

RIST Evaluation

of the Remote Indigenous Stores and
Takeaways Resources in Queensland and
the Anangu Pitjantjatjara Yankunytjatjara
Lands of South Australia.



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Acknowledgements

Funding for the evaluation of the Remote Indigenous Stores and Takeaways (RIST) resources was provided initially by Population Health Services, Division of the Chief Health Officer, Queensland Health. Subsequently, additional funding was provided by the Department of Health of South Australia to enable the evaluation to be conducted also in Anangu Pitjantjatjara Yankunytjatjara (APY) Lands of South Australia.

Anthea Gregoriou (RIST Nutritionist) conducted the evaluation. Kate Coates (Senior Public Health Nutritionist) and Dympna Leonard (Public Health Nutritionist, Early Life Indigenous Nutrition and Growth (ELING)) provided supervision and support. This report was written by Anthea Gregoriou and Dympna Leonard.

Many thanks to:

- Kate Coates who assisted with the development of the evaluation project, input and analysis of store sales data and development of the enhanced *Keeping track of healthy food*
- Sharon Laurence (formerly National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (NATSINSAP) Project Officer) who assisted with the development of the evaluation project plan
- Dr. Janice Knights who assisted with the development of the evaluation methodology, data bases and data analysis
- Peter Horne who prepared the maps
- Liz Whitlock who assisted with store sales data input
- Noore Alam who analysed the tobacco sales data
- Rosalind Butler who provided the map of the APY Lands and supported the evaluation with stores in the APY Lands
- Julie Brimblecombe and Robyn Liddle from Menzies School of Health Research in Darwin who conducted training in *Keeping track of healthy food*, in Cairns in November 2008
- The store managers, takeaway managers, store group managers, nutritionists, dietitians and others who gave their time to participate in interviews and surveys and talk about the RIST resources, providing valuable information reported here
- The store managers and store group managers who provided the store sales data
- The people of the remote communities visited in the course of this evaluation. We are grateful for the opportunity to travel to these communities and appreciate the welcome and support provided for this work.
- A special acknowledgement goes to the Aboriginal and Torres Strait Islander peoples of the remote communities of Queensland and elsewhere in Australia, whose concerns about their food supply and health led to the Remote Indigenous Stores and Takeaways (RIST) project and, subsequently, to this evaluation.

A note in respect of the term ‘nutritionist’ as used in this report

This evaluation was conducted with the support of many people including different nutrition specialists. These included community nutritionists, nutrition health workers and nutrition promotion officers. These nutrition staff usually work to develop and implement nutrition promotion programs in community-based settings (e.g. schools, health centres and child care centres) and in community stores.

In some locations, dietitians were involved with local stores and with this evaluation. Dietitians usually work with people who have clinically established nutrition-related conditions such as diabetes. However, in the course of their work, many dietitians who work in remote areas are engaged in community nutrition programs, including work with stores.

In this report, for convenience, all of these nutrition specialists were grouped together under the term ‘nutritionists’.



1: Executive summary

This report describes the results of the evaluation of the Remote Indigenous Stores and Takeaways (RIST) resources which was conducted over one year – from mid-2008 to mid-2009 – in Queensland and the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands of South Australia.

The RIST resources were designed to assist managers of remote stores and takeaways in remote Indigenous communities to provide and promote healthy food and drinks choices.

The evaluation was planned to learn who was using the RIST resources in Queensland and the APY Lands, how useful they found them, any improvements and changes needed, and what outcomes could be achieved by using the resources.

A public health nutritionist – the RIST nutritionist – was employed to develop and conduct the evaluation of the RIST resources in Queensland over one year, from mid-2008 to mid-2009. The evaluation was extended to the APY Lands of South Australia.

The evaluation has generated much useful information despite a short time frame and the relatively small number of participants in the detailed evaluation. Most of the information in this report relates to remote community stores, as few takeaway food outlets ordered the RIST resources or participated in the evaluation.

In addition, the evaluation generated some unanticipated information with respect to store sales, highlighting the need to address sales of less healthy choices in remote stores and takeaways, as well as increasing availability and sales of healthy choices.

This evaluation did not include the Northern Territory where the Australian Government Emergency Response means that remote stores operate under a store licensing scheme which does not exist in other jurisdictions. The results described here should not be extrapolated to settings, such as the Northern Territory, where the policy context is very different.

In the course of this evaluation, colleagues in the Northern Territory described how the RIST resources formed the basis for policies and practices developed by various government and store agencies involved in the store licensing scheme. Consequently, the RIST resources may have had uses and applications which are not captured in this evaluation.

1.1 Results

1.1.1 Who uses the RIST resources and how useful are they?

The evaluation showed that the RIST resources were used mainly by nutritionists working with remote community stores, rather than by store managers. By contrast, few store managers used the resources to any extent; even the resources deemed most useful by store managers were used by only about half the managers. The entire suite of resources was used by nutritionists; even the least used resource was used by more than half the nutritionists.

These results are different from expected but demonstrate that the resources were being used and were useful.

Use of the RIST resources by nutritionists

RIST resources rated most useful by nutritionists were:

- *Guidelines for remote community stores: Guidelines for stocking healthy food in remote community stores* (7-page booklet)
- *Marketing ideas for healthy food in remote community stores*
- *Heart Foundation Buyer's Guide*
- *Checklist: How healthy is your store?* (4-page booklet).

Use of the RIST resources by store managers

RIST resources rated most highly by store managers were:

- *Guidelines for remote community stores: Guidelines for stocking healthy food in remote community stores*
- *Maximising the shelf life of fruit and vegetables* (A3 poster)
- *Checklist: How healthy is your store?*

Store managers reported that their responsibility for general store operations and store profitability, and their lack of relevant nutrition expertise, meant that they were unable to undertake the additional work of nutrition promotion. Store managers generally support promotion of healthy choices but rely on collaborations with nutritionists who conduct the promotions.

Use of the RIST resources by takeaway managers

Few takeaway food outlets ordered the RIST resources or participated in the evaluation. Takeaway food outlets are reportedly significant contributors to the food supply in remote communities. As takeaways often operate separately from stores and in competition with stores, it is important that takeaways are actively included in any future initiatives related to remote food supply and nutrition.

1.1.2 Effectiveness of the RIST resources

The outcome of nutrition promotions using the RIST resources was assessed by examining store sales data. Some positive changes were seen in respect of stocking practices but little impact on sales of healthy choices was seen in the short time frame of this evaluation.

There have previously been well-documented examples of community-based nutrition promotion programs achieving changes in store sales patterns. The absence of such an outcome during the RIST evaluation may have been due to the relatively short time frame during which promotional activities were conducted.

Alternatively, or additionally, factors related to the cost of healthy food and drink choices, compared with less nutritious choices, may restrict purchasing options. When financial resources are limited, people tend to purchase cheap ‘filling’ foods (bread, flour and white rice).¹ The cost of these foods is lower than the cost of nutrient-dense foods such as lean meat, low-fat dairy foods, fruit and vegetables.

It may be that increased sales of healthy choices will only be achieved by reducing the relative cost of healthy choices. More research is needed to develop and assess the impact of such an intervention.

1.1.3 Support and training

The RIST nutritionist provided information and support to store managers, takeaway managers and local-level nutritionists.

Menzies School of Health Research staff conducted training for nutritionists in the use of *Keeping track of healthy food*. This training was well received, and follow-up evaluation showed ongoing use of *Keeping track of healthy food* which is used to measure changes in store sales. There needs to be ongoing access to training in the use of *Keeping track of healthy food* for nutritionists involved in store and takeaway initiatives in remote settings.

Store and takeaway managers identified the need for training for store staff in nutrition with a focus on the nutrition and health of Aboriginal and Torres Strait Islander people. In response to this, funding has been provided by Queensland Health Population Health Services for the development of a training package. Work has commenced on the development of the training package by the Cairns Public Health Unit nutrition team and this is expected to be completed and piloted by December 2010.

1.1.4 Sales patterns

Analysis of store sales data showed that a large proportion of food and drinks sales are sales of ‘non-core’ foods which are energy-dense and nutrient-poor. Forty-four per cent (by weight/ volume) of food and drink sales in stores in Aboriginal communities and 37% of food and drink sales in Torres Strait outer island stores were non-core food and drinks.

This type of purchasing pattern reflects the underlying economic constraints of Aboriginal and Torres Strait Islander people of remote communities with low incomes and high household dependency levels. This underlying context has to change in order to achieve equity in health status. However there is opportunity, even within the current economic constraints of remote communities, to support healthy eating and improved nutrition.

In Queensland, many remote stores receive government support in different forms. One reason for this is to ensure access to healthy food for people in remote communities.² In this context, it is surprising to note the relative quantities of energy-dense, nutrient-poor foods and drinks

¹ Drewnoski A, Darmon N. *The economics of obesity –dietary energy density and energy cost. American Journal of Clinical Nutrition* 2005; 82(suppl):265S-73S

² Hansard Home Page: <http://www.parliament.qld.gov.au/hansard/> 4 June 2008

sold by remote stores. For example, sales of high-sugar soft drinks comprised 10% by dollar value of all food and drink sales in Aboriginal community stores and nearly 20% by volume/weight. In Torres Strait outer island stores, high-sugar soft drinks comprised 14% by volume/weight of all food and drink sales. (Dollar value of sales was not available for all Torres Strait outer island stores).

The quantity of high-sugar soft drinks sold in stores in Aboriginal communities was half as much again (156%) as the quantity of fresh fruit and vegetables sold. In the Torres Strait outer island stores, the quantity of high-sugar soft drink sold was just slightly less (97%) than the quantity of fresh fruit and vegetables sold.

Energy-dense, nutrient-poor foods and drinks have been shown to contribute to the development of overweight and obesity and associated chronic diseases, such as heart disease and diabetes. As the prevalence of these chronic diseases is particularly high among Aboriginal and Torres Strait Islander people in remote communities, the sale of these energy-dense, nutrient-poor foods and drinks in such large quantities is particularly concerning. It would be useful to measure the impact on health of the sales of nutritionally poor food and drink choices in remote communities in Queensland and the likely cost-benefits of changes in sales patterns.

Work as commenced on a project to enhance *Keeping track of healthy food* in order to provide greater flexibility in use and in reporting.

