

## Garden Tucker Program

Bianca Walker<sup>1</sup>, Merrian-Jo Nahow<sup>1</sup>

<sup>1</sup>Health Promotion Connections

---

Merrian-Jo Nahow is an Aboriginal and South Sea Islander woman (identifying as Aboriginal) who was born in Bowen and whose ancestry comes from the Kalkadoon Nation, which is situated in the western part of Queensland around the Mt Isa, Hughenden, Cloncurry, Charters Towers areas. Merrian-Jo's father's family come from the South Sea Islands (Vanuatu) and his grandfather and grandmother were black-birded to Australia as slaves to work on the cane farms between Rockhampton and the Burdekin.

Merrian-Jo was born the second youngest in a large family of five girls and 3 boys and is married and has two daughters and one granddaughter. She has lived in Bowen (top of the Whitsundays) all her life. Merrian-Jo attended the Merinda State Primary School, which had an attendance of approximately 30 students and then continued on with secondary schooling at the Bowen State High School where she finished during year 10. She has completed other studies during her adult life, including Cert 111 Aged Care and she is currently studying Cert 111 Indigenous Primary Health Care.

Prior to working in her current position, Merrian-Jo worked as a field officer for the Mackay ATSI Legal Service. Within this role she worked closely with a barrister and handled all of the legal files, taking client statements seeking legal representation for clients in the barrister's absence, attending police interviews, seeking Magistrate Court remands and seeking financial assistance for legal representation for clients and also other legal administration duties, as well as identifying prevention methods to stop re-offenders committing more crime.

Merrian-Jo has been working in the position of the Health Worker (Nutrition Promotion) since August 2007, within the Bowen, Collinsville and Burdekin areas. The role requires the health worker to promote the goodness of eating a healthy diet and especially fruit and veggies to the Indigenous and wider Community members. Within this role as the health worker she has formed many new partnerships, and met new colleagues who strive to promote good healthy eating as well as to promote eating more fruit and veggies to help with fighting chronic diseases. These workers come from various organisations with the three regions. They are from: Qld Health, Health Promotion Connections, Community Health (Bowen), Collinsville Regional Health, Tropical Population Health (Townsville) and Girudala Community Co-op. The role also requires the health worker to deliver the healthy eating message through programs such as Living Strong, Lighten Up and Foodcents, and to interact with community members in identifying their needs pertaining to health diet.

---

### Executive Summary

In 2008 health professionals from the Bowen and Burdekin regions identified a need for more Aboriginal and Torres Strait Islander (A&TSI) nutrition programs. A needs assessment was undertaken which analysed mortality and morbidity rates, health determinants and existing local programs. Community consultations were held, where the idea of giving people information and resources to grow fruit and vegetables at home was identified as a practical and focused way to promote healthy eating. Focus groups were also held to develop and test the project concept further.

The Garden Tucker Program is a pilot program which aimed at improving the healthy eating practices of Aboriginal and Torres Strait Islanders, by developing resources which support and promote the growing of fruit and vegetables in the home and through a range of local level activities. The program was run in the North Queensland towns of Bowen, Collinsville, Ayr and Home Hill and was guided by a working group with members from Health Promotion Connections, Girudala Community Co-Op, Bur-del Community Co-Op, Collinsville Regional Health Service, Collinsville Community Association, Queensland Health and Townsville Public Health Unit

In March 2009 The Garden Tucker Program was officially launched by Rohanee Cox, who is the national face of the *Tomorrow People* and the Go for 2&5® campaigns, which attracted considerable interest from the media and the general community. One hundred and twenty-nine families registered for the program and received a Garden Tucker Box which is a Styrofoam box filled with all the items required to grow a small amount of fruit and vegetables at home. In conjunction with the Garden Tucker Box resource the program provided 6 months of workshops and newsletters aimed at skilling participants to make healthy food choices.

