



**FIGHTING HUNGER  
IN AUSTRALIA**

**FUEL YOUR FUTURE PILBARA PILOT REPORT**

**FOODBANK WA  
REGIONAL STRATEGY  
2016**

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## EXECUTIVE SUMMARY

Foodbank WA's *Fuel Your Future* (FYF) adolescent program was successfully delivered to disadvantaged adolescents in the Perth metropolitan area, under Australian Government funding from 2012. However funding ended in June of 2015 leaving a gap in nutrition education services for adolescents across Western Australia (WA). Foodbank WA sought funding from other sources to continue program delivery and in January 2016, funding from BHP Billiton was obtained to introduce FYF to the Pilbara region of WA as part of a 5 year strategy. As such, a comprehensive pilot project was undertaken to develop a regional-appropriate version of the FYF adolescent program, to be implemented in regional and remote areas of the Pilbara region. A Literature Review and a Needs Assessment pre-questionnaire helped to guide an initial Review of Resources including workshop guides, activities and promotional resources from the original FYF program.

Findings from the Literature Review, Needs Assessment and Stakeholder Feedback provided data to help inform the program structure, activity resources, target group needs, engagement strategies and organisational considerations. Pilot sessions were conducted to test the functionality, suitability and effectiveness of the FYF program over two regional trips. Highlights from the findings suggested the program would be successful if it incorporated a hands-on approach to cooking and nutrition activities. Recommendations suggested the structure of the program should allow for 80-120 minutes of contact time in a 4-series workshop format. Consequently on a series of 4 workshops were delivered during the pilot project. Workshops were conducted in youth centres and schools in Hedland, Warralang and Yandeyarra with a total of 46 adolescents and 9 stakeholders engaged in the 7 workshops. Stakeholder Feedback was collected after the Pilot Sessions to gain insights around the suitability and effectiveness of the modified program for the target group.

A number of recommendations have resulted from the pilot for example, the program should consider the importance of hands-on, curriculum linked activity resources that meet the needs of low literacy groups. Activities such as Goal Setting should be delivered as a group exercise and be reflected on at the end of the workshops. Cooking Demonstrations were identified as an effective and engaging way to teach nutrition concepts and skills to the target audience, providing a positive social aspect with peers. Identified was the importance of considering using a combination of fresh, canned and frozen ingredients in recipes especially in remote areas. Working in groups of 2-4 was considered the most effective method during the cooking component of workshops and promote autonomy. For resources

to be effective for low literacy groups, recipe cards need to incorporate step-by-step pictorial instructions.

Engagement strategies that include prizes with recipes and ingredients were identified as being an effective way of engaging the target audience after the completion of the session. Incorporating Educator Training for teachers and youth workers with limited nutrition education experience into the program was considered as an effective strategy to ensure key concepts taught are being reinforced after the completion of Workshops. Contrary to findings from the literature, online strategies used in the original FYF program proved unfavorable amongst the target group therefore, the Pilbara pilot did not include these strategies. Finally, to improve the FYF program further and to support other health focused organisations, Foodbank WA will consider collaboration with those organisations that service the communities in which the program is delivered.

With the findings from the below report, it is anticipated an adapted FYF program will successfully be implemented into the Pilbara region of WA as part of a 5 year strategy.

## INTRODUCTION

Foodbank is Australia's largest food relief organisation, providing 60 million meals a year to over 2,400 charities around the country. Although the main focus of the organisation is food security and procurement, Foodbank WA has a strategic pillar focussed on providing nutrition education to disadvantaged individuals through the *Healthy Food For All* business unit. Foodbank WA's *School Breakfast Program (SBP)* and *Food Sensations®* initiatives aim to promote healthy eating and lifestyle behaviours to disadvantaged groups.

In 2012, Foodbank WA received funding from the WA Department of Health to develop a food literacy and cooking program. The proposed program was to be designed specifically to engage adolescents who were disengaged from mainstream school and supporting those adolescents from disadvantaged backgrounds. *Fuel Your Future (FYF)* was developed to provide adolescents with practical skills and knowledge relating to cooking and nutrition topics. The program was run in partnership with Diabetes WA, who employed a coordinator to overlook the social media innovation aspect. FYF was successfully delivered by Foodbank WA public health nutritionists throughout the Perth metropolitan area. The program was run with a range of disadvantaged, disengaged adolescents who attended youth organisations, during and after school and alternative education at high schools.

On 30<sup>th</sup> June 2015, funding for FYF ceased creating a gap in nutrition education services for adolescent services throughout Western Australia (WA). However, FYF proved to be an effective and successful food literacy program for the adolescent target group and therefore Foodbank WA sought funding from BHP Billiton to continue program delivery. In January 2016, Foodbank WA received funding from BHP Billiton to continue and expand services, providing an opportunity for two new programs (*Fuel Your Future* and *Food Sensations® for Parents*) to be introduced to the Pilbara region of WA as part of a 5 year strategy. Foodbank WA has been proudly supported by BHP Billiton since 2011, to support communities throughout the Pilbara region including the areas of; Jigalong, Kunawarritji, Marble Bar, Newman, Nullagine, Parnngurr, Port Hedland, Punmu, South Hedland, Strelley, Warralang and Yandeyarra. These programs in the past included the School Breakfast Program, *Food Sensations®* in Schools and *Food Sensations®* Educator Training.

As the first funder and owner of FYF, the WA Department of Health hold the Intellectual property rights of the program. Therefore, Foodbank WA entered into a license agreement with Department of Health to deliver FYF in the Pilbara region under BHP Billiton funding.

FYF was originally developed as a 6-series program for an adolescent target group based in the Perth Metropolitan region. With the new funding specifically for the Pilbara region, Foodbank WA identified the need to undertake a pilot project to adapt the program for a target audience based in regional and remote locations in the Pilbara region. The pilot was delivered over a six month period, involving teachers, youth workers, health professionals and youth.

