



Growing Strong: Feeding You and Your Baby Evaluation Summary Report

A reflection on activity from 1998 – 2005 and evaluation
of resources and training



Queensland
Government
Queensland Health

**GROWING STRONG: FEEDING YOU
AND YOUR BABY EVALUATION
SUMMARY REPORT**

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Acknowledgements

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Ros Gabriel collated the evaluation data and historical information on the project, and wrote the initial evaluation report. Helen Vidgen finalised the report.

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NOTE

In late 2005 Queensland Health underwent a restructure of the organisation. As a result three new Area Health Services, based on the previous Southern, Central and Northern Zones, were established. Borders of these Area Health Services remained the same, with the exception of the South Burnett Health Service District moving from Central to Southern. Public Health Unit Networks (PHUNs) have become Area Population Health Services (APHS).

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Introduction

Good nutritional status of mothers, babies and children are key foundations to the achievement and maintenance of health throughout life and affect the health of future generations. The period from pre-conception through to childhood provides a time-limited opportunity to improve health status through appropriate nutrition. (Eat Well Queensland. Queensland Public Health Forum. 2002)

In 2003 there were 49 690 births in Queensland. Indigenous births made up 2 693 of these. Indigenous mothers tend to be younger and are less likely to attend antenatal care than non-Indigenous mothers. Aboriginal and Torres Strait Islander babies are more likely to be low birth weight and born before term. Indigenous mothers are more likely to have health problems during pregnancy such as anaemia and diabetes. (Perinatal Data 2003. Queensland Health. 2005).

No statewide data exists on the breastfeeding rates or nutritional status of Indigenous infants and young children however local projects indicate that growth is poor, particularly in the first 3 years, iron deficiency is common, and the timing and types of solids introduced are inappropriate. In the Torres Strait, childhood overweight and obesity is a particular concern.

The Aboriginal and Torres Strait Islander health worker is often the first point of contact for Aboriginal and Torres Strait Islander people and the health system. In addition, they are also able to provide culturally specific knowledge and access to their communities to facilitate improvements in health status. The role of health workers varies significantly and is unlikely to specifically focus on early life or nutrition. Staff turnover can be high.

The Growing Strong resources have been developed to help staff talk with Indigenous families about nutrition for mothers, babies and young children. Information is presented in two forms: a book using straightforward language and plenty of illustrations, and a manual with more detailed background information.

Growing Strong resources provide information about eating well during pregnancy as well as offering suggestions for dealing with some common food and nutrition related problems. Information is also provided about common breastfeeding issues including how to know when a baby gets enough breastmilk and correct positioning and attachment.

The training is delivered in small groups to promote discussion and case studies are used to give practical examples of how the Growing Strong resources can be used. Nutrition teams from each Area Population Health Service provide the training.

This report aims to document and describe the work surrounding Growing Strong, its implementation and evaluation, with the aim of informing and guiding future investment both specifically in Growing Strong and more generally in Indigenous maternal and child health. To this end this report has used both data gathered specifically for this purpose i.e. the evaluation of Growing Strong resources and opportunistic data i.e. distribution of resources, workshop attendance forms and workshop evaluations. The aim of this report is to facilitate reflection and planning for future activity.

Background

Between November 1998 and March 1999, Nutrition for Indigenous Maternal and Child Health in-service workshops were held in Cairns, Townsville, Rockhampton and Brisbane. The workshops were attended by staff working in the community providing care to Aboriginal and Torres Strait Islander pregnant women and mothers of young children. Evaluation of these workshops plus informal feedback from workshop participants led to the development of the Growing Strong resources.

Planning and Definition Phase

Resource Development (1999)

The full colour client book includes nutrition information from pregnancy to early childhood. It was designed this way to encourage family members to read/look at the resource and to keep it. The manual was designed to be a reference for staff and to provide more in-depth information in a format suitable for clients with good literacy skills. The manual also covers issues not included in the book including Listeria, common breastfeeding problems and feeding a sick child.

The Growing Strong resources also include a Facilitators Training Manual developed in 2004.

Piloting (2001)

The second stage of resource development included the production of two drafts of the resource. Each draft was sent to more than 80 individuals across the state for comment. These individuals were chosen because of their experience in working with Aboriginal and Torres Strait Islanders mothers and /or in nutrition in early life. They included Aboriginal and Torres Strait Islander health workers, child health nurses, midwives and nutritionists.