1.2 Nutrition policies for stores and takeaways

In recent years, remote stores in Queensland have been supported to adopt the business practices of the mainstream retail industry. While this may have many benefits in term of efficient operations, a requirement for profitable store operations may contribute to increased sales of less nutritious and more profitable foods and drinks.

The present situation can place store managers in a situation of conflict of interest, as pressure for profitability can be inconsistent with pressure to increase the proportion of sales of healthy choices.

It is important that nutrition-related indicators are included in routine store operational reports, as well as the usual business indicators. This can be done by requiring remote stores and takeaways to develop, implement and report on nutrition policies, with the dual aims of increasing sales of healthy foods and drinks and reducing sales of less healthy choices and including meaningful and measurable targets. It may be appropriate to link performance targets – and possibly remuneration – of store and takeaway managers with the nutrition policy targets.

1.3 Collaborations with communities

The information derived from analysis of store sales data can be used to inform remote community residents about store sales and community purchasing patterns, as the basis for planning nutrition interventions and promotions.

In Queensland, where most remote stores are not community-owned, there may be reluctance to share information on sales with the community. If this is the case, important information required for planning nutrition interventions with remote communities will not be available.

This is an issue which government agencies may be able to address by linking support for remote stores with a requirement for store and takeaway nutrition policies, including transparent reporting against targets.

1.4 Sales of tobacco products

In Aboriginal community stores, the dollar value of sales of tobacco products was also very high. For every \$100 worth of food and drink sales there was, in addition, \$33.19c worth of tobacco sales. Unfortunately, equivalent information was not available for all Torres Strait island stores.

It is very likely that the high levels of expenditure on tobacco and cigarettes will negatively impact on the ability of residents of remote communities to purchase healthy food and other necessities, increasing the risk of household food insecurity.

1.5 Gaps, updating and a future ‘home’ for the RIST resources

The evaluation identified that there is a gap in the suite of RIST resources which were designed to promote healthy food and drink choices. For example, there is a need for resources that address the large quantities of energy-dense, nutrient-poor foods sold by remote community stores, in order to reduce the proportion of these choices sold in remote stores and takeaways.

There is also a need for a mechanism to update the RIST resources so that these remain consistent with changes in the food supply.

As a consequence of this evaluation, work has been initiated to enhance *Keeping track of healthy food* to provide more flexibility in reporting. This work will be lead by the Menzies School of Health Research in Darwin. Public Health Services Queensland have contributed funding for this project.

A system of updating, promotion and training in respect of the RIST resources is only feasible if the RIST resources have a home with an agency which will undertake this work. Such an agency may be identified during the course of current work for the Council of Australian Governments on food security for remote communities.³

In the meantime, responsibility for the RIST resources in Queensland should continue to remain with the Division of the Chief Health Officer. This responsibility should include liaison with other interested parties to establish a home for the RIST resources.

1.6 Nutrition workforce

The RIST resources are only useful if there is a workforce to utilise them; otherwise, no matter how useful they are, the resources will not be used.

A well-resourced and supported nutrition workforce is needed to work with communities, stores and takeaways in remote community settings, in order to achieve sustained improvements in nutrition and health among Aboriginal and Torres Strait Islander people in those settings.

These nutritionists need appropriate, useful, up-to-date and effective resources, and they need professional and technical support to work with communities to develop, implement, evaluate and report on nutrition interventions. Lack of adequate funding, lack of housing and insufficient professional support are some of the many barriers to recruiting and retaining staff. These barriers need to be addressed if effective nutrition programs are to be implemented in remote locations.

1.7 Research requirements

This evaluation has identified gaps in knowledge and understanding of the current food security situation of people living in remote Aboriginal and Torres Strait Islander communities.

Research is required to trial and evaluate interventions to increase purchasing of healthy food and drinks choices by people in remote communities, while decreasing purchase of less healthy choices.

Research into the impact of smoking and purchase of tobacco products on food preferences and food purchasing is needed, in addition to studies to quantify the health impact of energy-dense, nutrient-poor foods and drinks sold by remote stores and takeaways on the health of people of remote Aboriginal and Torres Strait Islander communities and to estimate the cost-benefits of interventions.

Detailed recommendations are listed in Section 8 of this report.

³ Council of Australian Governments Communique, December 2009 http://www.coag.gov.au/coag_meeting_outcomes/2009-12-07/index.cfm?CFID=130316&CFTOKEN=41595825#food_security

2: The RIST resources*



Guidelines for remote community stores: Guidelines for stocking healthy food in remote community stores

An A4 booklet that outlines the minimum range of core foods which should be stocked in remote community stores, regardless of size of the store



Maximising the shelf life of fruit and vegetables

An A3 poster that outlines key points for handling fresh fruit and vegetables to maintain good quality longer



Marketing ideas for healthy food in remote community stores

An A4 booklet that outlines how to promote healthy foods and drinks in a remote store setting



Healthy fast food: A resource for remote stores and takeaways

An A4 spiral-bound booklet that provides solutions for supplying safe, affordable and healthy takeaway options



Checklist: How healthy is your store?

An A4 checklist with tick boxes, that can be used to assess the current capacity of a store to provide healthy food and drink options and to identify potential areas for improvement



Checklist: How healthy is your takeaway?

An A4 checklist with tick boxes, that can be used to assess the current capacity of a takeaway to provide healthy food and drink options and to identify potential areas for improvement



Heart Foundation Buyer's Guide 2008: For managers of remote Indigenous stores and takeaways

An A4 booklet to assist managers of remote Indigenous stores and takeaways in ordering healthier food products within specific food categories



Keeping track of healthy food

An Access database management system that uses scanned sales data to assess and monitor a community's consumption of key foods and nutrients. This information is indicative of a remote community's food purchasing habits and nutrition issues



Freight improvement tool kit (Getting quality healthy food to remote Indigenous communities)

A booklet/CD for store managers, as well as others involved in the food supply chain, on methods to improve freight transport of healthy foods to remote stores

The RIST resources were published in January 2008, with the exception of the Freight improvement toolkit which was published in 2007.

* See Appendix A for more information on the RIST resources.

3: Introduction



The Remote Indigenous Stores and Takeaways (RIST) project commenced in October 2005 as one component of the National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan 2000-2010 (NATSINSAP).⁴ Food supply in rural and remote communities is one of the key priority areas of NATSINSAP. Food supply in remote settings is also identified as a priority action area in Eat Well Queensland.⁵

The RIST project was jointly funded by the Australian Government and the governments of Queensland, Northern Territory, Western Australia, South Australia and New South Wales to address food supply issues related to remote Indigenous stores and takeaways. The RIST project was hosted by the Northern Territory Department of Health and Community Services.

One outcome of the project was the set of RIST resources (see Section 2). These resources were designed to assist remote stores and takeaways with the provision and promotion of healthy foods and drinks in remote Indigenous communities. It was intended that the resources be used by store managers, store staff, nutritionists and other health professionals working in remote areas.

A nutrition team from Queensland Health Tropical Population Health Services (now Tropical Regional Services, Division of the Chief Health Officer) undertook an evaluation of the RIST resources in Queensland and in Anangu Pitjantjatjara Yankunytjatjara (APY) Lands of South Australia.

3.1 Background

Poor nutrition is a significant contributor to illness in remote Indigenous communities. Poor nutrition is linked to low birth-weight, anaemia and poor growth during infancy and childhood, and overweight and obesity among children and adults. These conditions are associated with poor development and health in early childhood and with chronic diseases such as diabetes, hypertension and heart disease in adult life. Such conditions are highly prevalent in remote Indigenous communities.⁶

The need for greater emphasis on chronic disease prevention has been recently highlighted in a report by the Australian Institute of Health and Welfare.⁷ The report shows that the burden of chronic conditions in Indigenous populations far outweighs that in the non-Indigenous populations, with cardiovascular disease resulting in three times more deaths and with diabetes death rates between seven and ten times higher. The obesity rate for Aboriginal and Torres Strait Islander adults is double that of non-Indigenous Australians.

4 National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (NATSINSAP) SIGNAL. Canberra: National Public Health Partnership; 2001 <http://www.nphp.gov.au/publications/signal/natsinsa1.pdf>

5 Queensland Public Health Forum. *Eat Well Queensland 2002–12: Smart Eating for a Healthier State*. Brisbane: Queensland Public Health Forum; 2002

6 National Health and Medical Research Council. *Nutrition in Aboriginal and Torres Strait Islander Peoples. An Information Paper*. Canberra: National Health and Medical Research Council; July 2000

7 Australian Institute of Health and Welfare. *Australia's Health 2006: The Tenth Biennial Health Report of the Australian Institute of Health and Welfare*. (AIHW catalogue no. AUS 73). Canberra: Australian Institute of Health and Welfare; 2006

The high prevalence of nutrition-related disease, as well as high rates of smoking, among young women in Cape York and the Torres Strait is concerning. A recent publication reported that the incidence of new cases of diabetes in women between 15 years and 35 years in Torres Strait is three times that reported among non-Indigenous Australian women aged 25-34 years during the same period, while incidence of diabetes among young women in Cape York is even higher, being six times the mainstream rate.⁸ The poor nutrition and health of young women has an intergenerational impact on the health of their children. These effects include increased risk of early onset obesity and Type 2 diabetes in their children.⁹

Poor quality diet reported among Indigenous Australians is characterised by excessive intake of refined carbohydrate, saturated fat and sodium, and low levels of fruit and vegetable consumption.¹⁰⁻¹¹ Research undertaken using store turnover methodology in remote Northern Territory communities from the 1980s identified that 50% of energy consumption was derived from just three foods: beef, white flour and sugar.¹² Twenty years later, similar patterns were revealed in a community food supply study undertaken in North East Arnhem land, where four single food items, including table sugar, flour, bread and milk, provided approximately 50% of the total energy. Fruit contributed no more than 1% to total energy intake.¹³

In contrast to previous times, Indigenous people now rely on an imported food supply. In remote areas, stores and takeaways provide approximately 90-95% of all food that is consumed in the community.¹⁴⁻¹⁵ Healthy foods tend to be expensive, and stores offer a limited range of healthy choices, particularly for perishable items such as fruit and vegetables. In view of that, improved access to healthy food in remote communities was identified in the National Aboriginal Health Strategy¹⁶ and the National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (NATSINSAP)¹⁷ as a key priority for improving the nutrition status and general health of people living in these communities.