It was found that the program was successful in accessing the target population and reaching people who had no experience in growing fruit and vegetables. Participants reported that they were successful in growing fruit

and vegetables in the box, which they used mainly in cooking and salads and reported that the box was very easy to care for. Participants reported that the Garden Tucker Box resource impacted positively on their eating habits and motivated them to continue to growing fruit and vegetables.

Participants found the Garden Tucker Box materials to be appropriate and useful, including the step by step instructions sheet. The workshops that were held in conjunction with the program were extremely well attended, although not always by the target group. The monthly newsletters were a central component of the program, as it kept participants updated, motivated and inspired to grow fruit and vegetables, eat healthy and participate in the workshops. Overall the pilot program was successful in generating an interest in growing and eating fruit and vegetables, exposing participants to fruit and vegetable gardening skills and increasing the awareness of healthy eating practices.

## Background

Bowen Health Service District has a high proportion of Aboriginal and Torres Strait Islanders living in the community. In 2001, 4.9% of the district population identified as either Aboriginal and/or Torres Strait Islander background. Aboriginal and Torres Strait Islander people have far lower life expectancy and experience far higher rates of morbidity and mortality than other Australians. Nutrition related diseases such as heart disease and diabetes are the major cause for the excess rates in morbidity and mortality in this population group.

In 2001 the major causes of death and illness in the Bowen Health Service District were stroke, cardiovascular disease, diabetes type II, suicide, unintentional injury and mental health. The health determinants that had a significant impact on the Aboriginal and Torres Strait Islanders within the Bowen Health Service District included: poor diabetes type II management, overweight and/or obesity, poor nutrition, physical inactivity, harmful alcohol consumption, high blood pressure and poor blood cholesterol management.

## Purpose

The Aboriginal & Torres Strait Islander, Better Health Project aims to improve the healthy eating practices of Aboriginal and Torres Strait Islanders (A&TSI) in Bowen, Collinsville and the Burdekin regions with the following benefits:

- increase knowledge and awareness of the need to eat a healthy diet, particularly fruit and vegetables
- increase skills in growing and cooking healthy foods
- create supportive environments to enable people to successfully make healthy lifestyle changes
- increase promotion of the convenience and relative ease of growing fruit and vegetables at home
- increase promotion of the convenience and relative ease of preparing and eating healthy foods
- increase promotion of the affordability of healthy foods
- increase inter-sectoral partnerships for the promotion of healthy eating practices
- enhance relationship with the local media.

## Project outline

The Garden Tucker Program is a multi-strategy program:

- **Garden Tucker Launch** held in Bowen, Collinsville and Ayr to allow families to register for the program. Launch events were fun and informative functions that provided health and gardening information, food, activities and prizes. The Bowen launch event was attended by over 300 people and was officially opened by the Go for 2&5<sup>®</sup> Ambassador Rohanee Cox.
- **Garden Tucker Box** is a Styrofoam box filled with all the items required to grow a small amount of fruit and vegetables at home. The kit included potting mix, watering can, small shovel, fertiliser, plastic gloves, seedlings (tomato, silverbeet, dwarf bean and basil), step by step instruction sheet detailing how to put

the Garden Tucker Box together and *Tomorrow People* information booklet for A&TSI Australians. These Garden Tucker Boxes were distributed at the launch events.

- **Garden Tucker Newsletter** is a monthly newsletter, where people share success stories about fruit and vegetable gardening and can access tips on healthy eating, cooking, budgeting and gardening.
- **Garden Tucker Workshops** are held on a regular basis and cover a range of topics such as:
  - how to build a no-dig garden or how to compost
  - how to cook quick, cheap, easy meals or Shop smart and save (Food Cents)

Program development began in August 2008, and was implemented from March – October 2009.

## Methodology

Process and impact evaluation were used to monitor the Garden Tucker Program, primarily using quantitative data collection methods. The data was analysed by grouping related categories to show simple graphical representation in Microsoft Excel.

### Registration survey

Garden Tucker Program Registration sheets were completed by all families who were given a Garden Tucker Box resource. Although 150 Garden Tucker Boxes were developed, only 129 registration forms were received, due to some boxes being given to schools, guest speakers, project working group members and some inadvertently being given away without registrations.