Implementation Phase (2002-)

Project Governance

In 2002 the Indigenous Mother and Child Nutrition (IMCN) Statewide Team was established. This self managed team consisted of Public Health Nutrition staff working in the area of early life nutrition with a focus on Aboriginal and Torres Strait Islander people. The purpose of the team was:

- to take a statewide strategic and coordinated approach to key public health nutrition initiatives to address Indigenous mother and child issues
- the sharing of skills and expertise across the state
- to use and disseminate/share most up-to-date, current good practice in this area to team members and primary tier practitioners
- to provide consistency of messages (i.e. in line with Australian Guide To Healthy Eating)

The role of Growing Strong Coordinator was established in each Zone to manage

and track the distribution of resources and arrange training in the use of the resources.

The working party were concerned that the resources would 'sit on the shelves' rather than be used if they were distributed without training being provided. This concern was supported by many of the users of the trial resources who also felt that training would increase staff capacity to use the resources.

Communication and Promotion

To assist with the dissemination of information about the Growing Strong resources a communication strategy and tools were developed. Tools developed include an information flyer, a PowerPoint presentation and a conference poster.

Training

Training Approach

A case study based training program was developed by the IMCN team. The training program that was developed consisted of using six case studies delivered in small discussion groups and accompanied by activities. This training approach was used to provide participants with practical examples of how to use the Growing Strong resources.

The mode of delivery was adapted to suit the local situation and the participants. This occurred in response to reflection on trainings conducted and discussion at IMCN meetings. For example in some instances a shorter training, specific to nurses was conducted, where the case studies were completed more rapidly.

One of the critical success factors in the training was the combination of the Public Health Nutritionist (for nutrition content expertise) and the Indigenous Nutrition Promotion Officer/Worker (for contemporary cultural acceptance). It was also very important that one or both of the trainers had experience as a mother and had breastfed.

Mother and child nutrition is often seen to be 'women's business' in the Indigenous health sector, however the males who participated in the Growing Strong training contributed a great deal and demonstrated an ability to play an important role in educating men to support optimal mother and child nutrition.

Ongoing Training Provision

In 2002 training in the Growing Strong resources was incorporated into the Nutrition and Clinical streams of the Cert IV in Indigenous Primary Health care offered by the Aboriginal and Islander Health Worker Education and Training Program (AIHWEP) in Cairns. Ongoing training in the Central Area Health Service is coordinated through the Yangulla Centre, Rural Health Training Unit, Rockhampton and through the Cunningham Centre, Rural Workforce Development Unit, Toowoomba in the Southern Area Health Service.

Training Reach

Training in the use of the Growing Strong resources is ongoing. At the time of writing 38 trainings have been conducted across Queensland. More than 323 participants have attended the training. This figure includes two staff from South Australia and two from the Kimberley Region of Western Australia. Training reach generally reflected where pregnant Aboriginal and Torres Strait Islander women and young children are in Queensland (see diag 1 and 2 and table 3) and local knowledge of where the Indigenous health workforce were located.

Information on the positions held by participants is not available for all trainings. Participants included:

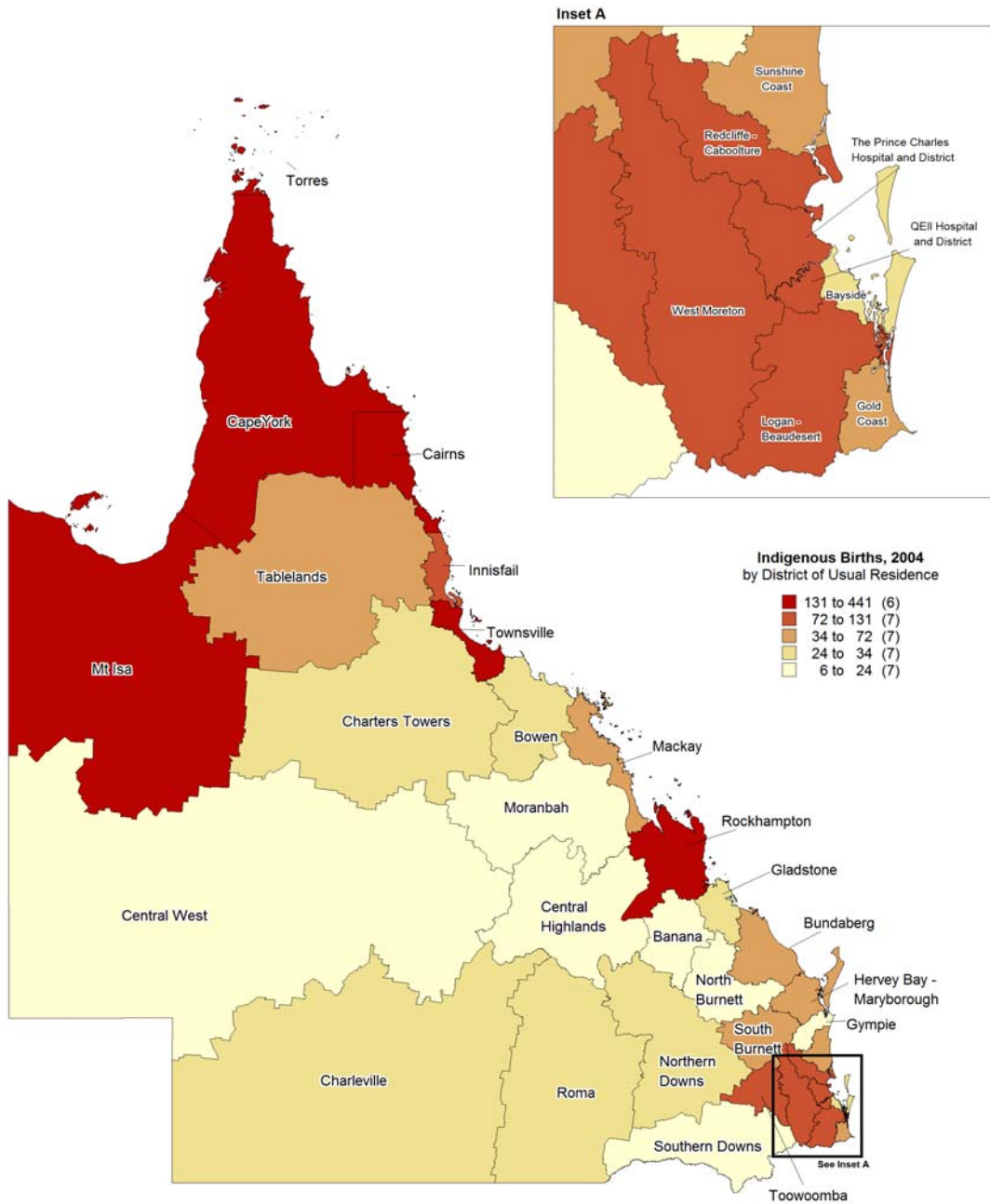
Table 1 Training Participants by profession

Position	Number	%
ATSI Health Worker	141	65
Child Health Nurse	6	3
Nurse	35	16
Midwife	4	2
Dietitian/Nutritionist	10	5
Student	18	8
Childcare staff	3	1
Total	217	100

Table 2 Location of Training

Southern Area Health Service:	Northern Area Health Service
<ul style="list-style-type: none"> • Roma • Beenleigh • Brisbane • Darling Downs • Ipswich • North Stradbroke Island 	<ul style="list-style-type: none"> • Mt Isa • Normanton • Cairns TAFE x 2 • Mackay • Bamaga • Badu Island • Lockhart River • Townsville • Yarrabah x 2 • Cooktown • Pormuraaw • Cairns • Coen • Mossman • Mer Island • Innisfail • Bamaga • Saibai Island • Coconut Island
<p>Central Area Health Service</p> <ul style="list-style-type: none"> • Barcardine • Gladstone • Bundaberg • Maroochydore • Sunshine Coast • Rockhampton • Woorabinda • Brisbane • Cherbourg • Hervey Bay 	