8 McDermott R, Campbell S, Li M, McCulloch B. The health and nutrition of young Indigenous women in north Queensland – intergenerational implications of poor food quality, obesity, diabetes, tobacco smoking and alcohol use. *Journal of Public Health Nutrition*. 2009;12:2143-9. doi: 10.1017/S1368980009005783

9 Coory M. Is birth weight an appropriate health-outcome measure for Torres Strait Islander babies? *Australian and New Zealand Journal of Public Health*. 2000; 24(1):354-7

10 Brimblecombe J. *Keeping Track of Healthy Foods; Towards Improving the Nutritional Quality of Foods Sold in Community Stores in Remote Australia*. Darwin: Menzies School of Health Research; 2008

11 Lee A, O'Dea K, Mathews J. Apparent dietary intake in remote Aboriginal communities. *Australian Journal of Public Health*. 1994;18(2):190-7

12 Lee A, Bailey A, Yarmirr D, O'Dea K, Mathews J. Survival tucker: Improved diet and health indicators in an Aboriginal community. *Australian Journal of Public Health*. 1994;18:277-85

13 Brimblecombe, J. *Enough for rations and a little bit extra. Challenges of nutrition improvement in an Aboriginal community in North-East Arnhem Land*; Menzies School of Health Research and Institute of Advanced Studies, Charles Darwin University; 2007. PhD thesis

14 Nganampa Health Council, Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council Anangu Pitjantjatjara and all Community Councils on the Anangu Pitjantjatjara Yankunytjatjara Lands. *Mai Wiru. Process and policy. Regional Stores Policy and Associated Regulations for the Anangu Pitjantjatjara Lands*. Nganampa Health Council and Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council, 2002. ISGN o 9585159 4 8

15 Lee A, Bonson A, Powers, J. (1996) The effect of retail store managers on Aboriginal diet in remote communities. *Australian and New Zealand Journal of Public Health*. 1996;20(2):212-4

16 National Aboriginal Health Strategy Working Party. *National Aboriginal Health Strategy*. 1989, reprinted 1996

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In 2003 the FoodNorth: Food for Health in North Australia¹⁸ study was conducted. This study, funded by the Office of Aboriginal Health of the Department of Health in Western Australia, aimed to collect and collate information on crucial issues affecting food supply in remote Indigenous communities across north Australia. The FoodNorth report documented some of the key issues regarding food supply to remote communities and provided examples of interventions and strategies that had been used in different locations, which had potential to provide models for future work to improve food supply and nutrition for Indigenous people in remote communities.

The work of RIST was guided by the proposals of the FoodNorth report and by subsequent events, including the establishment of Outback Stores and the licensing of remote stores in the Northern Territory as part of the Australian Government Northern Territory Emergency Response 2007.

The RIST project developed guidelines for 'best practice' in respect of nutrition in remote stores and takeaways. These best-practice principles were incorporated into the RIST resources for use by store managers and takeaway managers, and the nutritionists who support them, to improve store operations and evaluate nutrition-related initiatives. The RIST resources were printed in January 2008.

3.2 Scope of this report

This report describes the methodology and results of the evaluation of the RIST resources in Queensland and the APY Lands of South Australia, which was conducted from July 2008 to June 2009. This report includes information on:

- the distribution and promotion of the RIST resources
- the usefulness and usage of the RIST resources
- the effectiveness of using the RIST resources to increase the availability of healthy foods and drinks in remote Indigenous stores
- the effectiveness of using the nutrition promotion strategies detailed in the RIST resources to achieve changes in sales of healthy food and drink choices compared with less healthy choices
- current sales patterns, analysed using *Keeping track of healthy food*
- the potential use of store sales data in preparing information for reporting to remote communities on their purchasing and expenditure patterns.

¹⁸ Leonard D. *FoodNorth*. Department of Health in Western Australian. <http://www.healthinonet.ecu.edu.au/health-risks/nutrition/publications/key-references>

3.3 The RIST evaluation

In June 2008 a project officer (the RIST nutritionist) was employed to implement the next phase of the RIST project in Queensland (see Map 1) including the dissemination, training and evaluation of the RIST resources. The Department of Health of South Australia provided additional funding in order to support the RIST nutritionist to extend the evaluation to some remote communities in the APY Lands of South Australia (see Map 2).

The RIST nutritionist was based in Cairns Public Health Unit (formerly the Tropical Population Health Unit, Cairns) from mid-2008 for 15 months during which time she:

- promoted and distributed the RIST resources in remote Aboriginal and Torres Strait Islander communities across Queensland and the APY Lands of South Australia
- provided information and training to ensure an understanding of the use of the RIST resources
- designed and conducted the evaluation of the resources.

The RIST evaluation consisted of several components which were implemented to a different extent according to local priorities and opportunities. The 'core' components of the evaluation included the analysis of orders and distribution, as well as assessment of the usefulness, current use and planned future use of the individual resources. The more 'detailed' evaluation included an assessment of the effectiveness of nutrition promotion strategies undertaken by store managers and/or nutritionists using checklists, and analysis of the store sales data as indicators of outcome.

Remote store groups, stores and takeaways in Queensland include:

- the Retail Stores group which is part of the Office of Aboriginal and Torres Strait Islander Policy of the Queensland Department of Communities and which operates stores in six Aboriginal communities
- the IBIS store group which is a Queensland Government Statutory Body operating sixteen stores in the Torres Strait and Northern Peninsula Area
- the Island and Cape Group, a privately-owned business which operates remote stores, with four stores in the Torres Strait and one in Cape York
- approximately ten remote stores owned by community councils or privately-owned, mainly located in north Queensland
- one community-owned store managed by Outback Stores
- numerous takeaway food outlets.

Takeaway food outlets, bakeries and 'coffee-shops' may be owned by community councils but leased to private operators. Others are privately owned, some by church groups. A recent survey in Cape York identified an average of two takeaway food outlets in each community

operating independently of, and in competition with, the main community store.¹⁹ In addition, stores in remote townships, which are usually privately-owned, provide retail services to customers, many of whom are Aboriginal and/or Torres Strait Islander people.

In Queensland the reach of the evaluation was state-wide. However, respondents were mainly from north Queensland where most of the remote Indigenous community stores and takeaways are located.

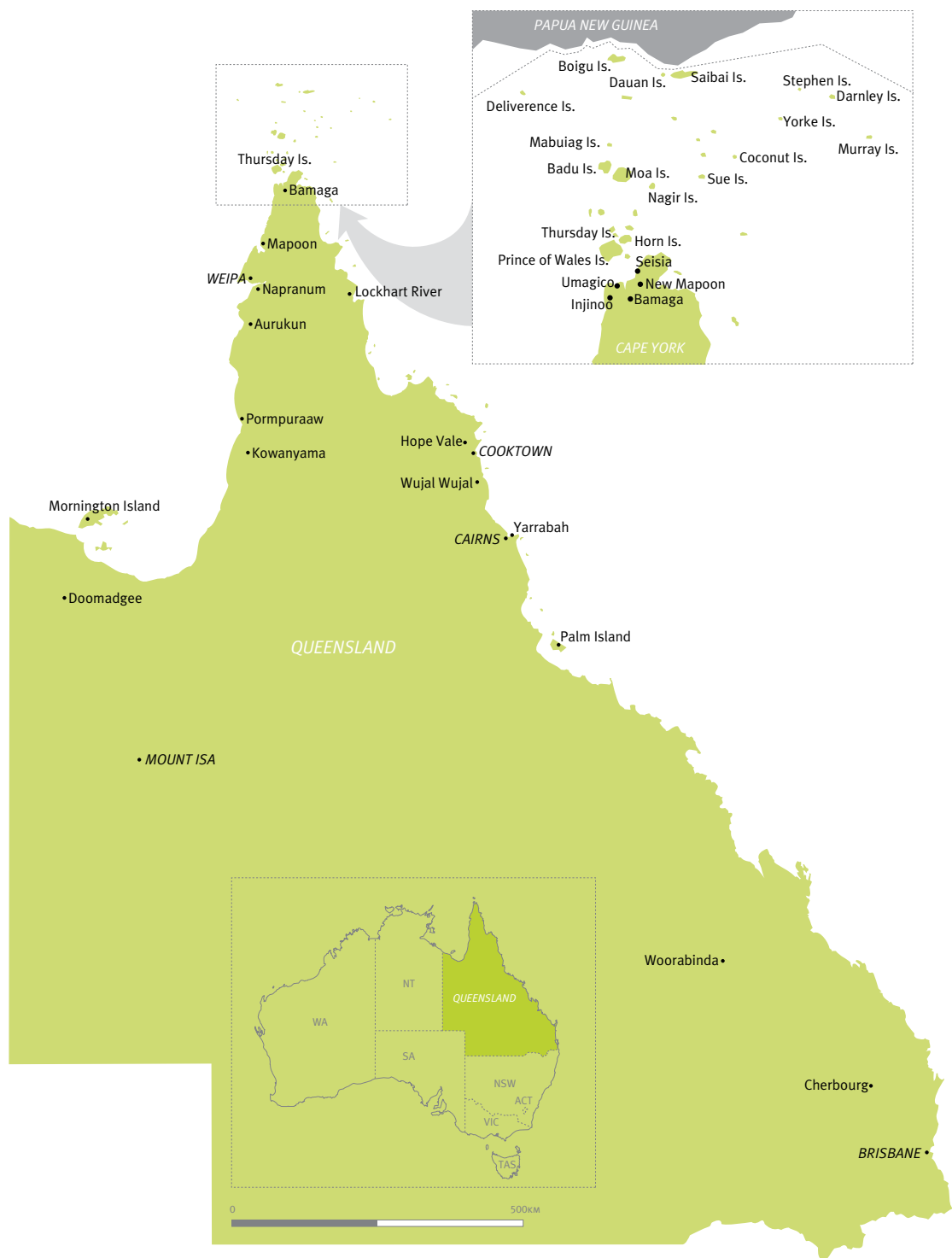
In the APY Lands of South Australia (see Map 2) there are six community-owned stores which have endorsed the Mai Wiru (Good Food) Stores policy.²⁰ Mai Wiru is an example of a community developed and managed nutrition policy with the aim of improving the health and wellbeing of the Anangu (Aboriginal people) living on the APY Lands by ensuring continuous access to nutritious and affordable food and essential health items. A public health nutritionist employed by Nganampa Health Services supports these stores.

