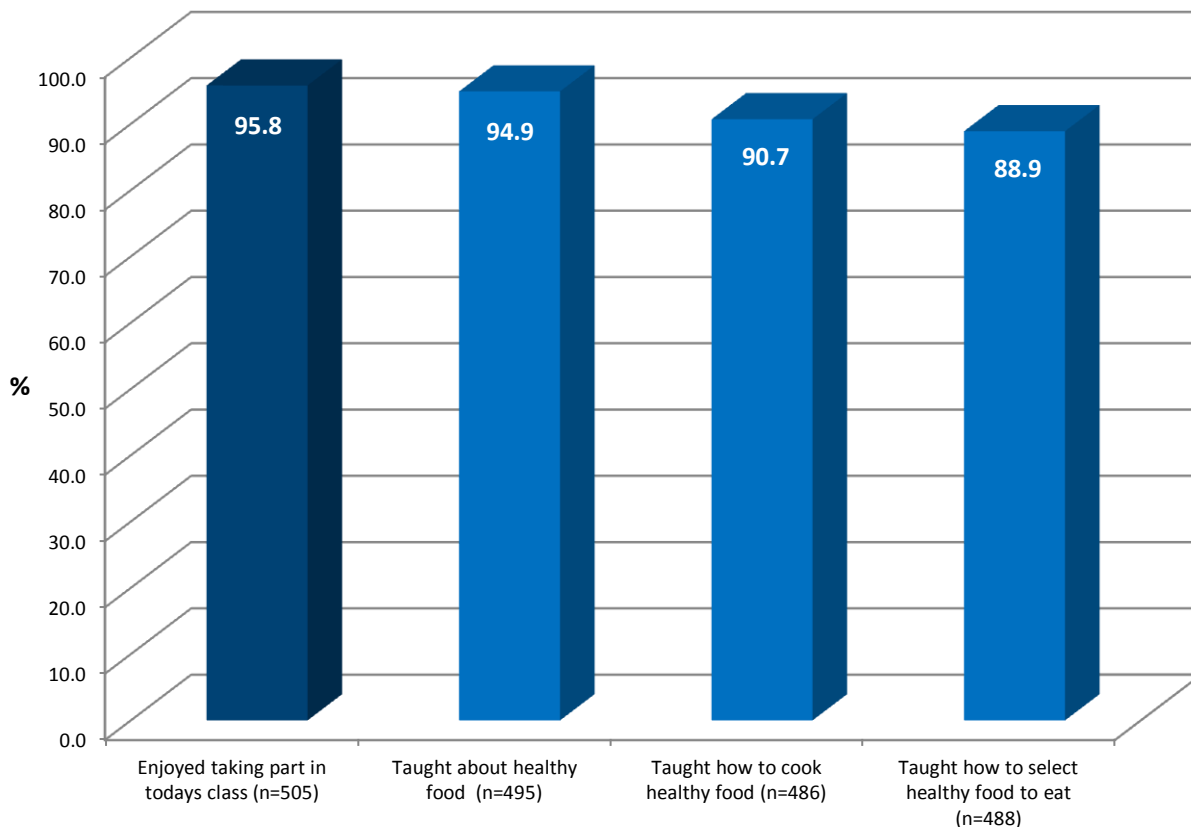


Figure 1: Student attitudes towards the food sensations session (% Yes)

In both the pre survey (86%) and the post survey (90%), the majority of students thought that healthy food tasted good. The proportion of students that thought healthy food tasted good was significantly higher in the post survey (Table 7).

Table 7: Do you think healthy food tastes good

	n	% Yes*
Pre test	526	85.7
Post test	508	90.3

* $p < 0.05$



Student Knowledge

(NB When reading this section it should be kept in mind that in addition to the Food Sensations program, participants may also have received health and nutrition information from other sources e.g. health promotion advertising, health classes, teachers, parents etc).

In both the pre and the post survey, most students were aware that we should eat two fruit and five vegetables each day (Table 8 and 9).