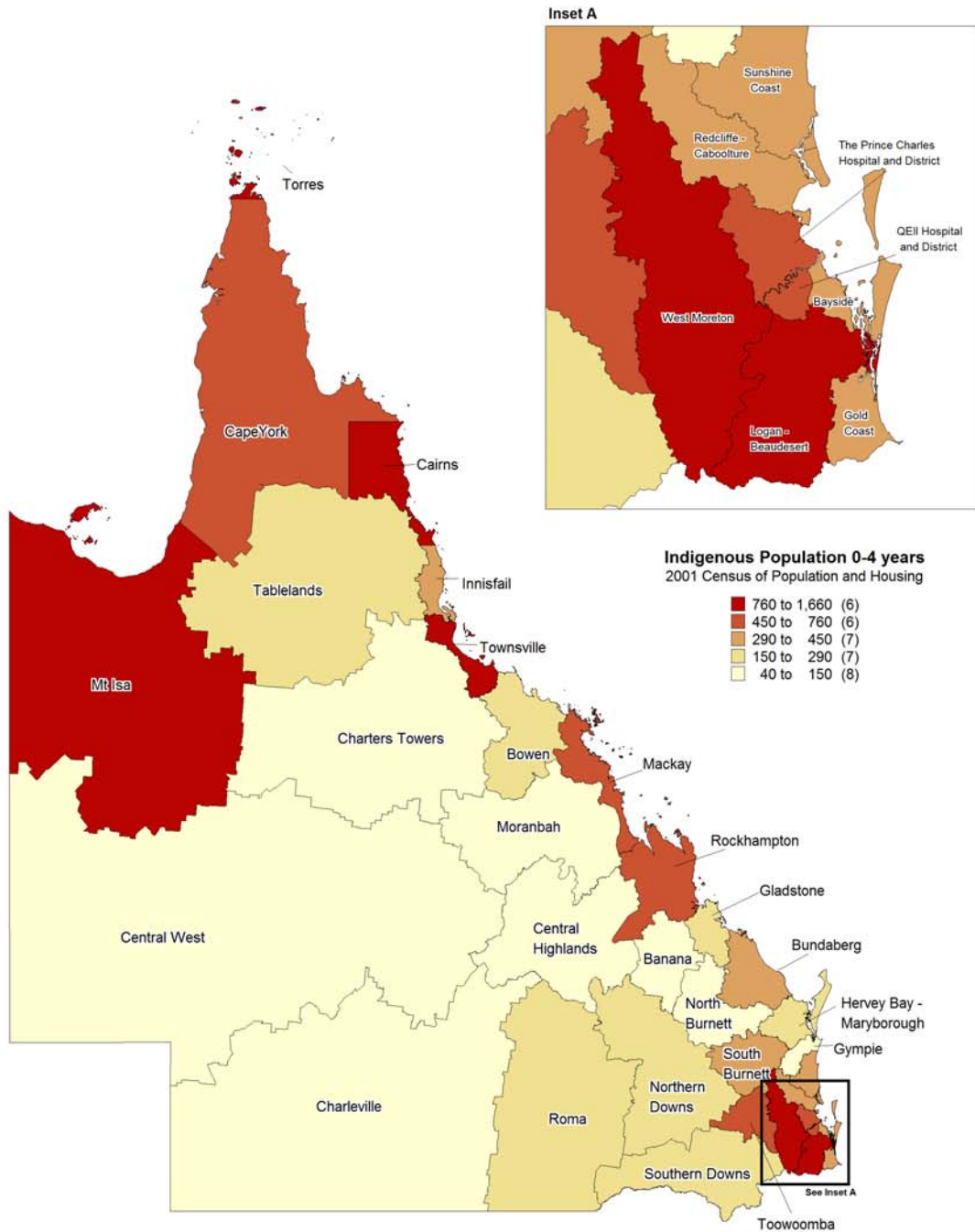
Queensland by Health Service Districts Indigenous Births by District of Usual Residence, 2004



N.B. Colour categories are defined by health service district quintiles.
The number in brackets represents the number of health service districts in that category.

Diagram 2

**Queensland by Health Service Districts
Indigenous Population Aged 0-4 years, 2001 Census**



N.B. Colour categories are defined by health service district quintiles.
The number in brackets represents the number of health service districts in that category.

Table 3 Indigenous Births by Health Service District of Usual Residence (Source: 2004 Perinatal Data)

Health Service District	Number of Indigenous Births	Health Service District	Number of Indigenous Births
Bayside	31	Mater	98
Charleville	27	QEII Hospital	
Gold Coast	38	PA Hospital	
Logan-Beaudesert	113	South Burnett	61
Northern Downs	24	Southern Downs	21
Roma	30	West Moreton	102
Toowoomba	85		
TOTAL (Southern Area Health Service)			630
Banana	9	Prince Charles Hospital	123
Bundaberg	43	Royal Brisbane Hospital	
Central Highlands	22	Royal Childrens Hospital	
Central West	7	Royal Womens Hospital	
Fraser Coast	35	Redcliffe-Caboolture	72
Gladstone	32	Rockhampton	143
Gympie	21	Sunshine Coast	34
North Burnett	9		
TOTAL (Central Area Health Service)			550
Bowen	33	Moranbah	6
Cairns	441	Tablelands	63
Cape York	131	Torres Strait	243
Charters Towers	25	Townsville	258
Innisfail	76	Mackay	68
Mt Isa	244		
TOTAL (Northern Area Health Service)			1588
QUEENSLAND TOTAL			2768

Evaluation of Training

Pre and Post training knowledge surveys were used to evaluate the impact of training.