Queensland is unusual compared with other locations in remote Australia in that few remote stores have store committees. The majority of stores in the APY Lands of South Australia are community-controlled, and all of these have store committees.

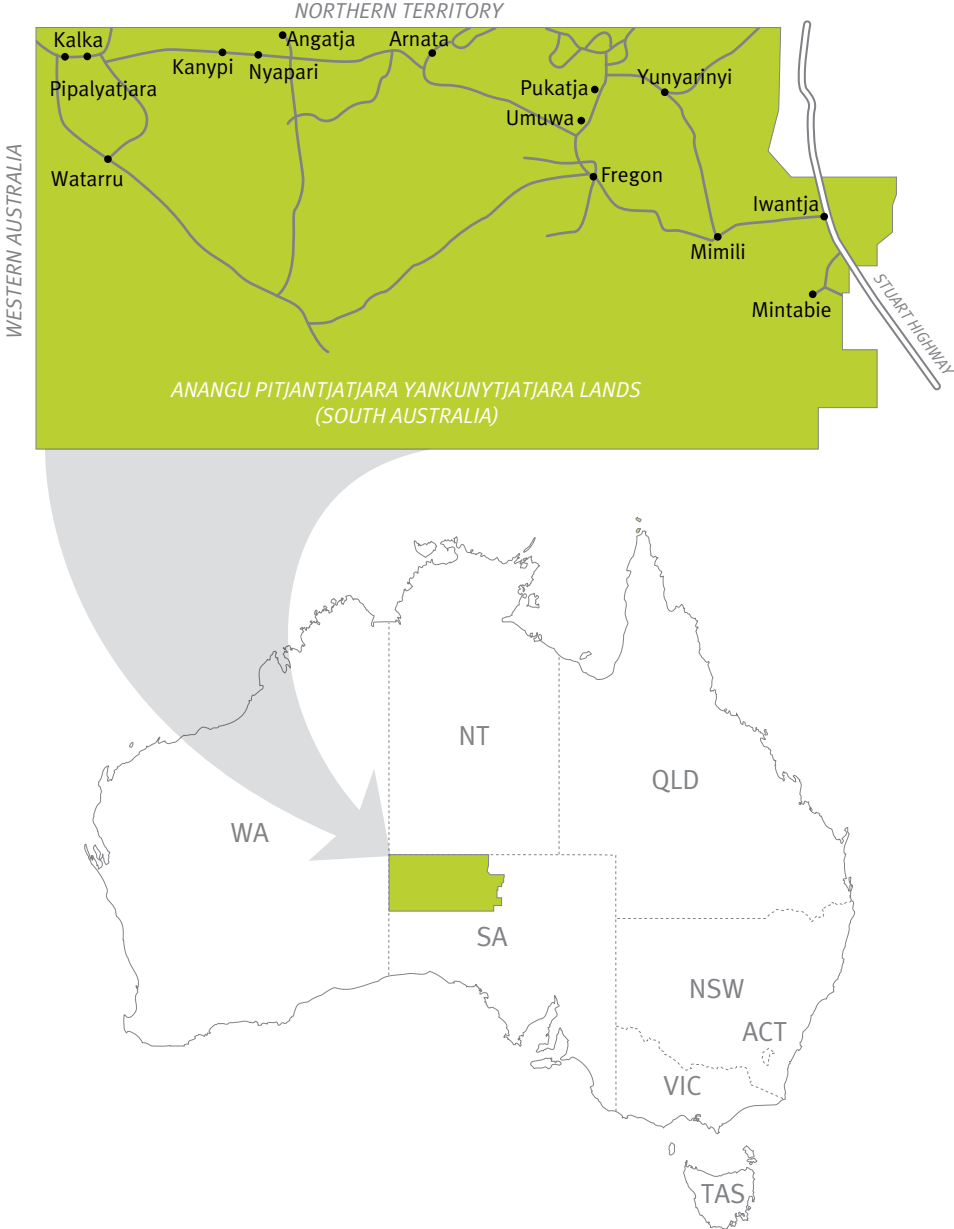
19 Personal communication, Elizabeth Whitlock, Cairns Public Health Unit nutrition team 2009

20 Mai Nganampa Health Council and Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council. Mai Wiru Regional Stores Policy 2002. ISGN 0 9585159 4 8 <http://www.healthinonet.ecu.edu.au/health-resources/programs-projects?pid=69>

Map 1: Queensland including the Torres Strait and the Northern Peninsula Area



Map 2: Anangu Pitjantjatjara Yankynyjtjara (APY) Lands, South Australia





4: Aims and objectives

4.1 Project goal

To promote and distribute the Remote Indigenous Stores and Takeaways (RIST) resources and to evaluate the usage and effectiveness of the strategies contained within these resources.

4.2 Objectives

4.2.1 To promote the RIST resources among store managers and nutrition and health staff in Queensland (core evaluation)

Indicators

- number of people reached
- number of different target groups reached
- geographical distribution.

4.2.2 To distribute the RIST resources among store managers, nutritionists and key stakeholders and others in Queensland and the APY Lands of South Australia (core evaluation)

Indicators

- number of different target groups who placed orders
- number of resources distributed
- types of resources distributed
- geographical distribution.

4.2.3 To assess the initial usage of the RIST resources among store managers in Queensland (core evaluation) and to identify nutritionists and store managers to be included in the detailed evaluation

Indicators

- level of initial use
- number of store managers involved in the detailed evaluation
- number of nutritionists involved in the detailed evaluation.

4.2.4 To provide information and training to meet the perceived needs of nutritionists, store managers and others in Queensland, for effective use of the RIST resources (core evaluation)

Indicators

- increased usage of the resources
- change in the level of knowledge
- increased confidence in using the resources
- continued use of *Keeping track of healthy food*.

4.2.5 To evaluate the usefulness, current use and future use of the RIST resources (core evaluation)

Indicators

- levels of current and future use
- use of each of the resources by target audience
- perceived relevance of the resources.

4.2.6 To evaluate the effectiveness of the strategies contained within the RIST resources throughout Queensland and the APY Lands of South Australia (detailed evaluation)

Indicators

- increased availability of healthy foods and drinks
- number of strategies undertaken
- professions which undertook the strategies
- increased sales of healthy foods and drinks
- decreased sales of soft drinks (not diet drinks).



5: Methodology

5.1 Recruitment

A flyer promoting the resources was distributed across all remote locations in Queensland, and the 44 respondents were included in the core evaluation. The nutritionist working with the APY Lands of South Australia distributed the RIST resources there, and six APY Land stores were included in the core evaluation.

Fifteen locations in Queensland (stores in 14 remote Indigenous communities and one remote township) and stores in four remote Indigenous communities in the APY Lands of South Australia agreed to be involved in the detailed evaluation. Takeaway stores were not included in the detailed evaluation, as it was not possible to obtain scanned store sales data.

The sites in Queensland and the APY Lands of South Australia were selected for the detailed evaluation if:

- the store manager/store group was prepared to provide quarterly sales data for the periods April–June 2008, July–September 2008, October–December 2008 and January–March 2009
- the store manager and/or nutritionist were prepared to complete the planning tracking sheets and provide these to the RIST nutritionist for the period October–December 2008 and January–March 2009
- the population of the community was more than 85% Aboriginal and/or Torres Strait Islander people.²¹

The fifteen stores which participated in the detailed evaluation included government-supported, community-owned and privately-owned stores in Queensland and the APY Lands of South Australia.

The population of the communities involved in the detailed evaluation ranged from approximately 80 to more than 2,000 residents. The majority of these communities have only one store. Some also have a takeaway food outlet and/or coffee shop and/or bakery. Supplies are delivered once per week in most cases by road or by barge. However, the supply system can be interrupted by flooding and road closures during the wet season.

²¹ The remote township did not meet this criterion

5.2 Distribution of the RIST resources

Information flyer and fax-back order form

- With assistance from colleagues, the RIST nutritionist developed a monitoring and recording system for distribution with contact details of all store group managers, store managers, takeaway managers, nutritionists, dietitians, health professionals and others (including Chief Executive Officers of Aboriginal Medical Services and relevant non-government organisations) in Queensland. The list was not exhaustive. However, it did include all remote Indigenous stores and townships in Queensland.
- A flyer outlining the details of the RIST resources and including a fax-back order form was developed and emailed or mailed to everyone on the contact list.²²
- Included on the flyer and fax-back form was information for nutritionists to indicate whether they wanted more information on the RIST sales data electronic analysis tool, Keeping track of healthy food.
- The RIST resources were distributed on receipt of the fax-back order form.
- Most packages initially distributed included one of each of the resources. Further packages and individual resources were distributed on request.
- Nutritionists who commenced work after this process were also given a set of the RIST resources.

Remote Indigenous community visits

- The RIST nutritionist visited 15 remote Indigenous communities in Cape York, Torres Strait and Northern Peninsula Area and the APY Lands of South Australia.
- An orientation to each resource was provided to nutritionists, health promotion officers, store managers, takeaway managers and others. This included:
 - an explanation of the resources including the purpose
 - how they were relevant
 - how they could be used
 - the support available for use of the resources
 - the activities required for the detailed evaluation.

Other distribution methods

- The store nutritionist in the APY Lands distributed the RIST resources to the store managers.
- RIST resources were also distributed to store managers at the request of store group managers.
- RIST resources were distributed to the Directors of Nursing and Nurse Managers in remote health centres and hospitals.

²² See Appendix B

5.3 Initial store manager interviews

- Structured telephone interviews using a questionnaire²³ were conducted with all store and takeaway managers who had been sent the RIST resources, one or two months after the resources had been sent.
- The initial telephone interviews provided an opportunity to identify store managers who were willing to provide sales data for the detailed evaluation.
- Guidelines were developed for nutritionists and store managers who were participating in the detailed evaluation.²⁴
- A different structured phone interview was conducted with store managers who did NOT order the RIST resources.²⁵

5.4 Preparations for the detailed evaluation and data collection

- Letters or emails were sent to all store managers and nutritionists involved in the detailed evaluation, outlining the evaluation project and what was required from them.
- A tracking/planning sheet template was also distributed to store managers and to nutritionists to enable them to document all nutrition promotion activities undertaken within the store over a specific time frame²⁶.
- The RIST nutritionist collected the following from the store managers and nutritionists:
 - tracking/planning sheets collected in January 2009 and April 2009. This was completed by the nutritionist and/or store manager, documenting all nutrition promotion activities undertaken over a six-month period from October 2008 to April 2009.
 - The completed RIST checklists, *Checklist: How healthy is your store?* were collected from store managers/nutritionists for the periods July to September 2008 (baseline data) and April 2009.

