

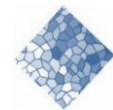
Food Literacy and Skill Development: Community & Intensive Program

2011-2012 Foodbank WA Report

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INTRODUCTION

The aim of the Food Literacy and Skill Development Program is to help Western Australian adults and families improve their ability to make appropriate eating decisions for good health and to increase the intake of healthy food consumed by those most vulnerable to poor nutrition. The Food Literacy and Skill Development Program, consists of: (1) the Food Literacy Intensive Program and (2) the Food Literacy Community Program. The sessions are tailored to meet the needs of participants and include a combination of topics, i.e. basic nutrition, food budgeting, menu planning, food label reading, preparation and cooking skills, portion sizing, food safety and food storage. In partnership with Foodbank WA, the Cancer Council WA is the lead agency for the community program and the Australian Red Cross is the lead agency for the intensive program.



Food Literacy: Intensive Program

The Food Literacy *Intensive Program* is based on (and adapted to) the needs of people from a variety of social and cultural backgrounds. The program is delivered to individuals or small groups over four or more sessions (1 to 3 hours in duration). The aim of the program is to increase the prevalence of healthy eating behaviours amongst low socioeconomic WA adults and families. The key target group of the intensive program are Western Australian adults/parents who are at risk of food insecurity or poor nutrition.

Food Literacy: Community Program

The Food Literacy *Community Program* is made up of an individual session or two/three comprehensive sessions. The program is delivered to adults/parents at risk of poor nutrition as a result of a lack of nutrition knowledge and skills. Like the intensive program, the aim of the community program is to increase the prevalence of healthy eating behaviours amongst low socioeconomic WA adults and families.

As part of its commitment to providing a community focused, relevant and high quality service, from the 31st October 2011 to the 30th June 2012, Foodbank WA evaluated both the Intensive and Community programs. The aim of the evaluation was to assess the effectiveness of these programs in terms of:

- Providing a program that was relevant and enjoyable to participants.
- Increasing participant knowledge and skills on a variety of nutrition and healthy eating topics as tailored to each participant group and encouraging the maintenance/increase of healthy eating behaviours.
- Encouraging the maintenance/improvement in participant attitudes towards healthy food.
- Increasing participant awareness of the benefits of a healthy diet, healthy weight, and the link between an unhealthy lifestyle and chronic disease risk.



METHOD

So as to assess changes in participant knowledge, attitudes and intended behaviour, before participating in the program, participants were asked to complete a short pre-program survey comprising 11 questions. At the end of each session or topic participants completed one of four post-program surveys depending on the information taught in their session.

Post program survey one comprised three questions (i.e. fruit and vegetable consumption knowledge, healthy snacks, foods that should be eaten most/some/least), survey two (reading a nutrition information panel, food budgeting) and survey three (frozen vs. fresh vegetables, product quality) each contained two questions and survey four comprised six questions (fats and oils, food safety, attitudes towards healthy food, enjoyment/relevance of the session, anticipated changes to their eating behaviour, healthy diet/weight and demographic questions).

Foodbank **FoodSensations**

**Adult Community Nutrition Program
Pre-Program Survey**

Q1. Name: _____

Q2. Please circle how many fruit you should eat each day?
Fruit 1 2 3 4 5 6 7 8

Please circle how many vegetables you should eat each day?
Vegetables 1 2 3 4 5 6 7 8

Q3. For each pair, please circle the healthy snack. If you are unsure, circle the unsure face.

Potato Chips	Banana	Unsure	Yoghurt	Chocolate bar	Unsure
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Q4. For each food or drink, tick the box to show if you should eat MOST, eat SOME or eat LEAST each day:

	<input type="checkbox"/> Most	<input type="checkbox"/> Some	<input type="checkbox"/> Least		<input type="checkbox"/> Most	<input type="checkbox"/> Some	<input type="checkbox"/> Least
	<input type="checkbox"/> Most	<input type="checkbox"/> Some	<input type="checkbox"/> Least		<input type="checkbox"/> Most	<input type="checkbox"/> Some	<input type="checkbox"/> Least
	<input type="checkbox"/> Most	<input type="checkbox"/> Some	<input type="checkbox"/> Least		<input type="checkbox"/> Most	<input type="checkbox"/> Some	<input type="checkbox"/> Least

Q5. Which column of the nutrition information panel would you look at to compare food? (Tick one box only)

Per 100g Per serving Unsure

PRE PROGRAM SURVEY

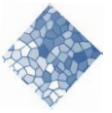
For each participant, pre and post program surveys were matched by name. Both the pre and post program surveys were designed so that they could be completed by people from a range of cultural backgrounds and literacy levels via the use of pictorial questions. The survey was pilot tested in the first three program sessions and the pictures/survey wording adjusted where necessary. As an interpreter was sometimes used in the sessions, “Interpreter Instructions” were developed to reduce the possibility of the interpreter “prompting” the class and biasing the evaluation.