The overall aim of the pilot was to develop a regional-appropriate version of the FYF adolescent program, specifically the for regional and remote areas of the Pilbara region. The following objectives were developed to help guide the pilot project.

## **METHOD**

To ensure the Pilbara FYF program met the needs of the target group in the region, Foodbank WA aimed to adequately consult the target group and relevant stakeholders. As such a comprehensive pilot project was undertaken and the FYF pilot project was directed through five stages; a Literature Review, Needs Assessment, Review of Resources, Pilot Sessions and Stakeholder Feedback.

## **OBJECTIVES**

The objectives below were developed to help guide the pilot project:

1. To conduct a Literature Review of nutrition, cooking and food literacy programs that have been conducted in regional and remote areas.
2. To conduct a Needs Assessment with staff members from youth organisations, schools and health organisations working with youth in the Pilbara region of Western Australia via phone interviews.
3. To review and amend current FYF workshop resources to ensure their suitability for regional areas.
4. To conduct a series of pilot workshops with five youth groups in Yandeyarra, Hedland, Marble bar, Warralong and Nullagine.
5. To collect stakeholder and participant feedback, through informal face-to-face discussions groups and interviews.

A summary of each element of the methodology is outlined below.

## **LITERATURE REVIEW**

It was identified that a Literature Review needed to be conducted as the first step in the Pilbara pilot to ensure any program modifications followed best practise and aligned with current literature. In the development of the original FYF program an intensive Literature Review was undertaken by Curtin University. A comprehensive report was produced from this Literature Review (Curtin University, 2014) and was included as the main literature source to inform the Pilbara pilot. In addition, grey literature from the original FYF program (i.e. Final Research Evaluation Report, Edith Cowan University 2015) was included in the Literature Review. The Literature Review was predominantly intended to help guide program implementation, looking specifically at program structure, activity resources and engagement strategies.

## **NEEDS ASSESSMENT**

In order to address the specific needs of the target group a Needs Assessment was undertaken with stakeholders. The key stakeholders that were engaged for the Needs Assessment included teachers, youth workers and health professionals with the intention that the program would be delivered within their organisations (schools/youth centres). A two page written questionnaire (see Appendix 1) was developed to capture information regarding target group needs and organisational considerations to help guide, workshop structure, activity resources, and engagement strategies.

## **REVIEW OF RESOURCES**

The original FYF program was designed as a 6-series workshop model previously delivered in the Perth metropolitan area. This model was deemed not suitable for regional program delivery implementation and the decision was made to alter the program structure to align with the regional travel calendar. In order to keep the program's integrity, as well as include modifications, the program was condensed to a 4-series workshop model.

A comprehensive review of workshop guides (1-6) was undertaken by Foodbank WA to guide the program modifications. To assist with the review process Foodbank WA Public Health Nutritionists were also consulted to gain insight into appropriate modifications for the target group. The following resources were reviewed;

- Workshop guides
- Activity resources
- Engagement strategies

- Promotional resources

## PILBARA PILOT SESSIONS

Pilot sessions were implemented to test the functionality, suitability and effectiveness of the FYF program. All four workshops required testing during the Pilbara pilot within a mix of schools and youth centres, in both regional and remote settings. The pilot sessions were planned over two regional trips to Yandeyarra, Nullagine, Marble Bar and Hedland, with the intention to engage at least 20 adolescents.

Recruitment of schools was directed by Foodbank WA's already existing partnerships via the School Breakfast and Food Sensations® programs. Foodbank WA's community connections were predominately bound to the school setting as the main beneficiaries of their services. As relationships with youth centers in the Pilbara region did not exist, existing youth services in the Pilbara region were researched and contacted.

Facilitator observations were made by Foodbank WA's staff from each workshop piloted which informed changes to be made if required.

## STAKEHOLDER FEEDBACK

Stakeholder Feedback was collected from stakeholders who attended and observed the Pilbara pilot sessions which provided insights into each workshops suitability for the target group. Before contact with relevant stakeholders could be made, Foodbank WA was given consent from the Department of Education to conduct evaluation on department premises. It was intended that Stakeholder Feedback would be collected from 6-8 participants from the Pilbara pilot sessions.

Stakeholders were contacted via email or phone to arrange the pilot sessions and to request involvement. A two page written questionnaire (see Appendix 2) was developed and included questions regarding the suitability of the following areas;

- Workshop structure, including timing
- Activity resources
  - Nutritional activities, including topics of interest
  - Cooking demonstrations
  - Recipes, including recipe card design
  - Goal Setting activity
  - Supporting resources
- Engagement strategies
  - Prizes, including the existing head chef prize box and its contents

- Organisational considerations, including partnership opportunities.

## RESULTS

### LITERATURE REVIEW

A comprehensive Literature Review completed by Curtin University (2014) for the original development of the FYF program was drawn upon as the main literature source for the Pilbara pilot project. Furthermore, findings from the *Final Research Evaluation Report* (Edith Cowan University, 2015) from the original FYF program was reviewed. Key themes from the intervention analysis of the report have been summarised below and were a major informant in the Pilot project.

#### PROGRAM STRUCTURE

Flexibility and informal program nature was viewed as a positive factor when it came to such adolescent targeted programs. It was reported that, adolescent cooking and food literacy programs should include a minimum of four workshops with at least six hours total duration (Curtin University, 2014). Locations such as schools and youth centres were viewed as the most effective settings to deliver programs to the target group as they provide a comfortable environment that adolescents are familiar with (Curtin University, 2014).

#### *Duration*

The duration of the workshops is an important factor for participant knowledge and skill retention, it is recommended that workshops run for a minimum of 80 minutes, with a maximum time of 2 hours duration. However, if the latter timeframe is used, the most effective method proved to be incorporating 5-10 minute breaks. It was suggested that allowing time for adolescents to re-energise with short breaks increased their focus and engagement (Curtin University, 2014). Considerations for high school groups was mentioned as an important factor, offering flexibility in session times (e.g. 80 minute sessions opposed to 120 minutes), as this timeframe suits the structure of the school setting.