5.4.1 Stores participating in the detailed evaluation

Data were collected from the following stores:

- one store from each of the four outer island clusters in the Torres Strait
- another seven remote Indigenous stores with a geographic spread across north Queensland
- one remote Indigenous store in central Queensland

²³ See Appendix C

²⁴ See Appendix D

²⁵ See Appendix E

²⁶ See Appendix F

- one store in a remote township in southern Queensland (although this was not a remote Indigenous store)
- four stores from the APY Lands of South Australia.

5.5 Training for nutritionists in *Keeping track of healthy food*

- Training in *Keeping track of healthy food*, for analysis of store sales data was organised in Cairns for nutritionists, dietitians, nutrition promotion officers and nutrition health workers in November 2008.
- Julie Brimblecombe and Robyn Liddle from the Menzies School of Health Research delivered the training.
- Evaluation of the training was conducted immediately after the workshop,²⁷ with a follow-up evaluation conducted six months later.²⁸

5.6 Follow-up core evaluation interviews

- An evaluation questionnaire²⁹ was sent or emailed to all stakeholders 6-8 months after they received the RIST resources. Completed evaluation questionnaires were returned to the RIST nutritionist by email, mail or fax. Follow-up by telephone was conducted with participants who had not responded.

5.7 Detailed evaluation – Store sales data

- The RIST nutritionist contacted the store managers to request the quarterly sales data. Repeat contacts were made until the data were provided. If not already in Excel, the raw store sales data were converted to Excel, then imported into *Keeping track of healthy food*, and analysed.
- The RIST nutritionist contacted store managers when further information was required with respect to weights/units of foods and drinks.
- Because of the time required for data entry and analysis, a senior public health nutritionist was employed to assist with this process.
- Reports generated from the analysis were provided to store managers or group managers and nutritionists.

²⁷ See Appendix G

²⁸ See Appendix H

²⁹ See Appendix I

5.8 Analysis

The RIST nutritionist and epidemiologist developed an Excel database for information about ordering and distribution for each survey conducted. The RIST nutritionist entered the information into the respective databases.

Descriptive data were compiled from the Excel databases for each survey and the tracking/planning sheets.

The *Checklist: How healthy is your store?* analysis compared the numbers of individual foods available at baseline and follow-up to identify any changes.

Further analysis of the RIST resource evaluation questionnaire was carried out using SPSS version 16. Non-parametric analyses were used due to small sample sizes and skewed distributions.

- A cross-tabulation of professional grouping (i.e. store managers and nutritionists) and each RIST resource was conducted to determine the usefulness, current use and future use of the RIST resources.
- A Spearman's rank correlation was conducted to assess the relationship between the length of time store managers and nutritionists worked with stores, and the usefulness, current use and future use of the RIST resources.
- Kruskal-Wallis tests were conducted to determine if there were any differences between the type of store ownership (i.e. privately-owned, community-controlled or government-supported) and the use of the resources.
- Mann-Whitney U-tests were conducted to determine if there were differences in resource usage between the following groups:
 - store managers who worked with a nutritionist, compared with store managers who did not work with a nutritionist
 - store managers who rated the resources as relevant to their work, compared with store managers who did not rate the resources as relevant
 - store managers who rated nutrition training as beneficial, compared with store managers who did not rate nutrition training as beneficial.

6: Results



6.1 Promotion of the RIST resources

Activities undertaken to meet this objective included the following:

6.1.1 Distribution of the information flyer and fax-back order form

- Two hundred and thirty-two flyer/fax-back forms were distributed to store/takeaway managers, nutrition teams, various health professionals and others across Queensland.
- Most of the Indigenous remote stores and takeaways are located in the northern region of Queensland but the flyers were also sent to stores and takeaways in central and southern Queensland.
- Multiple phone conversations resulted from the distribution of the flyers and the resources.

6.1.2 Community visits

- The RIST nutritionist visited 15 Aboriginal and Torres Strait Islander communities promoting and distributing the resources.
- Multiple discussions eventuated with store managers, nutritionists and health staff about how the resources could be used and promotional strategies implemented.

6.1.3 Presentations at nutrition meetings

Information about the RIST resources and their evaluation was presented at:

- Cape York and Cairns and Hinterland community nutritionists and dietitians meeting in July 2008
- North Queensland nutrition meeting in November 2008.

6.1.4 Newsletter articles

- An article about the evaluation appeared in the Cape York Health Promotions Project newsletter in October 2008.

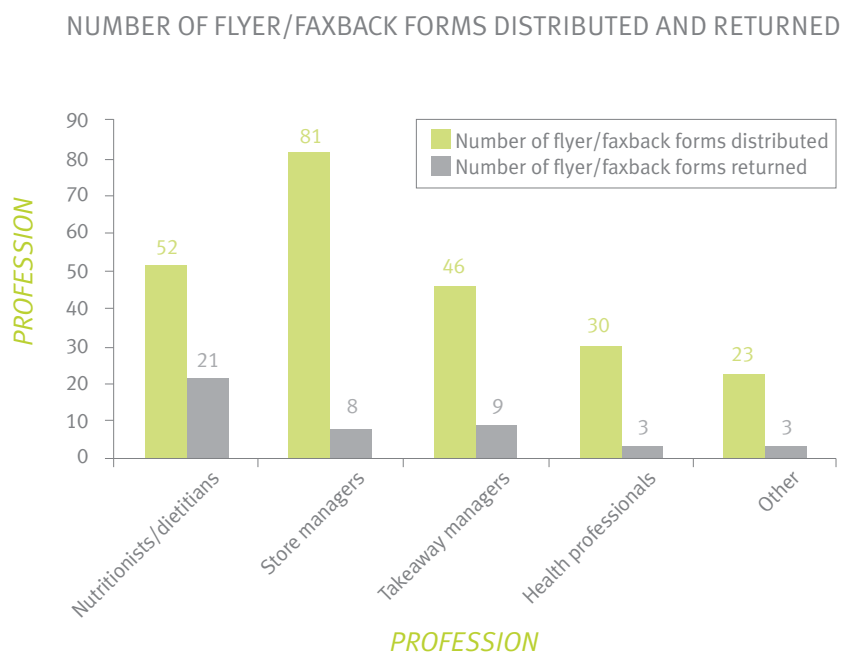
6.1.5 Conference presentation and poster

- A presentation on the evaluation was made at the Nutrition Society of Australia conference in Adelaide, November 2008.
- A poster featuring the preliminary results of the RIST evaluation was presented at the Dietitians Association of Australia conference, Darwin, May 2009.

Presentations were offered to nutrition meetings in southern and central Queensland. While these presentations did not eventuate, several nutritionists working on remote food supply issues in these regions used the resources and participated in the evaluation.

6.2 Distribution of the RIST resources

Graph 1: Number of fax-back forms distributed and returned by profession (Queensland)



Graph 1 indicates the numbers of flyers/fax-back order forms distributed in Queensland, by profession of the recipients.

- Two hundred and thirty-two flyer/fax-back order forms were distributed to:
 - 52 nutritionists
 - 81 store managers
 - 46 takeaway managers
 - 30 health professionals
 - 23 others.
- Forty-four (19%) orders were faxed back to the RIST nutritionist.
- Of those who received the flyers, orders for the resources were placed by:
 - 21 (40%) nutritionists
 - 8 (10%) store managers
 - 9 (19%) takeaway managers
 - 6 (11%) health professionals/others.
- In addition, two remote store groups in Queensland ordered 23 sets of RIST resources on behalf of their managers and other staff.

Table 1: Distribution of flyers/fax-back forms and resources by Health Service District location in Queensland

Health Service District location	Number of flyers/faxback forms distributed	Number of respondents ordering resources	Number of sets of resources distributed	% of total number of sets distributed in Queensland
Torres Strait and Northern Peninsula Area	27	7	59	31
Cape York	27	10	31	16
Cairns and Hinterland	14	4	11	6
Mt Isa	23	6	24	13
Townsville	16	3	13	7
Mackay	9	2	2	1
Central West	42	5	5	2.5
Central Queensland	6	1	6	3
South West	36	3	19	10
Darling Downs–West Moreton	2	2	7	3.5
South East Queensland*	30	1	13	7
Total	n=232	n=44	n=190	100

Table 1 and Maps 3 and 4 show the distribution of flyers/fax-back forms and resources by Health Service Districts in Queensland.

Of the Queensland respondents who ordered the resources:

32 (73%) were located in Health Service Districts in north Queensland

8 (18%) were located in Health Service Districts in Central West or South West Queensland.