A descriptive analysis was conducted for each question (overall and by type of program) and where appropriate significance testing conducted between matched pre and post survey responses (overall).

RESULTS

Program Participants

Overall, 467 people participated in the Food Literacy and Skill Development Program (160 intensive program and 307 community program). Participants were clients of 38 different organisations. Most participants were female (85%) and 18% identified themselves as being Aboriginal and/or Torres Strait Islander. In addition to Australia, the program was delivered to people from a range of countries (i.e. Afghanistan, Brazil, Burma, Canada, China, Egypt, Eritrea, Ethiopia, Hong Kong, Hungary, India, Indonesia, Iran, Iraq, Japan, Jordan, Kenya, Korea, Kurdistan, Lebanon, Liberia, Libya, Malaysia, Mali, Mauritius, Namibia, Nepal, New Zealand, Peru, Philippines, Poland, Romania, Russia, Rwanda, Saudi Arabia, Singapore, Somalia, South Africa, South Sudan, Sri Lanka, Sudan, Switzerland, Tanzania, Thailand,



Togo, Turkey, Ukraine, United Kingdom, USA, Vietnam and Zimbabwe). From the 31st October 2011 to the 30th June 2012, 130 sessions were run by Foodbank WA of which 108 sessions occurred in the metropolitan area and 22 sessions in regional areas.

Survey Respondents

Of the 467 people who participated in a session, 311 participants completed both a pre and post survey. Of those who completed both the pre and post surveys, 86% were female and 15% identified themselves as Aboriginal and/or Torres Strait Islander. The highest number of respondents indicated that their country or origin was Australia (38%). (Table 1a to 1c)

Table 1a: Gender

	Overall		Community (n=200)	Intensive (n=86)
	n	%	%	%
Male	39	13.6	16.0	8.1
Female	247	86.4	84.0	91.9
Total	286	100.0	100.0	100.0

**25 participants did not receive or respond to the question*

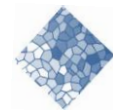
Table 1b: Country (n=311)

Country	n	%	Country	n	%	Country	n	%
Afghanistan	14	4.5	Kenya	2	.6	Saudi Arabia	1	.3
Australia	117	37.6	Korea	1	.3	Singapore	1	.3
Brazil	1	.3	Kurdistan	1	.3	Somalia	8	2.6
Burma	6	1.9	Lebanon	2	.6	South Africa	3	1.0
Canada	1	.3	Libya	1	.3	South Sudan	1	.3
China	6	1.9	Malaysia	3	1.0	Sri Lanka	1	.3
Eritrea	3	1.0	Mali	1	.3	Sudan	8	2.6
Ethiopia	7	2.3	Mauritius	3	1.0	Switzerland	1	.3
Hong Kong	1	.3	Not known	54	17.4	Thailand	2	.6
Hungary	2	.6	New Zealand	7	2.3	Turkey	1	.3
India	2	.6	Peru	2	.6	Ukraine	1	.3
Indonesia	5	1.6	Philippines	4	1.3	UK	15	4.8
Iran	4	1.3	Poland	1	.3	Vietnam	5	1.6
Iraq	6	1.9	Romania	1	.3	Zimbabwe	1	.3
Japan	1	.3	Russia	1	.3			
Jordan	1	.3	Rwanda	1	.3			

Table 1c: ATSI

	Overall		Community (n=173)	Intensive (n=48)
	n	%	%	%
Yes	33	14.9	11.0	29.2
No	188	85.1	89.0	70.8
Total	221	100.0	100.0	100.0

**90 participants did not receive or respond to the question*



Program relevance and enjoyability

The vast majority of survey respondents enjoyed taking part in the program (99%), thought the program was relevant to them (96%) and indicated that they would use the knowledge/skills learnt in the session at home (99%). (Table 2 to 4)

Table 2: I enjoyed taking part in the program (q11c post survey)

	Overall		Community (n=81)	Intensive (n=16)
	n	%	%	%
Agree	96	99.0	98.8	100.0
Unsure	1	1.0	1.2	0.0
Disagree	0	0.0	0.0	0.0
Total	97	100.0	100.0	100.0

**214 participants did not receive or respond to the question*

Table 3: The class was relevant to me (q11e post survey)