#### ACTIVITY RESOURCES

According to Curtin University (2014) it is important for activities covered in the program to be relevant for adolescents and appropriate depending on the location of the participants they are delivered too. Activities are most effective when they engage and support hands-on learning experiences. Where possible linking nutrition activities to the current Australian National Curriculum (Health and PE) including support materials is beneficial for continuing

nutrition messages being reinforced after the programs completion. Furthermore, considerations should be made for gender specific programmes and target groups such as; CALD, Aboriginal or Torres Strait Islander communities when developing program materials (Curtin University, 2014). A common theme in the literature, was the importance to assess and consider the literacy levels of the target group, relating to printed materials being appropriate reading format and comprehensibility.

### *Goal Setting*

Guided goal setting where the facilitator works with participants to develop minor and major goals they would like to achieve in the workshop was viewed as a beneficial way to instil self-efficacy. However an important point was noted regarding the delivery method of this type of activity. Recommendations suggested delivering the activity as a group exercise rather than individually, addressing set goals at the end of each session and reflecting on what skills participants feel they have achieved or need to focus on next time (Curtin University, 2014).

### *Cooking Demonstrations*

Cooking Demonstrations were reported as effective teaching methods to be included in food literacy programs for participants to learn key cooking skills. It is important that this element of the program employs principles of experiential learnings, engaging adolescents with food literacy skills and providing them with the chance to acquire skills through experimentation with different food products (Curtin University, 2014). This aspect of the program received positive feedback in the *Final Research Evaluation Report* (Edith Cowan University, 2015) as this aspect of the program proved to provide an engaging way to teach abstract nutrition concepts with adolescents and helped with their confidence to proceed with recipes by themselves (Edith Cowan University, 2015).

*“It’s OK to have a recipe but sometimes you aren’t really sure how to do it unless you’ve seen someone do it. If you can’t read the recipe, you can remember what the facilitator did.” – FYF Metropolitan participant*

### *Recipes*

According to the literature effective adolescent food literacy programs aimed at being delivered in regional and remote areas need to consider the access participants have to fresh fruits and vegetables. Incorporation of a combination of fresh, canned or frozen ingredients and alternatives should be considered. Furthermore, recipes that are easily

made at home using minimal equipment are favourable. Participants need to feel they have the ability to prepare the meals after the programs finished if the program is going to have an impact on behaviour change (Curtin University, 2014).

Cooking in group situations (2-4 participants per group) with recipes focusing on feeding a family or more than two persons at once, was shown as a positive influence in skill building and enjoyment. The use of a combination of recipe styles, e.g. written and pictorial step-by-step instructions, was most effective as it allows for increased readability for low literacy groups. In addition, recipe cards are effective when they include pictures and words outlining what ingredients and equipment are needed and how to make the recipe with a shot of the final product; allowing participants to have a better understanding of what their recipe should look like (Curtin University, 2014). The *Final Research Evaluation Report* (Edith Cowan University 2015) emphasised the positive impact pictorial recipe cards have on participant's confidence.

*“It’s helped my confidence with reading instructions.”*

*- FYF Metropolitan participant*

### *Experiential Learning*

Including opportunities for experiential (hands-on) learning was a key factor to the success of food literacy programs, offering a range of practical food-related settings such as gardens, encourages self-efficacy for increased food preparation skills (Curtin University, 2014).

## **ENGAGEMENT STRATEGIES**

### *Peer Influence*

Positive social contact with peers and group support was found to be a key factor in the recruitment and retention of youth in health programs. Utilising peer advocacy throughout program delivery has shown to be an effective method for the promotion of healthy eating and positive behaviour change (i.e. changes with school lunches) (Curtin University, 2014).

### *Prizes*

The most effective programs were those that involved providing incentives such as certificates, prizes or the chance to cook for free food (Curtin University, 2014). Evaluation of FYF (Edith Cowan University 2015), highlighted that teachers viewed the Head Chef prize as being a great accompaniment to the program. In the context of adolescents still living at

home, it provided a talking point about food and their classroom work. Having all the ingredients for the recipe included in the box was more conducive to parents and adolescents having an attempt at food preparation (Edith Cowan University, 2015).

#### *Educator Training*

The literature highlighted the need to provide training to educators who have little or no experience in teaching nutrition concepts. However a key finding was the lack of detail on formative research or evaluation of such training. Manuals had previously been developed with the intention to provide this training and information with limited evaluation on their effectiveness. Although it was noted that programs should still have a focus on providing training to non-nutrition professionals that provide them with ideas of incorporating nutrition into their work with adolescents (Curtin University, 2014).

#### *Online Strategies*

The incorporation of technology (i.e. online websites and social media) in nutrition education programs for adolescents was suggested as an effective strategy in engaging the target group. Computer-based nutrition education activities had been demonstrated as preferred and more effective methods to elicit behaviour change amongst adolescents (Curtin University, 2014). Contrary to these findings, Edith Cowan University (2015) found that online engagement strategies used in the original FYF program to not be an effective method for the adolescent target group, with limited adolescents accessing the website or social media components of the program.

## **NEEDS ASSESSMENT**

Teachers completed the pre questionnaire. Unfortunately a limited time frame for a review process of FYF meant that delivering pilot sessions was given priority and therefore a short timeframe was available for the Needs Assessment to be conducted. Due to the limited participation from stakeholders in the Needs Assessment, it is difficult to draw out concrete conclusions that informed the Pilbara pilot. With prior experience working in the Pilbara region for over five years, Foodbank WA were able to utilise this knowledge to guide the Pilbara pilot. In addition, an informal Needs Assessment continued through relationship building with schools and youth centres in the Pilbara region during the first year of program implementation in which valuable information was gained.

The result highlights from the completed questionnaires have been collated and are summarised below.