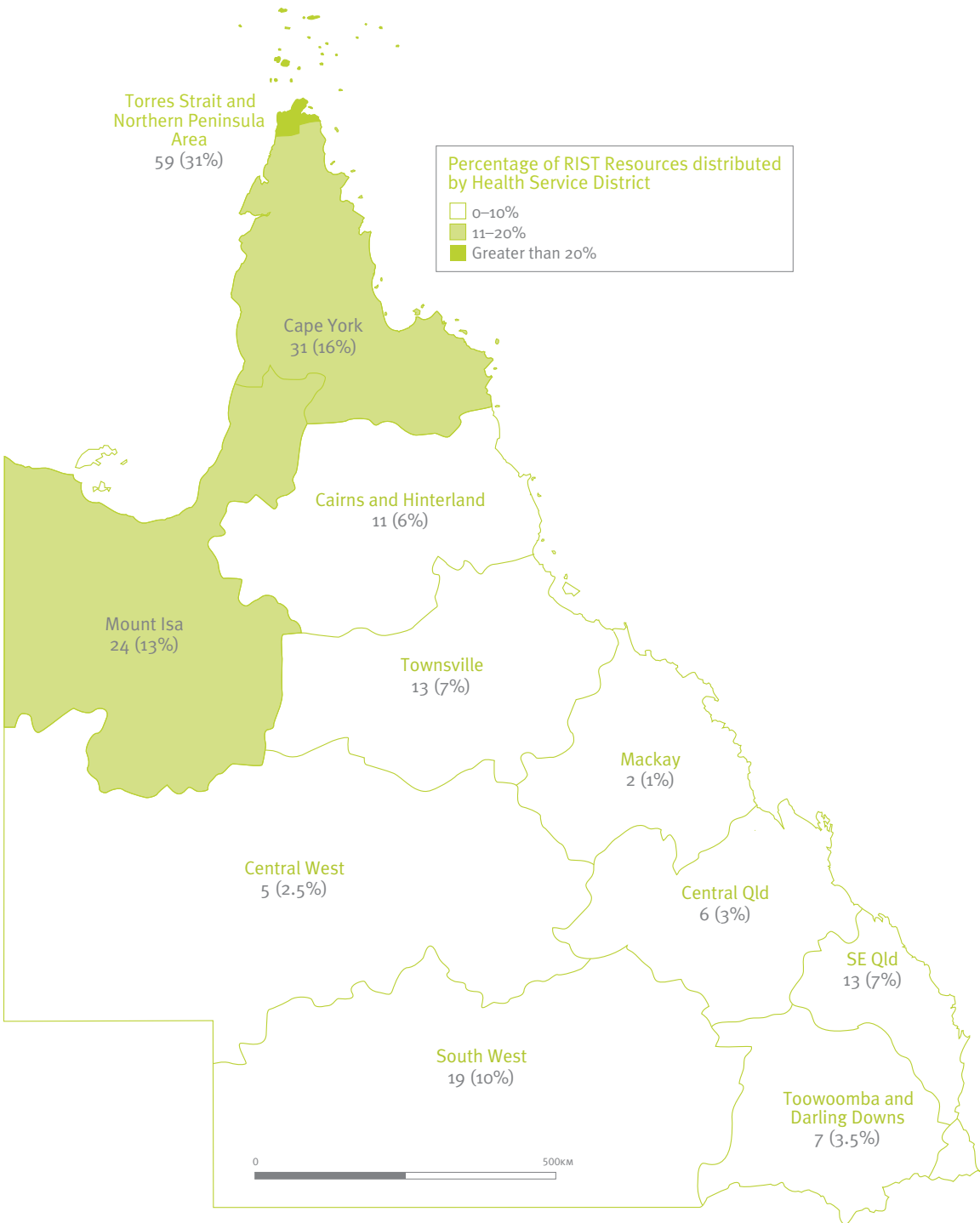
All but one of the stores associated with the two Queensland store groups which ordered the RIST resources on behalf of their managers are located in north Queensland.

* South East Queensland is an aggregation of Northside, Southside, Gold Coast and Wide Bay Health Service Districts

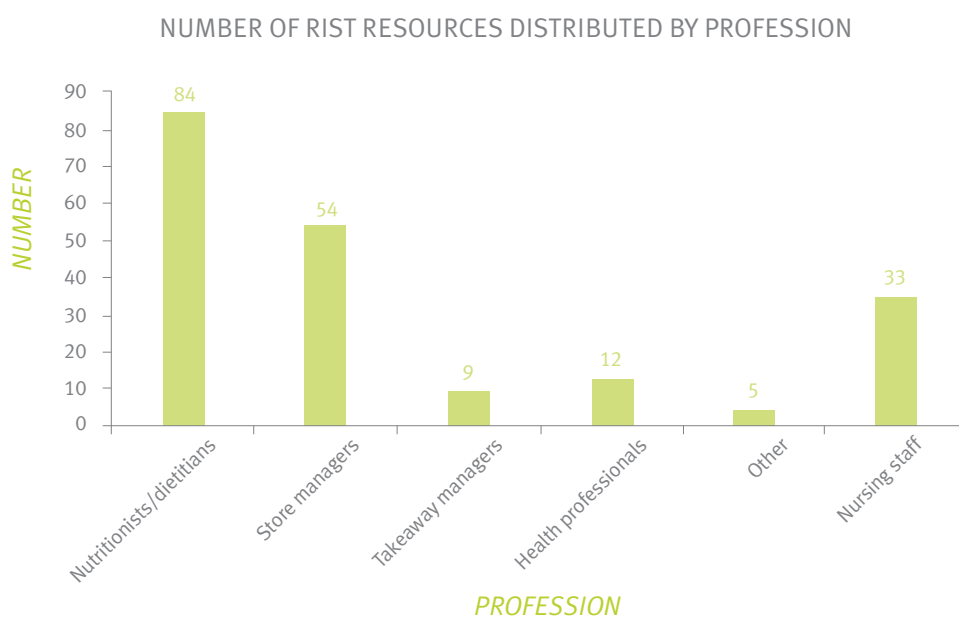
Map 3: Distribution of flyer/fax-back forms and number of resultant orders by location in Health Service Districts in Queensland.



Map 4: Total number and percentage of sets of RIST resources distributed by location in Health Service Districts in Queensland



Graph 2: Number of sets of RIST resources distributed by profession in Queensland and APY Lands of South Australia



Graph 2 indicates the numbers of sets of resources distributed, by profession of the recipients, in Queensland and the APY Lands of South Australia.

- A total of 197 sets of RIST resources were distributed to 109 people in Queensland and the APY Lands of South Australia. The contents of each set of resources varied according to the requirements of the person placing the order.
- The nutritionist working in the APY Lands distributed seven sets of the RIST resources.
- Resources were distributed:
 - in response to the fax-back order form
 - in person by the RIST nutritionist when on visits to remote communities
 - in response to requests by store group managers, store managers and nutritionists.
- The RIST nutritionists sent 33 sets of the RIST resources, as well as information about the evaluation, to all Directors of Nursing or Nursing Managers in remote Indigenous communities in Queensland.

Table 2: Number of each RIST resource distributed by profession in Queensland and the APY Lands of South Australia

RIST resources	Profession						Total n
	Nutritionists	Store managers	Takeaway managers	Health professionals	Other	Nursing staff	
<i>Guidelines for stocking healthy foods</i>	90	56	11	20	4	33	214
<i>Maximising shelf life of fruit and vegetables – A3 poster</i>	95	119	13	21	4	33	285
<i>Marketing ideas for healthy food</i>	95	54	12	20	5	33	219
<i>Healthy fast food</i>	95	53	13	20	4	33	218
<i>Checklist: How healthy is your store?</i>	121	65	8	23	8	33	258
<i>Checklist: How healthy is your takeaway?</i>	119	54	15	23	4	33	248
<i>Heart Foundation Buyer's Guide</i>	41	29	9	9	2	33	123
<i>Freight improvement tool kit – CD</i>	53	37	9	12	4	33	148
<i>Freight improvement tool kit – booklet</i>	33	50	8	12	3	33	139

Table 2 indicates the numbers of each resource distributed, by profession of the recipients, in Queensland and the APY Lands of South Australia.

- The most distributed resource was the A3 poster, *Maximising the shelf life of fruit and vegetables*, followed by the *Checklist: How healthy is your store?* and the *Checklist: How healthy is your takeaway?*.
- The main resource distributed to store managers was the A3 poster, *Maximising shelf life of fruit and vegetables*, with 119 (42%) out of a total of 285, and the *Checklist: How healthy is your store?* with 65 (25%) out of a total of 258.

- The main resources distributed to nutritionists were the *Checklist: How healthy is your store?* with 121 (47%) out of a total of 258 and the *Checklist: How healthy is your takeaway?* with 119 (47%) out of 248.
- Approximately 33% of the *Heart Foundation Buyer's Guide* were distributed to nutritionists, and approximately 24% were distributed to store managers.

6.3 Initial usage among store managers sent the RIST resources

Structured telephone interviews using a questionnaire were conducted with 15 store managers who had been sent the RIST resources, within two months of the resources being sent out.³⁰

This also provided an opportunity to determine if the store managers were willing to provide sales data for the detailed evaluation.

6.3.1 Results

Of the 15 store managers who participated in this survey, eight (53%) had looked at the resources and six of these eight managers were using the resources to some degree. Nine store managers reported that they were not using them.

Of the six store managers using the RIST resources:

- five were using the *Checklist: How healthy is your store?*
- four were using the *Guidelines for stocking healthy foods*
- three were using the *Heart Foundation Buyer's Guide*.

Five out of the six store managers using the RIST resources reported that they started to do so after the RIST nutritionist had visited and discussed the use and implementation of the resources in person.

The nine store managers who had been sent the RIST resources but were not using them gave the following reasons:

- no time to look at the resources
- did not recall receiving the resources (3)
- not a priority
- no one to promote the healthy foods once they are on the shelves, so what's the point?
- ineffective store management in the past; therefore the priority is to get the store into the black (not red)
- new to the store
- resources are for people who don't run stores. The information is too basic

³⁰ See Appendix C Part 1 for survey questionnaire and Part 2 for detailed results

- store manager on holidays; relieving store manager not given the resources.

Eleven of the 15 store managers did not want further training for themselves or their staff in how to implement the RIST resources. However, ten responded that they wanted further training for themselves and the store staff on general nutrition related to Aboriginal and Torres Strait Islander health.

All 15 of the store managers surveyed reported that they would provide store sales data quarterly and be involved in the detailed evaluation of the RIST resources.

6.4 Survey of store managers who did NOT order the RIST resources

A survey was conducted with store managers who were sent the flyer but did not order the RIST resources.³¹

6.4.1 Results

Eleven store managers were interviewed by telephone. Ten of these worked in communities in Cape York or in the Mt Isa and the Gulf region.

Six reported that they had not received the flyer/fax-back form and five said they had. Nine out of the 11 said they did not want to order the RIST resources while the remaining two did.

The following were some of the reasons the nine store managers gave for not wanting to order the RIST resources:

- not relevant to my work (4)
- not interested (6)
- don't have time (5)
- already sell healthy foods and drinks. We sell a lot of fruits and vegetables (3)
- the nutritionist that works in the store can use the resources.

One store manager reported that he was 'criticised all the time for not doing the right thing' and so was not interested.

Three store managers reported that they use other resources including 'Green Label'³² and work closely with nutritionists in the store. Therefore, they did not want any more resources.

None of the store managers wanted training on how to use or implement the RIST resources. One specifically reported that 'They were very basic and a little insulting'.