	Overall		Community (n=79)	Intensive (n=16)
	n	%	%	%
Agree	91	95.8	94.9	100.0
Unsure	3	3.2	3.8	0.0
Disagree	1	1.1	1.3	0.0
Total	95	100.0	100.0	100.0

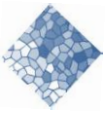
**216 participants did not receive or respond to the question*

Table 4: I will use the knowledge/skills learnt in today's class at home (q11d post survey)

	Overall		Community (n=81)	Intensive (n=16)
	n	%	%	%
Agree	96	99.0	98.8	100.0
Unsure	1	1.0	1.2	0.0
Disagree	0	0.0	0.0	0.0
Total	97	100.0	100.0	100.0

**214 participants did not receive or respond to the question*





Participant knowledge and skills

Overall, significantly more participants in the post survey compared to the pre survey were aware that they should eat two fruit (pre survey 58%, post survey 80%) and five vegetables (pre survey 57%, post survey 82%) each day. (Table 5a and 5b)

Table 5a: How many fruit should you eat each day (Q2a)

Fruit	Overall (n=243)		Community (n=173)		Intensive (n=70)	
	Pre [#] %	Post [#] %	Pre %	Post %	Pre %	Post %
0	0.4	0.0	0	0.0	1.4	0.0
1	4.5	1.6	4.0	2.3	5.7	0.0
2	58.0	79.8	56.6	76.9	61.4	87.1
3	19.8	11.1	21.4	12.1	15.7	8.6
4	8.6	4.5	9.8	5.8	5.7	1.4
5	8.2	2.9	7.5	2.9	10.0	2.9
6	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0
8	0.4	0.0	0.6	0.0	0.0	0.0

p<0.01

Table 5b: How many vegetables should you eat each day (Q2b)

Veg	Overall (n=241)		Community (n=172)		Intensive (n=69)	
	Pre [#] %	Post [#] %	Pre %	Post %	Pre %	Post %
0	0.0	0.0	0.0	0.0	0.0	0.0
1	2.1	0.8	1.7	1.2	2.9	0.0
2	10.4	2.9	9.3	2.9	13.0	2.9
3	17.8	5.4	20.9	7.0	10.1	1.4
4	7.9	5.8	8.1	5.8	7.2	5.8
5	56.8	82.2	54.7	79.7	62.3	88.4
6	2.5	2.5	3.5	2.9	0.0	1.4
7	0.8	0.4	0.6	0.6	1.4	0.0
8	1.7	0.0	1.2	0.0	2.9	0.0

p<0.01

Participants were given a list of six foods/drinks and asked where on the healthy food pyramid the food/drink should be placed i.e. consumed 'most', 'some', 'least'. As shown in Table 6, significant improvements in consumption knowledge were found with regard to meat, vegetables, bread, water and butter.

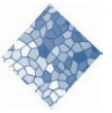


Table 6: For each food/drink, indicate if you should eat most, eat some or eat least each day

Food/Drink	Correct response (most, some or least)	Participant responses		
		n	% Correct	
			Pre	Post
Meat	Some	267	74.2	83.1** ↑
Vegetables	Most	269	91.4	96.3* ↑
Soft Drink	Least	269	88.1	92.2
Bread	Most	270	23.3	60.7** ↑
Water	Most	269	92.2	96.3* ↑
Butter	Least	268	67.9	75.4** ↑

* $p < 0.05$ ** $p < 0.01$

Food/Drink	Community			Intensive		
	n	% Correct		n	% Correct	
		Pre	Post		Pre	Post
Meat	197	74.6	83.8	70	72.9	81.4
Vegetables	197	89.9	95.4	72	95.8	98.6
Soft Drink	198	85.9	89.9	71	94.4	98.6
Bread	199	22.1	61.3	71	26.8	59.2
Water	196	91.3	95.9	73	94.5	97.3
Butter	198	64.6	72.7	70	77.1	82.9

In both the pre and post surveys, the vast majority of respondents were able to identify that a banana (pre survey 99%, post survey 99%) or a small tub of yoghurt (pre survey 98%, post survey 99%) were healthier snacks than potato chips or chocolate respectively, and were able to read a price tag so as to ascertain which size product was the cheapest/best value to buy (pre survey 91%, post survey 93%). (Table 7a, 7b and 8).