This survey gathered; contact details, information on who will be planting and caring for the Garden Tucker Box, gardening skills, gardening confidence levels and whether or not participants require assistance in the care and maintenance of the Box.

### Three month follow-up survey

The 3 month follow up survey was distributed to all Garden Tucker Program participants. Participants were encouraged to return the surveys by promoting the opportunity to win 1 of 2 BBQ's and including a postage paid envelope with the survey. Although 129 participants were registered only 127 surveys were distributed due to some addresses not being supplied. Only 31 surveys were completed and returned, which is a response rate of 24%.

This survey asked questions about the growth, care, use and impact of the Garden Tucker Box, gardening confidence levels and feedback about the newsletters and workshops.

### Six month follow-up phone survey

The 6 month follow up was conducted as a phone survey. Available members of the project working group conducted the phone interviews on the 12<sup>th</sup> November 2009 between the hours of 9am – 12:30pm and 5pm – 6:00pm. All participants agreed to participate in this survey, and 75 people were reached in this time period, which is a response rate of 58%.

This survey asked for feedback about the Garden Tucker Box material, intentions to plant the box in the New Year and ideas and suggestions to improve and continue the program.

### Workshop surveys

A range of workshops were conducted on a variety of topics, aiming to improve participant's fruit and vegetable gardening, skills and healthy eating practices. Overall 8 workshops were held with a total of 139 participants. Of these 59 or 42% were participants from the Garden Tucker Program and the remainder were community members who had heard about the workshops from flyers, media articles, advertisements etc.

### Shop Smart and Save workshops

Shop Smart and Save (Food Cents) workshops show participants how to shop according to the Australian Guide the Healthy Eating. Three workshops were held with a total of 47 participants, with 34 participants completing

an evaluation form, which is a response rate of 72%. The survey asked questions about the methods of promotion, reasons for attending, ability to maintain a food budget, impact of the workshop and what could be improved.

### **Cooking workshops**

Cooking workshops allow participants to cook and share a three course meal together, while discussing the Australian Guide to healthy eating, portion distortion and healthy cooking methods. All the prepared recipes were from the *Living Strong Healthy Lifestyle Cookbook*, which was also given to all participants. Two cooking workshops were originally planned; however the Ayr workshop was cancelled, due to lack of registrations. The Bowen workshop was conducted with 15 participants, 14 of who completed evaluation surveys. The surveys asked questions about the methods of promotion, reasons for attending, current cooking and shopping habits and feedback to improve workshops.

### **Phil Murray gardening workshops**

Gardening workshops were run by Phil Murray from Greening Australia. Phil is a Landscape Designer, and has a weekly gardening segment on ABC radio. The workshop covered a variety of topics including:

- how to build a 'no dig' veggie garden
- correct planting of miniature fruit trees
- growing fruit and vegetables in small spaces
- general fruit and vegetable gardening advice, tips and hints

Three workshops were held with a total of 59 participants, with 47 completing an evaluation form, which is a response rate of 80%. The surveys asked questions about the methods of promotion, reasons for attending, experience in growing fruit and vegetables, confidence levels after the workshop and feedback to improve workshops in the future.

### **Compost workshops**

By popular demand one composting workshop was run by a permaculturist. The workshop demonstrated how to turn household and garden waste into organic soil to feed fruit and vegetable gardens. The workshop was well attended with 18 participants, 17 of who completed evaluation forms. The surveys asked questions about the methods of promotion, current compost skills, and confidence levels after the workshop and feedback to improve the workshops in the future.

## **Summary of results**

### **Summary of results from the registration survey**

Over half (55%) of the 129 families registered in the Garden Tucker Program were Aboriginal or Torres Strait Islander or both. A large percentage of participants were in the 50+ age group (36%), followed by the 40–50 age group (24%). The age group with the least amount of participants was the 15–20 year olds (5%), followed by the 30-40 year olds (17%). Over half of the participants (54%) had no experience growing fruit and vegetables before, but 46% had.