³¹ See Appendix E Part 2 for detailed survey results

³² 'Green Label' is a store-based project in North Queensland, promoting healthy food choices, which commenced prior to the RIST project

6.5 Nutrition training requirements for store managers and store staff

The survey conducted with store managers to ascertain initial usage of the RIST resources included a question regarding training in nutrition related to Aboriginal and Torres Strait Islander health. (This question was also asked in the subsequent core evaluation questionnaire).

6.5.1 Results

Ten of the eleven store managers identified a need for nutrition training for themselves and/or for the store staff. The following topics for store staff training were suggested by the store managers:

- how to distinguish between healthy and unhealthy foods/drinks and the reasons why
- food safety
- oils and the most appropriate types for cooking
- hygiene, cleaning and washing hands
- general nutrition
- fruit and vegetable preparation
- positioning of healthy foods
- stock rotation
- development of red and green price ticketing which is changed weekly to indicate which foods and drinks are healthy and unhealthy.

The following were some suggestions and concerns from store managers regarding store staff training:

- very difficult for store staff to be trained as they are all on the Commonwealth Employment Development Projects (CDEP) program. They will not do the extra training.
- very important for the store managers to be trained as well, to help and support the store staff
- has to be language appropriate; otherwise it will be a waste of time
- it would be a great idea. However, it won't help. The store staff do not have direct contact with customers.

An opportunity arose to respond to the training needs identified by the store managers. In October 2008, a nutrition and dietetic student from Griffith University, on placement with Tropical Population Health Services, designed a pilot training package for remote store and takeaway staff. The aim of this project was to design a training package in nutrition that would increase the capacity of store and takeaway staff to provide information to customers regarding healthy food and drinks and improve the shelf life and appearance of fresh produce through improved food handling.

The student conducted interviews with seven store and three takeaway managers to ensure the package met their needs.

The following topics were included in the draft store/takeaway staff nutrition training package:

- fats in foods
- sugar/carbohydrate in foods
- salt in foods
- fruit and vegetables
- food safety
- food safety: supplement for takeaway staff
- promotion of healthy foods and drinks.

The work to finalise and pilot the training package will be continued as part of a separate project.³³

6.6 Training in *Keeping track of healthy food*

Keeping track of healthy food is an electronic monitoring tool which analyses the sales of foods and drinks, using point-of-sale scanning data. *Keeping track of healthy food* is designed to be used to provide information to store managers, nutritionists and communities involved in promotion of healthy food and drink choices.

Keeping track of healthy food automatically generates reports which can be used to feed information back to the stores and/or communities. The information in these reports can be used to identify specific targets, develop food and nutrition policies, evaluate stores interventions, and guide nutrition education programs.

An enhanced version of the *Keeping track of healthy food* tool was used in the course of this evaluation to monitor the sales of the stores involved in the detailed evaluation.

The *Keeping track of healthy food* monitoring tool was commissioned by the RIST project and designed by the Menzies School of Health Research. Julie Brimblecombe and Robyn Liddle from the Menzies School of Health Research facilitated the workshops.

Two one-day training workshops in the use of the *Keeping track of healthy food* tool were held in November 2008 in Cairns.

Evaluation was conducted initially at the end of the one-day workshops, with follow-up evaluation conducted 6 months later.

A follow-up evaluation questionnaire was emailed to eighteen nutritionists/nutrition workers in June 2009.

³³ For more information contact the Nutrition Team, Cairns Public Health Unit, Tropical Regional Services (phone 07 4050 3600)

6.6.1 Results

Nineteen nutritionists, dietitians, nutrition promotion officers and nutrition health workers attended, 18 from Queensland and one from South Australia.

Fifteen participants completed the evaluation questionnaire.³⁴ All of the respondents found the workshop useful, while 14 of the 15 felt confident in using *Keeping track of healthy food*. Fourteen out of 15 believed they would use *Keeping track of healthy food* in the future.

At follow-up, 14 out of 18 participants (one had ceased employment) responded to the survey³⁵. Six of the respondents reported that they do use *Keeping track of healthy food* but eight do not. Six of the 14 respondents had used *Keeping track of healthy food* to generate a report.

The main reason given for not using the *Keeping track of healthy food* tool was that the nutritionist or nutrition health worker was not currently working with remote stores.

Eleven of the 14 respondents reported they felt confident in using the tool, and 12 reported that they will use *Keeping track of healthy food* in the future.

6.7 Core evaluation survey

6.7.1 Coverage of the core survey

The RIST core evaluation questionnaire³⁶ was sent to all store managers, takeaway managers, nutritionists and health professionals who had been sent the RIST resources, six to eight months after the RIST resources were sent. The purpose of this survey was to determine the usefulness of the RIST resources, support and training requirements, and suggestions for improvements to the resources.

6.7.2 Results

6.7.2.1 Respondents

A total of 103 RIST evaluation questionnaires were distributed by mail, email or fax to store managers, takeaway managers, nutritionists, health professionals and others (see Table 3). Follow-up telephone interviews were conducted two weeks later with store managers, takeaway managers and nutritionists who had not returned the questionnaire by mail, email or fax.

³⁴ See Appendix G for workshop evaluation questionnaire and detailed results

³⁵ See Appendix H for workshop follow-up evaluation questionnaire and detailed results

³⁶ See Appendix I for RIST core evaluation questionnaire and detailed results

Table 3: Number of questionnaires sent and returned

Profession	Number of questionnaires distributed	Number of questionnaires returned	% of questionnaires returned
Nutritionist	37	14	38
Store manager	48	21	44
Takeaway manager	7	1	14
Health professional	8	2	25
Other	3	1	3
Total	103	39	38

One hundred and nine people had been sent the RIST resources, but due to staff movements only 103 questionnaires were distributed. Thirty-nine people (38%) responded to the questionnaire. Of the respondents, 21 (54%) were store managers and 14 (36%) were nutritionists. Only one takeaway manager returned the questionnaire out of the seven takeaway managers who were sent questionnaires.

Of the 21 store managers who responded, six work in privately-owned stores, nine in community-owned stores and six in government-supported stores. Sixteen of these store managers were involved with the detailed evaluation.

Thirty-nine nutritionists were sent the survey but 18 of these did not work directly with stores and reported that they felt uncomfortable in filling out the RIST evaluation questionnaire as they were ‘not familiar enough’ with the resources. Responses were received from 14 nutritionists, 10 of whom were involved in the detailed evaluation.

Of the 21 store managers who responded, eight had been with the store for less than 12 months, and six had been there for more than 10 years. Two-thirds of store managers reported that they worked with a nutritionist, while one-third did not.

Of the 14 nutritionists who responded, eight had been employed in their current positions for less than one year, and the remaining six for less than five years.

Within Queensland 73% of the RIST resources were distributed to locations in north Queensland. Approximately 85% of the responses to the 6-8 month survey were returned from locations in north Queensland.

6.7.2.2 Commencement of use of the RIST resources

Table 4: Commencement of use of the RIST resources

Time when resources started to be used	No. of respondents	%
At once	14	36
After 1 month	6	15
After 3 months	2	5
Never	15	39
No answer	2	5
Total	39	100

Fourteen (36%) respondents who had received the RIST resources commenced using them at once (see Table 4). Fifteen (39%) reported they had never used the resources.

The following were some reasons why respondents had never used the RIST resources:

- A lot of things are already in place; therefore no need to use them at the moment
- Did not have time to use the resources and am happy for the nutritionist to visit the store and discuss issues and give guidance and direction
- No time to read them – too busy
- Away for two months; therefore not a chance to read them
- Looked through them and didn't find them relevant
- Priority was to keep the store financially viable, not to use the RIST resources. There are so many time pressures; constantly prioritising and unfortunately health is at the bottom of the list
- Misplaced the resources
- More designed for takeaways and roadhouses. The resources are designed for people who have never worked in a remote store before. They are too basic and 'dumbed' down. The resources are a bit insulting.
- Read them when received them; however, they provide basic information and they make sense
- The resources wouldn't make much difference as the communities are set in their ways and they know what they like and don't like
- Not given handover or any explanation about the resources when the store was taken over. Difficult to know how to use them (2).

6.7.2.3 Assistance with using the RIST resources

Twenty-two (56%) of the respondents said that the RIST nutritionist discussed with them how to use and implement the RIST resources, while four reported that the community nutritionist had done this. One-third of the respondents either could not recall or did not answer.

Twenty-two (56%) of the respondents reported that they found the RIST resources easier to use after they had discussed them with someone (see Table 5). Five store managers reported that they did not find it easier to use the RIST resources after discussing them.

Table 5: The RIST resources easier to use after discussion with nutritionist

Profession	Was it easier to use the RIST resources after someone discussed them with you?	
	Yes	No
Store manager	6	5
Takeaway manager	1	0
Nutritionist	12	0
Health professional	2	0
Other	1	0
Total	22	5

Table 6: Benefits of nutrition training for store manager and store staff

Profession	Would nutrition training benefit the store manager or store staff?	
	Yes	No
Store manager	14	7
Takeaway manager	1	0
Nutritionist	11	2
Health professional	2	0
Other	1	0
Total	29	9
No answer = 1		

Eleven (85%) of the 13 nutritionists said nutrition training would be beneficial for store managers/store staff (see Table 6). Fourteen (66%) of the 21 store managers and the takeaway manager agreed, while seven store managers (33%) disagreed.

6.7.2.4 *Benefits of nutrition training*

Comments from store managers and the takeaway manager included the following:

- Could be very beneficial for store staff
- Definitely beneficial. All the staff recently completed a food safety course. They found the course very useful. The Indigenous store staff are very interested to learn more
- Very useful to have training for staff especially in temperature control, rotation of stock and use-by dates
- It would help
- The more the store staff know, the better it will be
- The store staff are interested in nutrition
- Need to sell healthy foods. People need to be shown what to eat and how to cook the foods. Store manager has no time for promoting healthy foods
- Currently store managers try to provide nutrition information, although have not been trained. Would really benefit from training
- Store training in nutrition would be beneficial for store staff
- It would be beneficial to train store staff and the store manager. Store manager currently giving nutrition advice. Would like information on foods suitable for kids, label reading, etc. People really want to know this information
- Staff won't pass on the knowledge as it is not appropriate. The information will only benefit the staff not the community
- We feel we know enough about nutrition
- Very aware of nutrition and healthy foods.