Below are the results from 323 participants of 36 Growing Strong training workshops. Note data are missing for two trainings, Rockhampton and Maroochydore. Data have been compiled to report participants' confidence post training and a comparison of participant knowledge pre and post training.

By the end of training, participants reported:

- Confidence in using and applying the Growing Strong resources
- An increased knowledge of:
 - Good sources of folate
 - Breastfeeding duration recommendations
 - Signs a breastfed baby is receiving enough breastmilk
 - Appropriate introduction of solids
 - Feeding toddlers
- An increase in confidence in:
 - Giving advice about nutrition to mothers and families

- Talking to mums about attachment and positioning for successful breastfeeding

Resource Distribution

Growing Strong Books have been distributed to the following Area Health Services in the quantities shown from 2003 to 2005.

Table 4 Distribution of Books

Area Health Service	Number of Growing Strong Client Books Distributed
Southern Area Health Service	935
Central Area Health Service	1162
Northern Area Health Service	2171
Interstate	86
TOTAL	4354

Resource Evaluation

Respondents and Methodology

Surveys to evaluate the Growing Strong resources were posted to 359 individuals in Queensland who had either attended training in the use of the resources or requested resources. A total of 156 individuals responded to the survey, resulting in a response rate of 43%. It is unclear if this response rate is due to lack of interest or time in participating in the survey or anecdotally high staff turnover.

Table 4: Respondent profile by position

Position	Number	%
ATSI Health Worker	75	48
Child Health Nurse	8	5
Nurse	30	19
Dietitian/Nutritionist	17	11
Other	26	17
Total	156	100

A range of strategies were used to follow up non-responders. Training in the use of the Growing Strong resources had been attended by 92% of the respondents.

Results

Seventy six percent (76%) of respondents referred to the Growing Strong resources before any others for information on maternal and infant nutrition.

At least 78% of respondents “strongly agreed” or “agreed” that Growing Strong:

- Is current and accurate
- Is easy to find information in
- Is presented in a way that women and care givers can understand

- Encourages discussion about nutrition issues
- Encourages clients to make informed choices
- Provides the opportunity for referral to other sources of information and/or support
- Is liked by clients
- Suits the cultural and social needs of clients

How the Growing Strong Resources are Used

Use of Resources in Past Two Months

When asked to estimate how many times they had used the Growing Strong resources in the two months prior to the survey, respondents estimated 787 times in total and five times on average. Eighty six percent (86 %) of these times the resources were used with Indigenous clients.

Respondents estimated eight hundred and eighty one (881) Growing Strong books were given out in the two months prior to the survey, with 86% going to Indigenous clients.

Information to be included in the Growing Strong resources

Respondents were asked whether there was any information about nutrition for pregnant women, infants and young children that they thought was important that was not included in the resource. Topics included: general topics of diet, drugs and medications, breastfeeding, introducing solids, recipes and meal preparation and diabetes.

Other comments

Respondents were asked to provide any other comments they would like to share. A large number of responses were given. They may be broadly grouped around:

- Use of Growing Strong in a group setting and with other target groups eg fathers.
- Positive feedback on the resource, congratulations and thanks.
- Use of the resource with non-Indigenous clients especially those with low literacy.

Summary of Results

What worked well

- The Indigenous Mother and Child Nutrition Group facilitated the consistent and co-ordinated delivery of Growing Strong.
- Training was delivered to a consistent standard in a range of locations by a number of staff.
- Training increased participants confidence in both using the resources and giving nutrition and breastfeeding advice.
- Training increased participants' knowledge across all content areas.
- Resources are used very predominantly with Indigenous clients in a variety of ways and with a range of family members, age groups and life stages.
- Users find that information in the resources is current, accurate, easy to find and presented in a way that women and caregivers can understand.