The majority (91%) of participants intended to care for the Garden Tucker Box themselves, but 78% intended to also involve other members of their family. Participants said that their children, grandchildren, partners and grandparents would all be involved in caring for the Garden Tucker Box.

The majority of participants said that they had a confidence level of 7 and over with 37% reporting a confidence level of 7-8 and 35% reporting a confidence level of 9-10, with 10 being the highest level and 1 being the least. Only a small percentage of participants had a confidence level of less than 7.

The majority of participants felt that they were able to set up and maintain the Garden Tucker Box without assistance; however 5% of participants did nominate to have assistance with their Garden Tucker Box.

### **Summary of results from the three month follow up survey**

Just over half (52%) of the 31 participants who responded to the three month follow up survey were Aboriginal, Torres Strait Islander or both. The two age groups who responded the most in the 3 month survey were the 50+ age group (39%) and the 40–50 age group (35%). Half of respondents (52%) had also never grown fruit and vegetables before, but 48% had. 100% of respondents reported that they planted their Garden Tucker Box. The majority of respondents reported that their vegetables grew either very well (32%) or well (45%). A small amount of participants reported that they struggled to keep their plants alive (23%).

Over half of respondents (68%) reported that their bean seedlings died. Almost a quarter of respondents (23%) said that their basil and silverbeet plants also died. The tomato plant was the most successful, with only 19% of respondents reporting that it died. Only a small percentage (6%) of respondents reported that all of their plants survived. Respondents were provided with a tick list, to explain why they thought the seedlings did not survive. Over half of the respondents (55%), reported that their seedlings did not survive due to “other” reasons, such as birds insects or grubs, positioning of the box or over watering. Other popular responses were; over or under fertilised (19%), did not plant correctly (10%) and lack of sun or water (10%).

Well over half of the respondents (65%) reported that they have extended their fruit and vegetable garden, since having the Garden Tucker Box. Of the 35% of respondents that said that they have not yet extended their fruit and vegetable gardens, 25% said that they intend to in the future.

The majority of participants (90%) reported using the produce grown in their Garden Tucker Box. Respondents reported that the most common way of using their produce grown from their Garden Tucker Box was in salads (39%), in cooking (33%), as a garnish (16%) and given away or shared (9%).

Over half of the respondents (61%) believed that the Garden Tucker Box has changed their eating habits in a positive way, with only 26% of respondents reporting that their eating habits have not changed since having the Box. Respondents reported that since having the Garden Tucker Box, they have been generally eating and cooking more fruit and vegetables (33%), have purchased more fruit and vegetables (30%), have been more creative in the kitchen (18%), and were more aware of increasing their fruit and vegetable intake (9%).

When respondents were asked to rate their confidence level in growing fruit and vegetables after three months, 23% of participants said that their confidence was the same, 38% said that their confidence level increased by 1-5 points, however 16% said that their confidence level had decreased.

Over three quarters of respondents (77%) reported that their Garden Tucker Box was easy to maintain, with only 10% saying that they did not find it easy to maintain. The majority of respondents (88%) reported that they had been receiving the newsletters. Of those that received the newsletter, 93% reported that they did take the time to read them. The thing that respondents liked most about the newsletter was that they were able to see what other families were doing with their Garden Tucker Box (21%). Other popular sections of the newsletter were recipes (16%), photos (12%), upcoming events (9%) and tips and hints (9%).

Over a quarter of respondents (39%) had attended a Garden Tucker Workshop at three months, however just over half of respondents (52%) had not attended workshops. The main reason respondents gave for not attending the workshops were; that the workshop times were not suitable. Almost three quarters of respondents (77%) reported that their family and friends have been motivated to grow their own fruit and vegetables at home, after seeing their Garden Tucker Box.

### **Summary of results from the six month follow up phone survey**

After six months, 41% of 75 participants who were contacted via phone for a six month follow up survey reported that their Garden Tucker Box is still growing, with 59% reporting that it is no longer growing. The main reasons participants gave for their gardens no longer growing; were that the plants were all picked and cooked, the plants eventually died, they had problems with pests or pets or they went away and it wasn't cared for.