## **TARGET GROUP NEEDS**

### *Cooking Experience*

It was identified that students had participated in cooking activities at school prior to the Pilbara pilot. These cooking sessions were in the form of Food Sensations® and weekly cooking classes. With this information considerations were made, to ensure the cooking activities in the FYF workshops can build upon existing skills. However, contrary to the original FYF program in which participants had little to no cooking experience and therefore the cooking activities needed to begin with very basic skills.

### *Workshop Structure*

Respondents specifically identified that workshops should be delivered in a maximum two hour block and with breaks should be limited as it was noted that they can cause disruptions.

### *Participant Engagement*

Stakeholders identified strategies that could be utilised in the program delivery to maximise engagement of participants. These strategies related to the communication of instructions, allowing some participant autonomy and supervision.

*“Giving responsibility and very explicit instructions. Directions should be short and precise, with small group supervision” - Teacher.*

These strategies will be considered in the delivery of the program. However it is acknowledged that the needs of each individual group can differ.

## **ORGANISATIONAL CONSIDERATIONS.**

### *Other health programs*

Respondents were asked if the organisation had participated in other health workshops to explore potential opportunities for collaboration. Two health organisations were identified, one of which Foodbank WA has an existing relationship (WA Country Health Service) and an unknown organisation that could be investigated further (Blackwood Tree) for potential collaboration opportunities.

## **REVIEW OF RESOURCES**

In the process of reviewing resources, considerations were made around all elements of the FYF program to ensure flexibility was integrated in each workshop. This is a key contributor

to the success of Foodbank WA's regional food literacy programs and therefore was important to incorporate into FYF.

## **WORKSHOP GUIDES**

Due to the change in the FYF program structure six workshops needed to be condensed into a 4-series workshop structure. From the review, Workshops 5 and 6 had no new nutrition content or skill building elements and were used as a way to recap the information delivered and build upon skills learned in Workshops 1-4. Therefore, Workshops 5 and 6 were removed from the programs structure and the key elements from these Workshops were built into Workshops 1-4. Refer to Appendix 3 for the Workshop Overview.

## **ACTIVITY RESOURCES**

### *Workshops*

The review of the activity resources outlined a need for Workshops 3 and 4 to be modified, with no major changes to Workshops 1 and 2.

The original FYF program had one activity in Workshop 3 to address food investigation principles (*Sugar in Drinks*), and one activity in Workshop 5 to address label reading (*Food Label Reading*). It was identified that Foodbank WA's existing nutrition education activity, *Homemade vs. Takeaway*, integrated both label reading and food investigation principles, therefore this activity was built into Workshop 3.

The original nutritional activity for Workshop 4 addressed food storage through the Food Friendly Fridge activity. This activity provided important skills and learning outcomes for participants. However, it needed to be broadened for remote target groups who often need to transport food for long periods of time. Therefore the activity was modified to include the safe transport of foods from purchase to storage, as such the Food Friendly Transport and Storage activity was created.

### *Goal Setting*

The original FYF program included a journal that participants used and referred to each workshop. The journal was considered inappropriate for the target group. However, one element of the journal (*Goal Setting activity*) was deemed to be important to encourage behaviour change and engagement, as per the literature. This activity was reproduced as a pictorial interactive worksheet.

### *Recipes*

Changes were made to recipes according to availability of ingredients in regional and remote settings, cooking practices and equipment available to the target group.

### *Logos*

Due to the change in funding source, workshop materials needed to have logos updated to reflect branding guidelines.

## **PROMOTIONAL RESOURCES**

### *Promotional Flyers*

Flyers were developed to promote the FYF program and provide further information regarding the Pilbara pilot and how organisations in the youth sector could get involved. Flyers were distributed via email to stakeholders who worked with the target group.

### *Booking Form*

The original FYF programs booking form was re-developed with slight modifications being made (i.e. updating logos and program structure). Once modifications were made the new booking form was sent via email to stakeholders who wished to participate in the Pilbara pilot.

### *Workshop Overview*

A workshop overview outlining all six workshops was developed for the original program. It was decided that this overview was a valuable resource for Foodbank and organisations to refer to as it outlines the recipes, activities and key learnings to be delivered at each workshop. The document was updated to include new funder logos and new program structure. Once relevant changes had been made the overview was disseminated via email to relevant stakeholders who could potentially be involved in the Pilbara pilot (see Appendix 3).

### *Guard their Future (Parent flyers)*

The original FYF program had flyers created for Workshop 1 to 6, which were distributed to parents or guardians as a way of reinforcing messages presented at the workshops. The flyers were handed to participants at the end of each workshop to pass on but they were often found left at the facility the session had run. It was decided that this promotional resource was not suitable to the target group.

## ENGAGEMENT STRATEGIES

### *Head Chef Prize*

To engage adolescents and retain interest the original FYF program involved a weekly Head Chef prize. This prize included a recipe card and the ingredients needed to make the recipe. The winner of the prize was chosen in the first week by the facilitators based on a participant who works diligently, tries hard, works well with others, contributes in discussions and demonstrates good time management. The winner was then asked to cook the recipe outside of the workshop time. The purpose of the prize was to create a sense of achievement and incentive amongst participants, with the hope of encouraging them to continue cooking after the workshops had ceased.

This element of the program was deemed successful in the workshops (Edith Cowan University, 2015) and it was recognised as an important element to continue in the Pilbara pilot. As a result the Head Chef Prize was delivered in all Pilbara pilot workshops.

### *Workshop 6 - Test your Knowledge Quizmaster*

In the final workshop of the original FYF program a quiz was conducted in a fun and engaging way. The questions asked were based on topics covered over the previous five workshops and were asked to see how much the participants had learnt throughout the workshops. Participants were broken up into four groups and pressed a buzzer when they had the answer, points were allocated and the group with the highest number of points was given a prize. This aspect of the workshops was successful and engaged the youth to reflect on their learnings. However due to modifications in the program structure only the integral activities were kept to ensure learning objectives were achieved. Instead after each Pilbara pilot session the facilitator asked participants to reflect on one to three learnings they would like to share from the session.