Table 8: How many fruit we should eat each day

	Pre test [#] (n=523) %	Post test [#] (n=504) %
1	1.7	0.4
2	75.7	81.5
3	11.1	7.7
4	3.1	2.4
5	5.2	5.2
6	1.1	0.8
7	0.4	0.2
8	1.7	1.8

#Proportion correct not significantly different

Table 9: How many vegetables we should eat each day

	Pre test [#] (n=522) %	Post test [#] (n=501) %
1	0.6	0.0
2	5.7	4.2
3	5.2	4.4
4	5.6	5.2
5	78.5	82.6
6	1.9	1.0
7	0.6	0.2
8	1.9	2.4

#Proportion correct not significantly different



Health Education Principles

Significantly more students in the post survey compared to the pre survey were aware that they should wash their hands for 20 seconds before cooking (pre test 28% post test 70%), that there are four teaspoons of fat in a meat pie (pre test 18% post test 55%), and that there are 10 teaspoons of sugar in a can of cola (pre test 28% post test 76%). (Table 10 to 12).

Table 10: How long should you wash your hands for before cooking

	Pre test (n=530) %	Post test (n=502) %	
5 seconds	7.0	2.6	
10 seconds	25.7	11.8	
20 seconds (correct answer)	27.7**	69.7 **	↑
30 seconds	29.1	13.5	
Don't know	10.6	2.4	

** $p < 0.01$

Table 11: How many teaspoons of fat are in a meat pie

	Pre test (n=520) %	Post test (n=272) %	
1 teaspoon	1.7	0.5	
2 teaspoons	10.4	5.9	
3 teaspoons	27.3	20.5	
4 teaspoons (correct answer)	17.5**	54.9**	↑
Don't know	43.1	18.3	

** $p < 0.01$

Table 12: How many teaspoons of sugar are in a can of cola

	Pre test (n=529) %	Post test (n=375) %	
1 teaspoon	1.1	0.3	
5 teaspoons	14.2	4.8	
10 teaspoons (correct answer)	28.5**	76.3**	↑
15 teaspoons	33.8	13.1	
Don't know	22.3	5.6	

** $p < 0.01$



Students were given a list of 18 foods/drinks and asked to indicate where on the food pyramid the food/drink should be placed i.e. consumed 'most', 'some', 'least'. As shown in Table 13, significant improvements in consumption knowledge were found with regard to vegetables, milk, meat, tuna, beans, bread, pasta, rice, and Weet-bix. Although the majority of students were able to identify that water should be consumed 'most', a significant decrease in awareness was found between the pre and post surveys. Overall, most students had trouble identifying how much pasta, rice or butter they should eat each day.

Table 13: For each food/drink, indicate if you should eat most, eat some or eat least each day

Food/Drink	Correct response (most, some or least)	Student responses		
		% Correct		
		Pre (n=532)	Post (n=532)	
Cheese	Some	70.5	73.7	
Vegetables	Most	80.3*	84.0*	↑
Fruit	Most	77.3	80.1	
Eggs	Some	72.0	73.3	
Soft Drink	Least	76.5	76.3	
Butter	Least	45.7	42.7	
Milk	Some	53.6**	63.5**	↑
Meat	Some	53.0**	66.9**	↑
Water	Most	88.3*	84.4*	↓
Lollies	Least	76.3	77.4	
Chocolate	Least	72.0	75.6	
Tuna	Some	57.7*	62.8*	↑
Beans	Most / Some	83.1*	89.1*	↑
Bread	Most	35.0**	55.8**	↑
Pasta	Most	23.3**	34.8**	↑
Rice	Most	30.6**	38.9**	↑
Hot Chips	Least	66.9	70.1	
Weet-bix	Most	46.1**	58.6**	↑

*Proportion correct significantly different $p < 0.05$ **Proportion correct significantly different $p < 0.01$



SUMMARY OF FINDINGS

- The vast majority of students enjoyed taking part in the Regional Food Sensations program and indicated that the program taught them about healthy food, how to cook healthy food and how to select healthy food to eat.
- Of the variety of foods cooked in the sessions, most students had a preference for fried rice and fruit crumble cups.
- Most students in both the pre and post surveys thought that healthy food tasted good and were aware they should eat two fruit and five vegetables each day.
- Significant improvements in student knowledge were found regarding how long they should wash their hands for before cooking, how much fat is in a meat pie and how much sugar is in a can of cola. Significant improvements in consumption knowledge were found with regard to vegetables, milk, meat, tuna, beans, bread, pasta, rice, and weet-bix.
- With the exception of butter, pasta and rice, most students were able to correctly identify from a list of 18 foods/drinks, if they should eat the specified food/drink 'most', 'some' or 'least' each day. As students appear to be confused about the consumption of butter, pasta and rice and as a decrease in awareness was apparent regarding water, more time should be spent teaching students about these foods in the Regional Food Sensations sessions.