Although only a small percentage of Garden Tucker Boxes were still growing, 92% of respondents reported that they intend to plant the box with new seedlings in the New Year, with only a small percentage (8%) of respondents reporting that they would not be re-planting the box again.

100% of respondents found the items included in the Garden Tucker Box to be useful, especially the watering can. Overall, respondents reported that they used all of the items in the Garden Tucker Box (77%), however a small number of people said that they did not use the gloves (12%), some of the seedlings (5%) and fertiliser (3%).

The majority of respondents did not have any suggestions as to how to improve the Garden Tucker Box (57%), however a small number of people said that they would like to see different seedlings (15%), more seedlings (11%), garden stakes (9%), a bigger gardening box (4%) and proper gardening gloves (3%). Other responses were seedling tags, tips on natural pesticides and water crystals.

The majority of respondents (82%) said that they did use the step by step instruction guide when putting the kit together for the first time. The people, who did not use the guide (17%), said that they didn't need to as they had grown fruit and vegetables before. 100% of participants who used the step by step instructions reported that it was easy to use and made comments about the pictures being particularly helpful.

Over three quarters of participants (77%), did not have any suggestions on improving the project. Some suggestions to improve the project included; continue newsletters (7%), more cooking workshops (5%), change seedlings (4%), evening workshops (2%), more gardening workshops (2%) and social events (2%). Other responses included; to continue the program, workshops for HACC clients, cooking workshops for children and more gardening boxes.

Some suggestions to motivate participants to continue growing fruit and vegetables were to continue the Garden Tucker Program (16%), different seedlings (16%), cooking workshops (11%), gardening workshops (9%), continue newsletter (3%) and competitions (3%). Other responses included workshops for children, more workshops in general, information on companion planting, more recipes and social groups.

## Discussion

The Garden Tucker Program was successful in reaching its target audience with 55% of participants being either Aboriginal or Torres Strait Islander or both. The program was also successful in capturing families who had never grown fruit and vegetables before with 54% of participants stating that neither they nor anyone helping them with the Garden Tucker Box had ever grown fruit and vegetables before.

Promotion of the program by the Project Partners helped achieve success in reaching the target audience. The largest percentage of participants reported hearing about the program from Girudala Community Co-Op (35%), flyers and posters (27%), local Newspapers (15%) and Burdel Community Co-Op (11%). Girudala and Burdel promoted the program widely through their newsletters and other programs, to ensure that local Aboriginal and Torres Strait Islander people would participate. Flyers were also handed out at Indigenous health events, screening days, meetings and workshops, by the Indigenous Health Workers.

The Garden Tucker Program had 129 participants registered for the Garden Tucker Box resource, with 78% of participants reporting that other family members would also be involved in the planting and care of the Garden Tucker Box. This demonstrates that the program had the potential to reach more members of the community than actual registrations represent. Gardening confidence levels at the beginning of the program were at a high level, with 80% of participants reporting confidence levels of 7 or higher. It is not understood why confidence levels were so high, but may be due to participants being involved in Garden Tucker Box demonstrations at the launch or previous gardening skills.

Despite participants being encouraged to return their 3 month evaluation surveys through a BBQ draw and postage paid envelope, a response rate of only 24% was achieved. The Indigenous health workers received anecdotal feedback that participants did not like filling in forms, even if there was an opportunity to win something. Although the response rate was low the respondents represented similar age, cultural background and had similar experience in growing fruit and vegetables, as participants from the registration baseline data.

The Garden Tucker Box resource was successful in giving respondents the resources to successfully grow a small amount of fruit and vegetables in a 3 month period. All respondents reported using the Garden Tucker Box resource and a large majority of participants reported successful vegetable growth, although a high proportion of respondents reported their dwarf bean seedlings dying. It is believed that the bean seedlings died because they were not raised correctly by the supplier, or because they were not suitable to be grown in

the confines of a small box. The Garden Tucker Box resource was also found to be successful in motivating respondents to establish fruit and vegetables gardens outside the Garden Tucker Box. Sixty five per cent of respondents self-reported extending their fruit and vegetable garden since having the Garden Tucker Box, and a further 25% said that although they have not extended their fruit and vegetable garden yet they intend to in the future.