## SUPPORTING RESOURCES

### *Posters*

Posters developed for the original delivery of the FYF program required some essential changes to be made (i.e. funder logos and content updates) however these changes required action by a graphic designer. Due to the short timeframe and the potential for further changes for the Pilbara pilot, these updates were unable to happen prior to piloting commenced. Considerations will be made for posters to be implemented into the Pilbara FYF program beyond the Pilot project.

### *Website and Social Media*

A website was created for the original FYF program and was designed to be highly interactive, encouraging users to try, rate and comment on recipes, participate in activities and communicate with other website users. The website was closely linked to the FYF social media platforms Facebook and Instagram and users were encouraged to share website elements via social media. Unfortunately results from the Final Research Evaluation Report (Edith Cowan University, 2015) indicated limited engagement with all aspect of the website and social media platforms. Therefore this resource was not utilised or promoted in the Pilbara pilot.

## **PILBARA PILOT SESSIONS**

A total of 7 workshops were delivered to a combination of youth centres and schools in Hedland, Warralong and Yandeyarra. A total of 46 adolescents participated in the pilot sessions with 3 youth workers, 5 teachers and 1 community health professional who observed. The FYF workshops were piloted in the following settings:

- **Workshop 1:** Yandeyarra Remote Community School and Youth Involvement Council
- **Workshop 2:** Hedland Senior High School
- **Workshop 3:** Strelley Community School (Warralong campus) and JD Hardie Youth Centre
- **Workshop 4:** Yandeyarra Remote Community School

Those who observed the pilot sessions were asked to participate in the post session Stakeholder Feedback.

Contrary to the original Pilbara pilot plan, changes to the travel schedule meant that sessions were piloted in Strelley instead of Marble Bar and Nullagine.

### **FACILITATOR OBSERVATION**

The facilitator of the Pilbara pilot made observational notes after each workshop to reflect on functionality, suitability, effectiveness and engagement in each workshop.

**Workshop 1:** A great introductory session into the Australian Guide to Healthy Eating and basic cooking skills. This workshop was delivered to a school group who attend their classes on a regular basis. The timing of the session worked well and allowed for all activities to be delivered. The Glitterbug Hand Washing activity provided a genuine shock factor to participants and work well to deliver key food handling messages.

A success of the session was the cooking demonstration, this gave participants time to understand what processes to take whilst preparing food and allowed for organic discussions around food and nutrition. The pictorial Goal Setting worksheets were trialed in which they were well received and all adolescents participated. This activity gave participants some ownership over their abilities and their behavior throughout the session. Recipes were popular and had all been consumed by the end of the session. The structure worked well and allowed for breaks in theory and practical cooking skills.

**Workshop 2:** A workshop that starts to go beyond the surface of the Australian Guide to Healthy Eating. Workshop 2 starts to build upon the cooking skills introduced in Workshop 1. This workshop was delivered to the same group of adolescents who received Workshop 1 and delivered the following day. The portion/serving size component was a success and participants were often shocked with what 'an actual portion of food was'. Cooking in small groups and creating meals adolescents commonly enjoy consuming is a plus. Asking cooking groups to allocate team leaders and roles allowed for more skills to be built and provided a great group dynamic. The Head Chef Prize box was well received and provided great incentive to participants.

**Workshop 3:** This workshop was trialed in a youth centre with a disengaged group. However, the program activities and structure engaged the youth and kept them on task throughout the whole session. The Goal Setting activity worked well with this group as it provided them the skills to set themselves a task for the session and stay on track. A demonstration of cutting techniques was noted as a crucial element with this target group as many had never been in a kitchen before. The activity Homemade vs. Takeaway was trialed and worked well, many participants opened up about the types of foods they consume and how amazed they were by how unhealthy they actually are. Copies of the recipes were requested and it was noted that they be provided to participants after each workshop. Providing copies of recipes can be used as a way of encouraging and help guide the cooking skills learnt in the session being transferred into the home.

**Workshop 4:** Workshop 4 was trialed with a high school group who attended school on a regular basis. Many of the participants had previous cooking skills from the Food Sensations® program delivered by Foodbank WA. As this workshop is the final of the series it was trialed in a way that participants had greater responsibility over their recipes. In this session participants have the opportunity to learn skills by 'virtually shopping' for

their recipe ingredients in preparation for cooking. The activity Food Friendly - Transport and Storage, was trialed for the first time in this session. Participants responded well and engaged with the activity. Again the session structure and flexibility allowed for greater participant engagement. The head chef prize box was again well received and participants were excited to take it home to make.

## **STAKEHOLDER FEEDBACK**

A post session written questionnaire (see Appendix 2) was completed by a total of two teachers and one health professional who observed the sessions. Stakeholder Feedback was collected for Workshops 1, 3 and 4. There were limited responses to the Stakeholder Feedback and follow up was made on numerous occasions by phone and email. One challenge in this process was a high level of staff turnover in the youth sector which impacted responses.

The original plan of the Pilbara pilot was to seek feedback from adolescents. However due to the evaluation process, DOE required parent/guardian consent for any persons under the age of 18 years. This process proved challenging and time consuming as there was limited time and resources in the pilot period and therefore only Stakeholder Feedback was collected. An evaluation plan for FYF has been included in the first year of implementation with results available December 2016 (please refer to Pilbara Internal Evaluation Report 2016). The Pilbara pilot post questionnaire feedback from stakeholders is outlined below.

### **WORKSHOP STRUCTURE**

Overall respondents stated that the FYF program structure was suitable for the target group, with key points from Stakeholder Feedback having been collated below.

#### *Theory vs practical*

A positive aspect regarding the structure of the workshops was related to the combination of the theory and practical aspects of each workshop. It was noted, providing the target group with a combination of different teaching methods such as a hands-on style allowed for a more relaxed learning environment and catered for different learning styles.