- The resources encourage discussion about nutrition and the making of informed choices and provide opportunities to refer to other services.
- Resources are liked by clients and suit the cultural and social needs of Aboriginal and Torres Strait Islander mothers and children.
- Growing Strong training objectives and outcomes were achieved.
- Response to Growing Strong is overwhelmingly positive.

What could have worked better

- Project management relies on staff's historical knowledge rather than information being managed or archived.
- Resources were developed as the project progressed rather than as a co-ordinated, planned approach.
- Public health nutrition staff were overburdened with committees.
- Growing Strong began as a resource development project and in the end is spoken of as Queensland Health's program response to nutrition in pregnancy and early life for Indigenous people.

Recommendations

Project Management

- Growing Strong activity should be considered in the context of one part of a multistrategic approach to address nutrition in pregnancy and early life in the context of chronic disease prevention. This would be documented under the Early Life Priority Area Plan and then feed up to the Nutrition, Physical Activity and Oral Health Outcome Area Plan.
- Early Life Priority Action Area Team to consider other determinants of low birth weight and poor child growth and establishing partnerships with the lead agencies on these issues.
- The Early Life Priority Action Area Project Team to be responsible for the planning and project management specific to Growing Strong with actual project work being led by the Northern Area Health Service Public Health Nutrition team.
- The Early Life Priority Action Area Team to develop clear roles regarding the promotion, implementation, co-ordination, evaluation and support of training.
- Training and resource distribution data currently collected by Area Health Services should continue to be collected and reported via the Early Life Priority Action Area Plan.
- Staff attending training and resource distribution should be monitored against Indigenous births and re-oriented to those districts with greatest need.

Training

- Training should continue to be offered annually through Rural Health Training Units or similar, in each Area Health Service as a minimum.
- High staff turnover among Aboriginal and Torres Strait Islander health workers should be considered when determining frequency of training.
- Public Health Nutrition staff to advocate for the inclusion of Growing Strong training in Indigenous Child Health Worker training throughout Qld Health.
- A training plan should be developed by the Early Life Priority Action Area Project Team in consultation with the Area Health Service Indigenous Child Health Co-ordinators and Child and Youth Health Unit which includes priority groups and health service districts, comprehensive promotion of training, options for distance delivery, opportunities for incorporation into pre-service training and a funding policy for training including who pays for staff to attend, backfill of staff, travel allowance, accommodation, attendance fee should be developed.
- The Early Life Priority Action Area Team should consider if distributing resources only to those staff who have attended training is a bottleneck to wider dissemination and usage.

Resources

- Resource re-development will be led by the Northern Area Health Service Public Health Nutrition Team reporting key milestones to the Early Life Priority Action Area Project Team to ensure input from other Area Health Services and Corporate Office.

- Resource redevelopment will place more emphasis on addressing nutritionally poor, energy dense diets and the early onset of overweight and obesity as well as insufficient food and poor growth.
- Oral health, alcohol and drugs to be better addressed.
- Redevelopment will need to consider all existing resources ie. client book, manual, training manual, video, information flier to ensure consistency.
- A sustainable plan for who will pay for resource development, production and distribution should be developed. Area Health Services to determine what capacity we have to pay for resources as this may determine how we want to promote this.
- Resources that respondents identified they currently used should be reviewed as part of the re-development of Growing Strong for information, presentation style and format.
- Northern Area Health Service project team to consider users suggestions regarding the inclusion of additional information.
- Northern Area Health Service project team to identify existing videos, pamphlets and posters identified in the survey prior to the development of new ones.
- Northern Area Health Service project team to consider if a different format for the client resources would encourage staff to use them generously as staff have been reluctant to give away the booklet as it is a relatively high cost resource.
- The resources should be reformatted so that age appropriate information is in an easy to distribute format for health staff to use at health screening check points eg in Northern Area Health Service these are at 6 weeks, 8 weeks, 4mth, 6mth, 12mth, 15mth, 18mth, 21mth, 2yr,3yr and 4yr.
- Information on BMI to be included after 2 years.
- More information on childhood obesity and diabetes and the prevention of diabetes in a mother who has gestational diabetes to be included.

Sustainability

- A communication and marketing plan should be developed to ensure the ongoing use and awareness of the resources.
- The Early Life Priority Action Area Steering Committee to consider use of “Growing Strong” to “brand” a range of public health nutrition initiatives targeting Aboriginal and Torres Strait Islander mothers and children as the name is very well known and often used.
- Determine monitoring system for interstate use of Growing Strong.

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