After 3 months of having the Garden Tucker Box resource, respondents reported that they were eating more fruit and vegetables. Sixty one per cent of respondents self-reported that they were generally eating, cooking and purchasing more fruit and vegetables since receiving the box. This figure is supported by 90% of respondents reporting using the produce grown in the Garden Tucker Box. This may have been due to respondents having been made aware of the need to eat more fruit and vegetables through the program promotions, or having ready access to fresh fruit and vegetables at home.

Although 61% of respondents reported that their confidence levels either stayed the same or increased by up to 5 points in the three months since having the Garden Tucker Box, 16% of respondents reported that their confidence level actually decreased. It is thought that the failure of the bean plants may have impacted on the confidence levels of first time growers, or that participants may have initially overestimated their confidence level. Even though there was a slight decrease in the level of gardening confidence, 77% of respondents still reported that it was easy to maintain the Garden Tucker Box.

Newsletters were a central component of the program with the majority of participants reporting that they enjoyed reading the newsletters particularly the stories about other families and the recipes. The newsletter kept participants updated, motivated and inspired to grow fruit and vegetables, eat healthy and participate in program activities. It is thought that the newsletter was successful due to it being sent to participants in hard copy, printed in colour and relatively short (A4 back to back) in length.

After the poor response rate from the written survey at 3 months, it was decided to conduct a phone survey at 6 months. Members of the working group contacted participants in two different time allotments and reached 75 participants which is a response rate of 58%. No participants refused to participate in the survey and all participants spoke freely about their gardening successes and failures, the Garden Tucker resources and ideas about how to improve and continue the program.

This survey confirmed the findings from the 3 month survey, that the Garden Tucker program was successful in getting respondents to grow a small amount of fruit and vegetables in the Garden Tucker Box. Forty-one per cent of respondents reported that all or some of their Garden Tucker Box was still growing after 6 months and 92% of respondents reported that they intended to re-plant the box with new seedlings in the new year. It is hoped that if participants continue to use their Garden Tucker Box, that they will continue to be motivated and inspired to include more fruit and vegetables into their diet.

Overall the participants were highly satisfied with the resources (the Garden Tucker Box and the step by step instruction sheet) that were supplied as part of the program, however some suggestions to improve the Box included; different seedlings, garden stakes, a bigger box and proper gardening gloves instead of plastic gloves. There were no suggestions to improve the step by step instruction guide with the majority of respondents commenting on its ease of use.

The main suggestions to improve the program were to; to continue the program, to continue the newsletters, to hold more gardening workshops, to hold evening workshops and to change the variety of seedlings. When respondents were asked "what would motivate you to keep growing fruit and vegetables", the main suggestions were; continuing the program, providing different seedlings and running cooking and gardening workshops.

The Garden Tucker workshops were well attended; however participant demographics did not reflect the target group. This may be due to workshops not being held at suitable times, or the target group not being interested in the workshop topics. Overall the workshops were popular and successful in developing people's knowledge, skills and confidence levels.

The Garden Tucker Program was successful in giving participants hands on experience of small scale fruit and vegetable production. The concept behind this innovative, multi-strategic approach to nutrition promotion

was community generated and has provided significant learning opportunities for individuals and families. Working group members have identified significant learnings from this project and are using these to plan and implement future home gardening based nutrition promotion programs.

### Limitations

The limitations of the evaluation include:

- The primary means of data collection for the program was the use of self reported questionnaires, which may have impacted on the reliability of the data collected.
- The evaluation provides limited insights into the reasons behind these results due to only quantitative program evaluation methods being used.
- The use of Excel to enter data has meant that data could not be cross referenced to monitor whether the results can be applied to the target group.