*“The program includes a good mix of theory and cooking and the theory component is very good as it is hands on.” - Teacher*

#### *Duration*

Notable challenges to the duration of sessions were made throughout the different settings the Pilot Sessions were delivered. Flexibility for schools needs to be considered as a 2-hour timeframe is often unachievable as class times often run for 1-hour periods.

*“It could be a challenge for some groups to allow this amount of time, as class periods are often 60 minute blocks.” - Health professional*

## **ACTIVITY RESOURCES**

A total of four activities were trialled during the Pilbara pilot. All activities were successfully run with all groups. Being hands on and interactive was a positive aspect noted in the Stakeholder Feedback.

### *Activity Delivery*

It was stated in the feedback, the importance of ensuring participants are not singled out to answer questions, instead allowing time for participants to feel comfortable enough to share their thoughts and opinions. Ensuring activities are in a safe environment, through hands-on methods is the most effective way to keep adolescents engaged.

*“The activities were informative and hands - on.” - Teacher*

### *Recipes*

It was revealed that step-by-step recipe cards are the most preferred design. Having the ability to flip between a pictorial style recipe card and a regular recipe card as it allowed participants with low literacy skills to follow the recipe without feeling like they were being judged.

*“The recipe cards were suitable and having the pictured options works well for lower literacy groups.” - Teacher*

Recipes throughout all workshops were popular and it was noted by stakeholders that participants enjoyed being left in their groups to have some autonomy when creating their recipes such as when measuring out correct amounts of ingredients, making mistakes and learning how to adapt and fix them.

*“Recipes were great - pasta, curry & flat bread were the favorite.” - Teacher*

Whilst the majority of recipes were enjoyed, there were requests to remove two recipes. The savoury pikelets and mighty muffins (*Food Sensations®* recipes) were not popular amongst the adolescents and a healthy brownie or vegetable frittata were suggested replacements. Considerations of some recipes for remote communities was also mentioned.

*“Reducing the amount of ‘extra’ ingredients needed and keeping recipes simple using basic ‘common’ ingredients would be my suggestion.” - Teacher*

A common theme in the Stakeholder Feedback was around providing copies of recipes to participants after each workshop. Stakeholders often photocopied recipe cards to hand out to participants after the pilot sessions.

*“It would be good to have copies of the recipes for the youth, if they want to cook it at home.” - Teacher*

### *Goal Setting*

The goal setting component was trialled at each workshop with two different methods used.

#### *Method One:*

- Participants wrote down their goals and placed them in an anonymous box

#### *Method Two:*

- Participants used pictorial cards to help guide them when choosing their goals. For example, kitchen timer, reading a recipe, following instructions or working in teams was pictured. Participants then placed their chosen goal on their worksheet. This was then reviewed at the end of the workshop, allowing participants to feel a sense of accomplishment if they achieved their goals or something to work towards next time.

The preferred Goal Setting activity was Method Two as it allowed flexibility for the Goal Setting activity to be anonymous, whilst still ensuring to encourage the youth to share. The activity was most beneficial when the program facilitator participated and provided examples of goals, setting one main goal for the group to achieve was also found to be beneficial. At the end of each workshop the youth were asked to reflect on their individual goals. It was observed that allowing time for youth to decide whether they share their goals or not was favoured and not pushing or forcing participants to share if they wish not to created safety.

*“I really like this element of the workshops, and I think it is important for the students to set themselves an achievable goal. They really got on board with setting themselves something to achieve and were really proud of themselves when they could see at the end of the workshop they had achieved it. And even if they hadn’t they could see how they needed to improve, that’s really important for this group.” - Teacher*

#### *Glitterbug Hand Washing activity*

An activity that is hands on and gets participants engaged with learning hand washing practices, is the *Glitterbug Hand Washing* activity. The use of a ‘glitterbug’ hand cream was a successful way of incorporating hand hygiene into the pilot sessions.

*“A fun and engaging way to get youth participating in an otherwise ‘boring’ subject. It allowed youth to think about their hand washing techniques and the importance of hand washing when handling food.” - Teacher*

One teacher suggested, ensuring there was a dark space set-up to allow the full visual effect of the UV light on the hand cream to be seen by the youth, otherwise it was a great activity.

#### *Food, Friendly Transport and Storage activity*

The activity Food, Friendly Transport and Storage was trialed in the Workshop 4 pilot. It was noted that the activity was highly relevant and suitable for the target group in remote areas.

*“The storage activity (Food, Friendly, Transport and Storage) was well structured and informative.” - Teacher*

#### *Cooking Demonstrations*

As a part of the cooking component a Cooking Demonstration was trialled with overwhelming positivity. The feedback noted the demonstrations as providing a talking point about nutrition topics otherwise often missed and that they allow for incidental learning, especially when working with disengaged adolescents.

*“The demonstration engaged the youth, allowed them to see exactly what needed to be done and how to read the recipe cards step-by-step. It allowed for discussion and gave the youth a place to share their ideas of ingredients that could be used and alternatives to cooking techniques.” - Teacher*

## ENGAGEMENT STRATEGIES

### *Prizes*

Prizes were piloted in the sessions with the intention to provide friendly competition between participants. Plastic 'novelty' medals were received in some workshops along with haky sacs, Frisbees, skipping ropes and stress balls. The most successful prize however was the Head Chef Prize box. The Head Chef prize box was another important and well received prize.

*"The Head Chef prize box is a great prize, as it includes everything you need to make the recipe, the youth really enjoyed receiving this prize and the idea of making it at home after the session." - Teacher*

Although the prizes provided in the pilot sessions were well received, it was suggested that cooking utensils could also be incorporated into the session's prizes.

## ORGANISATIONAL CONSIDERATIONS

### *Other programs*

In order to understand how Foodbank WA might be able to improve the FYF program further in supporting organisations, stakeholders were asked questions related to organisations considerations. Stakeholders identified organisations that adolescents are already involved with, these included (Edge of Nowhere Foundation and WA Country Health Services - Pilbara Population Health), two organisations Foodbank WA currently have relationships.