Table 7a: Circle the healthy snack (Q3a)

	Overall (n=247)		Community (n=177)		Intensive (n=70)	
	Pre [#] %	Post [#] %	Pre %	Post %	Pre %	Post %
Potato Chips	1.2	1.2	1.1	1.7	1.4	0.0
Banana	98.8	98.8	98.9	98.3	98.6	100.0

[#] Proportion correct not significantly different

Table 7b: Circle the healthy snack (Q3b)

	Overall (n=246)		Community (n=175)		Intensive (n=71)	
	Pre [#] %	Post [#] %	Pre %	Post %	Pre %	Post %
Yoghurt	98.0	98.8	97.7	98.3	98.6	100.0
Chocolate	2.0	1.2	2.3	1.7	1.4	0.0

[#] Proportion correct not significantly different

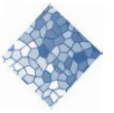


Table 8: Please circle the price tag for the rice which is the cheapest to buy (Q6)

	Overall (n=139)		Community (n=82)		Intensive (n=57)	
	Pre [#] %	Post [#] %	Pre %	Post %	Pre %	Post %
Sunrise Long Grain Premium Rice 2kg \$5.55 (\$0.28 per 100g)	90.6	92.8	91.5	96.3	89.5	87.7
Sunrise Long Grain Premium Rice 500g \$1.72 (\$0.34 per 100g)	9.4	7.2	8.5	3.7	10.5	12.3

#Proportion correct not significantly different

Respondents were asked which column of a nutrition information panel they should look at to compare different types of food and if frozen vegetables contain as many vitamins/minerals as fresh vegetables. Significantly more participants in the post survey compared to the pre survey were aware that they should look at the “per 100g” column of the nutrition information panel when comparing food (pre survey 48%, post survey 83%) and were aware that fresh and frozen vegetables contain the same amount of vitamins/minerals (pre survey 62%, post survey 95%). (Table 9 and 10)

Table 9: Which column of the nutrition information panel would you look at to compare food (Q5)

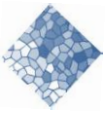
	Overall (n=163)		Community (n=102)		Intensive (n=61)	
	Pre [#] %	Post [#] %	Pre %	Post %	Pre %	Post %
Per 100g	48.5	82.8	49.0	80.4	47.5	86.9
Per serving	51.5	17.2	51.0	19.6	52.5	13.1

p<0.01

Table 10: Do frozen vegetables contain as many vitamins and minerals as fresh vegetables (Q7)

	Overall (n=151)		Community (n=96)		Intensive (n=55)	
	Pre [#] %	Post [#] %	Pre %	Post %	Pre %	Post %
Yes	62.3	95.4	69.8	96.9	49.1	92.7
No/Unsure	37.7	4.6	30.2	3.1	50.9	7.3

p<0.01



Overall, a similar proportion of respondents in the pre and post surveys identified that Weetbix and generic branded wheat biscuits were nutritionally the same quality. It was noted however, that some respondents thought that generic wheat biscuits tasted different to Weetbix and therefore were unwilling to accept that the quality was the same. (Table 11)

Table 11: Please circle the product that you think is the better quality (Q8)

	Overall (n=127)		Community (n=76)		Intensive (n=51)	
	Pre [#]	Post [#]	Pre	Post	Pre	Post
	%	%	%	%	%	%
They are both the same quality	55.1	60.6	67.1	57.9	37.3	64.7
Weetbix or generic wheat biscuits	44.9	39.4	32.9	42.1	62.7	35.3

#Proportion correct not significantly different

As shown in Table 12, the vast majority of respondents in both the pre and post surveys were able to identify that olive oil was a healthier fat/oil than butter (pre survey 95%, post survey 98%).

Table 12: Please circle the healthier fat or oil (Q9)

	Overall (n=129)		Community (n=79)		Intensive (n=50)	
	Pre [#]	Post [#]	Pre	Post	Pre	Post
	%	%	%	%	%	%
Olive oil	94.6	97.7	92.4	96.2	98.0	100.0
Butter/Unsure	5.4	2.3	7.6	3.8	2.0	0.0

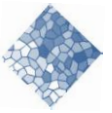
#Proportion correct not significantly different

Significantly more respondents in the post survey (92%) compared to the pre survey (80%) were aware that using the fridge instead of the kitchen bench was the safest way to defrost meat. (Table 13)

Table 13: Please circle the safest way to defrost meat? (Q10)

	Overall (n=66)		Community (n=22)		Intensive (n=44)	
	Pre [#]	Post [#]	Pre	Post	Pre	Post
	%	%	%	%	%	%
Fridge	80.3	92.4	86.4	95.5	77.3	90.9
Kitchen bench /Unsure	19.7	7.6	13.6	4.5	22.7	9.1

p<0.05



Participant attitudes towards healthy food

As shown in Table 14a and 14b, the vast majority of respondents, in both the pre and post surveys, thought that healthy food tasted good (pre survey 93%, post survey 96%) and that eating healthy food was important to them (pre survey 96%, post survey 99%).