## CONCLUSION

The aim of the Pilbara pilot project was to determine the necessary changes needed to be made to the original FYF program before it could be implemented into the Pilbara region of Western Australia. The program has been designed and condensed into a 4-series program with a minimum of 6-hours content. Flexibility has been built into the program structure to ensure that FYF can meet the needs of schools and youth centres, such as duration to include shorter 80 minute sessions and maximum 120 minute sessions with breaks included where suitable.

All components of the program have been designed to be hands-on and interactive with a mix of theory and practical teaching methods. Activities such as Goal Setting are included in the program, allowing for participants to set goals as a group, reflecting on achievements at the end of each workshop to provide self - efficacy amongst the target group and reinforce key concepts taught. Cooking Demonstrations have been included in each workshop to demonstrate cooking techniques and nutrition concepts to participants in an effective and engaging way. Considerations have been made regarding ingredients used in the FYF recipes to ensure they are suitable for the community, program staff will ensure access and availability in local stores has been explored before each workshop is delivered. The cooking component will aim to allow participants to work in groups of two to four per recipe, with participants given autonomy to work on their recipes and asking for assistance when required. To ensure resources such as recipe cards meet the needs of low literacy groups, they have been designed to incorporate both written and step-by-step pictorial instructions.

Engagement strategies that include prizes (Head Chef prize box) will be implemented into each workshop, with considerations for cooking equipment as subsequent prize options. Incorporating Educator Training for teachers and youth workers with limited nutrition education experience will be incorporated into the program. Contrary to findings from the literature, online strategies used in the original FYF program proved unfavorable amongst the target group. Therefore the Pilbara program will not include these measures. Finally to improve the FYF program further and to support other health related organisations, Foodbank WA will consider collaboration with organisations that service the communities the program is delivered.

With the findings from the below report, an adapted FYF program has been successfully implemented in the Pilbara region of WA as part of a 5 year strategy.

## RECOMMENDATIONS

The Fuel Your Future Pilbara Pilot project revealed some gaps and areas of need that were not incorporated or addressed in the Pilot. A summary of recommendations have been included for consideration beyond the first year of program implementation in the region.

- Inclusive delivery and facilitation of sessions: Activities should be inclusive and not single out individuals as this may create ‘shame’. Remembering to always reinforce the choice to share opinions or thoughts, but not force it upon participants.
- Provision of recipes to encourage cooking after session: Copies of recipes be provided to participants after the completion of each workshops.
- Training for staff in the youth sector: Educator Training for non-nutrition professional who work with the target group be considered.
- Evaluation of participants: Adolescent (participant) evaluation be conducted to gain insights into skill, knowledge and enjoyment from the program.
- Ongoing improvements to program: Continued development of nutrition activities be incorporated into the planning of the program. Consider building in the Quiz Master activity from the original program in future as it was considered a highly engaging activity for youth.
- Resources gaps: Development of pictorial resources e.g. posters, recipe cards, flyers to be considered and evolved to reflect the target group’s needs.
- Partnerships and collaboration: Relationship building between Foodbank WA and organisations in the youth sector need to be continued and explored.

## REFERENCES

1. Begley, A. (2014). *Analysis to Inform the Development of an Adolescent Food Literacy and Cooking Program - Foodbank WA*. Curtin University.
2. Byrne, M. Anderson, K. Gower, G. Cross, D. & Partington. (2015). *WA Adolescent Cooking and Food Literacy Program, 'Fuel Your Future'*. *Final Research Evaluation Report*. Edith Cowan University, School of Education.

## APPENDIX

### APPENDIX 1: PRE - STAKEHOLDER QUESTIONNAIRE

\*Remind stakeholders they do not need to give names or specific information about youth.

Questions	Answers
1. How many students do you have at your youth centre/class?	
2. What is the best time to run workshops? E.g. morning (before lunch), afternoon (after lunch), after school (4-6pm)?	
3. Are there any considerations in regards to attendance that would impact the program being run in a series of 4 workshops over the year?	
4. Are there more males than females that attend your class/youth centre?	
5. What are the group's dynamics? Are there behaviours we need to be aware of?	
6. Are there any concerns about eating behaviours in the group we need to take into consideration when delivery nutrition content? <i>Please note: Names and specific details do not need to be provided, only general information required to ensure appropriate delivery of the program.</i>	
7. Would a 2 hour format suit your organisation/school? If no, what would suit?	
8. Have you run cooking/health workshops or cooking/health activities before? If yes, please explain.	
9. Are there any other health related organisations that your school/youth centre are engaged with?	
10. Do you think the youth/students would require a 5-10 minutes break in-between the 2 hour workshop?	
11. Are there any literacy issues I need to be aware of? <i>Please note: Names and specific details do not need to be provided, only general information required to ensure appropriate delivery of the program.</i>	
12. What kitchen facilities do you have?	
13. Organisational: What priorities is your organisation/agency/school looking towards this year? (prompts: healthy canteens)	
14. What activities/groups/programs are the youth engaged with?	
15. What do you find helps with engaging the youth in getting involved in activities?	

## APPENDIX 2: POST - STAKEHOLDER QUESTIONNAIRE

\*Remind stakeholders they do not need to give names or specific information about youth.

Questions	Answers
1. Do you think the recipes were suitable, please explain? (Prompts: cooking facilities, access to food, taste preference).	
2. Do you feel the Fuel Your Future logo is appropriate for our target audience (12-18 years old)?	
3. Is the Head Chef Prize box appropriate?	
4. What prizes do you think would be suitable for the youth/students at your school/organisation?	
5. How did you find the structure of the program?	
6. Do you think the recipe cards were suitable? (Prompts: pictorial enough, writing large enough).	
7. Which recipe card did you prefer?	
8. Were the pictures on the recipe card large enough?	
9. Did you find the nutrition activities appropriate for your students?	
10. Is the hand model in resources (Caucasian) appropriate to be used with students in your organisation/school?	
11. Was the 2 hour workshop too long/ not long enough?	
12. Have any of the participants made comments about the program?	
13. Overall how did you find the Fuel your Future workshops? Key strengths/weakness?	
14. Are there any improvements you would like to see in the Fuel Your Future program?	
15. Are there any activities/groups/programs that the youth are engaged with through your organisation/school?	

### Appendix 3: Workshop Overview

WORKSHOP 1	WORKSHOP 2	WORKSHOP 3	WORKSHOP 4
<p><b>Recipes</b></p> <ul style="list-style-type: none"> <li>• Pizza - Oven Or Frypan</li> <li>• Mexican pita toasties</li> <li>• Meat kebabs</li> <li>• Pancakes</li> </ul> <p><b>Head chef</b></p> <ul style="list-style-type: none"> <li>• Chocolate brownies</li> </ul>	<p><b>Recipes</b></p> <ul style="list-style-type: none"> <li>• Beef burgers</li> <li>• Frittata</li> <li>• Chicken nuggets</li> <li>• Banana oat cookies Or Apple crumble cups</li> </ul> <p><b>Head chef</b></p> <ul style="list-style-type: none"> <li>• Pancakes</li> </ul>	<p><b>Recipes</b></p> <ul style="list-style-type: none"> <li>• Nana's curry</li> <li>• Flat bread</li> <li>• Creamy pasta</li> <li>• Fruity Frypan cake</li> </ul> <p><b>Head chef</b></p> <ul style="list-style-type: none"> <li>• Muesli bars</li> </ul>	<p><b>Recipes</b></p> <ul style="list-style-type: none"> <li>• Fried noodles</li> <li>• Butter chicken</li> <li>• Bolognaise</li> <li>• Chocolate brownies Or French toast</li> </ul> <p><b>Head chef</b></p> <ul style="list-style-type: none"> <li>• Popcorn mix</li> </ul>
MESSAGES	MESSAGES	MESSAGES	MESSAGES
<p><b>Primary</b></p> <ul style="list-style-type: none"> <li>• Keep clean in the kitchen.</li> <li>• Eat more, Eat some, Eat least.</li> </ul> <p><b>Secondary</b></p> <ul style="list-style-type: none"> <li>• Live to slice another day.</li> </ul>	<p><b>Primary</b></p> <ul style="list-style-type: none"> <li>• Eat more, Eat some, Eat least.</li> </ul> <p><b>Secondary</b></p> <ul style="list-style-type: none"> <li>• Cook together. Eat together. Live better.</li> <li>• Keep clean in the kitchen.</li> </ul>	<p><b>Primary</b></p> <ul style="list-style-type: none"> <li>• Eat the best. Leave the rest.</li> </ul> <p><b>Secondary</b></p> <ul style="list-style-type: none"> <li>• Keep clean in the kitchen.</li> <li>• Cook together. Eat together. Live better.</li> </ul>	<p><b>Primary</b></p> <ul style="list-style-type: none"> <li>• Plan to eat well.</li> </ul> <p><b>Secondary</b></p> <ul style="list-style-type: none"> <li>• Separate the raw.</li> <li>• Keep clean in the kitchen.</li> <li>• Cook together. Eat together. Live better.</li> </ul>
PRACTICAL SKILLS	PRACTICAL SKILLS	PRACTICAL SKILLS	PRACTICAL SKILLS
<p><b>LLN skills</b></p> <ul style="list-style-type: none"> <li>• Following a recipe</li> </ul> <p><b>Cooking skills</b></p> <ul style="list-style-type: none"> <li>• Chopping - knife skills</li> <li>• Measure - heap, tap, scrape</li> <li>• Kneading</li> <li>• Whisking</li> </ul> <p><b>Safety skills</b></p> <ul style="list-style-type: none"> <li>• Oven safety</li> <li>• Frypan/sandwich press safety</li> <li>• Knife safety</li> <li>• Grater skills</li> <li>• Food hygiene - chopping boards</li> </ul>	<p><b>LLN skills</b></p> <ul style="list-style-type: none"> <li>• Following a recipe</li> </ul> <p><b>Cooking skills</b></p> <ul style="list-style-type: none"> <li>• Shaping</li> <li>• Whisking</li> <li>• Sauté</li> <li>• Cracking eggs</li> </ul> <p><b>Safety skills</b></p> <ul style="list-style-type: none"> <li>• Oven safety</li> <li>• Frypan/sandwich press safety</li> <li>• Blender safety</li> <li>• Knife safety</li> <li>• Grater skills</li> <li>• Food hygiene - chopping boards</li> </ul>	<p><b>LLN skills</b></p> <ul style="list-style-type: none"> <li>• Following a recipe</li> </ul> <p><b>Cooking skills</b></p> <ul style="list-style-type: none"> <li>• Browning</li> <li>• Measure - Heap, tap, scrape</li> <li>• Boiling</li> <li>• Chopping - knife skills</li> <li>• Sauté</li> </ul> <p><b>Safety skills</b></p> <ul style="list-style-type: none"> <li>• Hot plate safety</li> <li>• Frypan/sandwich press safety</li> <li>• Safety when using boiling water</li> <li>• Knife safety</li> <li>• Food hygiene - chopping boards</li> </ul>	<p><b>LLN skills</b></p> <ul style="list-style-type: none"> <li>• Following a recipe</li> </ul> <p><b>Cooking skills</b></p> <ul style="list-style-type: none"> <li>• Stirring</li> <li>• Knowing correct cooking times</li> <li>• Browning</li> <li>• Chopping - knife skills</li> </ul> <p><b>Safety skills</b></p> <ul style="list-style-type: none"> <li>• Oven safety</li> <li>• Frypan/sandwich press safety</li> <li>• Knife safety</li> <li>• Grater skills</li> <li>• Food hygiene - chopping boards</li> </ul>