Table 14a: Healthy food tastes good (q11a)

	Overall (n=117)		Community (n=88)		Intensive (n=29)	
	Pre# %	Post# %	Pre %	Post %	Pre %	Post %
Agree	93.2	95.7	95.5	95.5	86.2	96.6
Unsure/ Disagree	6.8	4.3	4.5	4.5	13.8	3.4

Proportion correct not significantly different

Table 14b: Eating healthy food is important to me (q11b)

	Overall (n=120)		Community (n=91)		Intensive (n=29)	
	Pre# %	Post# %	Pre %	Post %	Pre %	Post %
Agree	95.8	99.2	94.5	98.9	100.0	100.0
Unsure/ Disagree	4.2	0.8	5.5	1.1	0.0	0.0

Proportion correct not significantly different

Participant awareness of the benefits of a healthy diet, healthy weight and the link between an unhealthy lifestyle and chronic disease

Overall, the vast majority of respondents suggested that the program made them think about eating a healthy diet (98%), being a healthy weight (98%) and encouraged them to consider the link between what they eat and their health (98%). (Table 15a to 15c)

Table 15a: Did the program make you think about eating a healthy diet (q12a post survey)

	Overall		Community (n=58)	Intensive (n=32)
	n	%	%	%
Yes	88	97.8	100.0	93.8
Unsure	2	2.2	0.0	6.3
No	0	0.0	0.0	0.0
Total	90	100.0	100.0	100.0

*221 participants did not receive or respond to the question

Table 15b: Did the program make you think about being a healthy weight (q12b post survey)

	Overall		Community (n=59)	Intensive (n=32)
	n	%	%	%
Yes	89	97.8	100.0	93.8
Unsure	1	1.1	0.0	3.1
No	1	1.1	0.0	3.1
Total	91	100.0	100.0	100.0

*220 participants did not receive or respond to the question

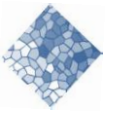


Table 15a: Did the program make you think that what you eat can affect your health (q12c post survey)

	Overall		Community (n=58)	Intensive (n=32)
	n	%	%	%
Yes	88	97.8	100.0	93.8
Unsure	2	2.2	0.0	6.3
No	0	0.0	0.0	0.0
Total	90	100.0	100.0	100.0

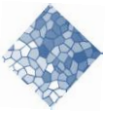
**221 participants did not receive or respond to the question*

As a result of participating in the program, most respondents specified they would make changes to their diet, including eating less sugar (80%), eating plenty of vegetables (79%), eating plenty of fruit (77%) and eating less salt (74%). (Table 16)

Table 16: Please tick the changes you will make to your diet as a result of taking part in this program (q13 post survey)

	% Respondents (n=77)
Eat less sugar	80.5
Eat plenty of vegetables	79.2
Eat plenty of fruit	76.6
Eat less salt	74.0
Reading nutrition information labels, shopping wisely	10.4
Eat less fat, oil	5.2
Other	3.4
Eat less packaged food	2.6
More wholemeal/fibre	2.6
Drink more water	2.6
Eat a healthy balanced diet	2.6
Use the recipes given in the session	1.3
Smaller food/meal portions	1.3

**Multiple response question; 234 participants did not receive or respond to the question*



SUMMARY OF FINDINGS

- Foodbank WA was successful at delivering a program that was relevant and enjoyable to participants.
- Foodbank WA was effective at increasing participant knowledge and skills on a variety of nutrition and healthy eating topics, for example:
 - significantly more participants in the post survey compared to the pre survey were aware they should eat two fruit and five vegetables each day; that fresh/frozen vegetables contain the same amount of vitamins/minerals and were able to identify that olive oil was a healthier fat/oil compared to butter;
 - significantly more participants in the post survey compared to the pre survey showed improvements in consumption knowledge regarding foods they should eat most, some, least;
 - significantly more participants in the post survey compared to the pre survey were able to correctly read a nutrition information panel to compare food; and
 - significantly more participants in the post survey compared to the pre survey showed improvements in food safety knowledge.
- In both the pre and post surveys, the majority of respondents maintained very positive attitudes towards healthy food and eating healthy food.
- The majority of respondents specified that the program made them think about eating a healthy diet, being a healthy weight and encouraged them to consider the link between an unhealthy lifestyle and chronic disease.
- Overall, the vast majority of respondents indicated they would use the knowledge/skills learnt in the sessions at home and would try to make healthy changes to their diet as a result of participating in the program (e.g. eating less sugar and salt; eating plenty of fruit and vegetables).