Comments from nutritionists and health professionals included the following:

- The store staff would definitely require training in the resources. However, not all resources would be relevant to all store staff due to a centralised ordering system
- Training would benefit all staff that would be using resources particularly non-nutrition focused staff, i.e. store management, other store staff and health promotion officers
- Definitely for store staff
- Training for the community-based staff is essential and part of our ongoing work around food supply issues.

6.7.2.5 Accessing the RIST resources

Of the 39 respondents who completed the questionnaire, 38 (97%) recalled receiving the RIST resources. One respondent could not recall whether the resource had been received.

Thirty-four (87%) of the respondents received the RIST resources from the RIST nutritionist. Four respondents received the RIST resources from other nutritionists who had been supplied the resources by the RIST nutritionist.

6.7.2.6 Indigenous HealthInfoNet

The Australian Indigenous HealthInfoNet allows the downloading of the RIST resources. The majority of nutritionists/dietitians were aware of the Australian Indigenous HealthInfoNet website. However, only 16% of the store managers were aware of the website.

Of the respondents, four nutritionists, one store manager and one takeaway manager had downloaded the RIST resources from the Indigenous HealthInfoNet website.

6.7.2.7 Relevance of the RIST resources

Fourteen (66%) of the 21 store managers reported that the RIST resources were relevant to their work. All (100%) of the nutritionists reported that the RIST resources were relevant to their work.

Comments from store/takeaway managers included the following:

- Some of the resources are relevant. However, the resources can't be used unless suppliers have appropriate foods that can be accessed.
- Want to sell products that are good for the community. Aware of the issues with health and want to help improve it. These resources are very relevant.
- If the store managers have experience, they are not relevant.
- Not being a nutrition expert, I found them to be a very informative read that I could link to business objectives.

Comments from nutritionists and health professionals included the following:

- Very relevant and unlikely to go out of date quickly. However, opportunities to promote and implement store-related strategies have been *ad hoc* due to distance and irregular visits to remote towns/stores in this area for a number of reasons but primarily due to a need to build considerable community support, need to collaborate with other workers visiting the areas before any intervention, and an inability to monitor.
- At times, the RIST resources are difficult to integrate into current work/project.
- The RIST resources were particularly useful when starting my position as remote food supply was a new area. The simple and easy-to-use format of the RIST products gave me a great overview of the ways to improve food supply, promotion and sales of healthy foods in remote stores. The guidelines and checklists also provided a good starting point for collecting baseline data/assessments of how healthy stores were and what areas needed improving.

6.8 Usefulness, current use and future use of the RIST resources

The results presented in this section are based on responses from store managers and nutritionists as there were sufficient responses from these two groups for further analysis. Others who responded included one takeaway manager and three health professionals.

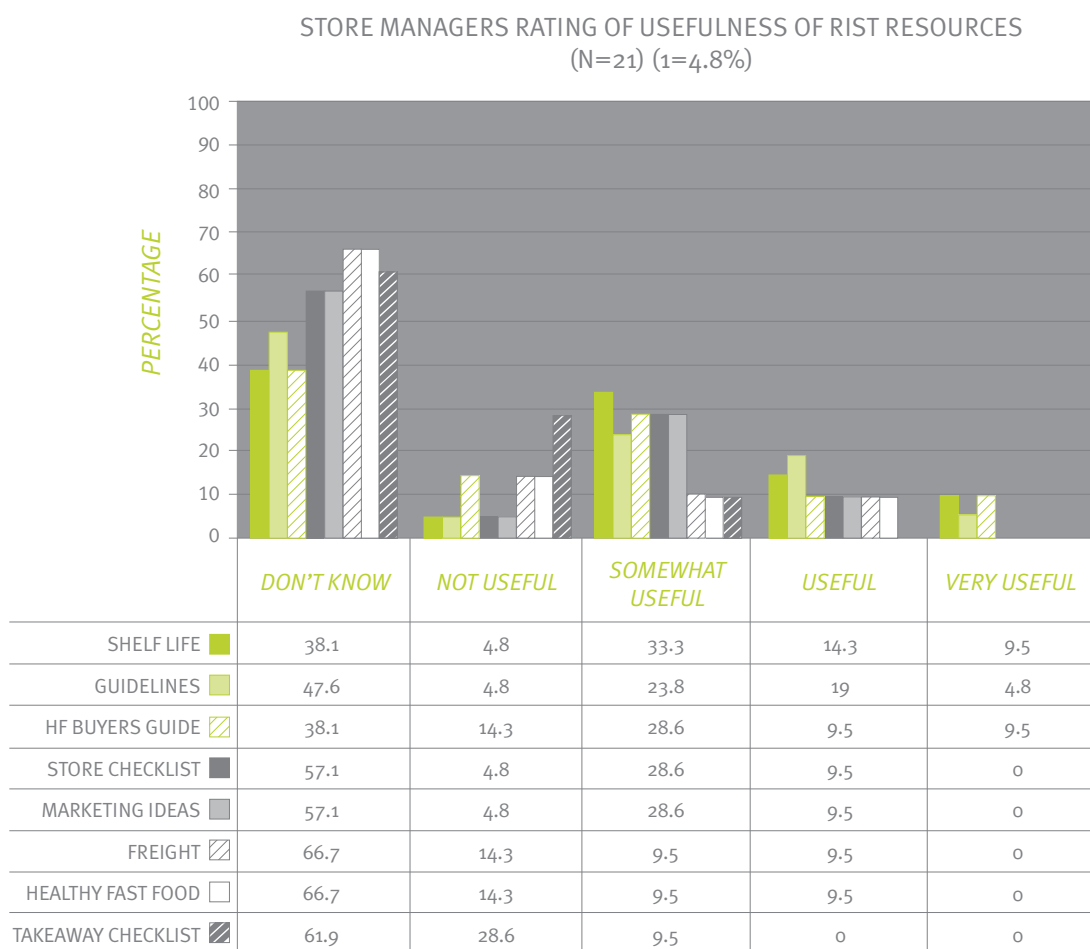
The responses from the one takeaway manager who responded to the survey indicated that he/she found the resources useful or very useful, currently used most of the resources and expected to continue using them. The resources rated most highly by this individual were the *Healthy fast food* resource and the *Heart Foundation Buyer's Guide*. The *Checklist: How healthy is your takeaway?* and the *Checklist: How healthy is your store?* were also rated highly. The takeaway manager had never used the *Freight improvement toolkit*.

The three other health professionals mostly rated the resources relevant and useful but two out of the three do not currently use the resources. All three expect to use them in future.

6.8.1 Results: store managers and nutritionists

6.8.1.1 Usefulness of the RIST resources

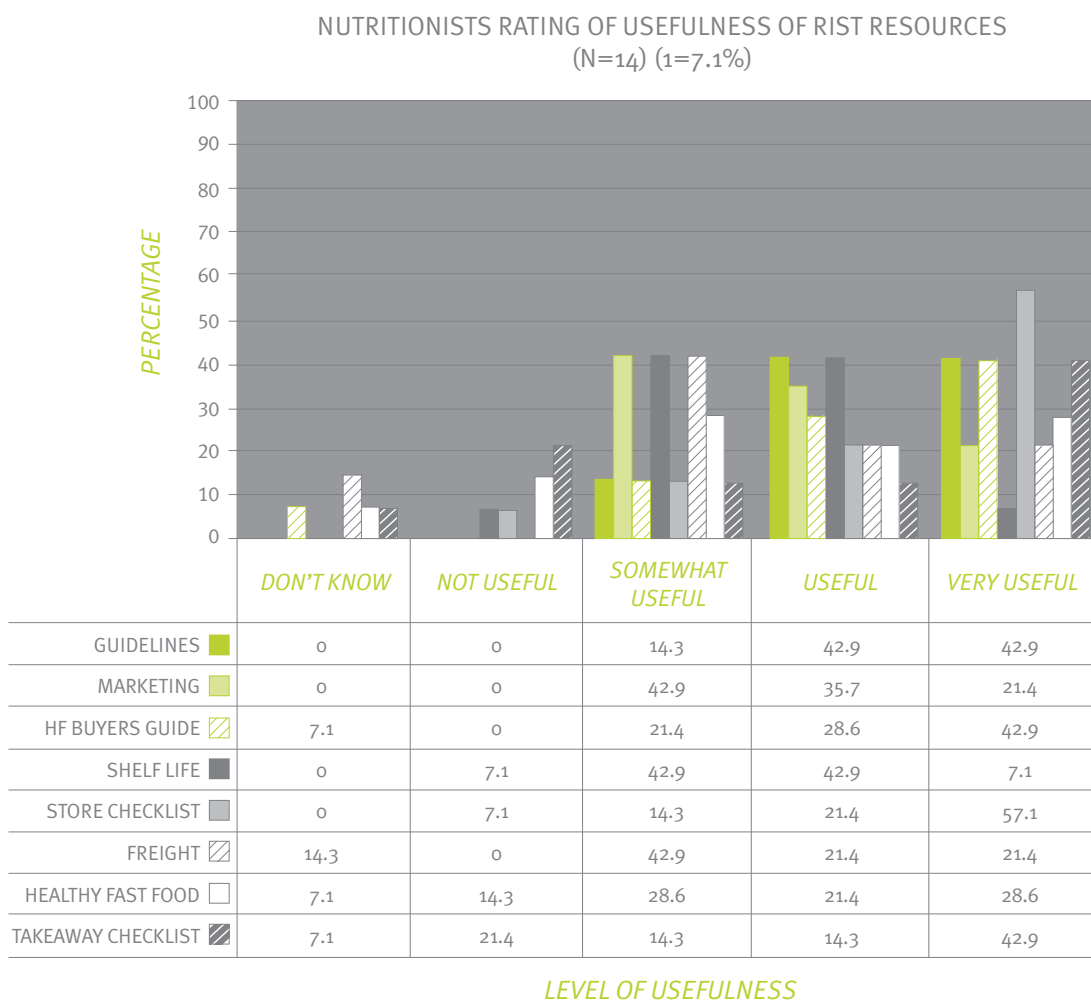
Graph 3: Store managers' rating of the usefulness of the RIST resources (%)



The A3 poster, *Maximising the shelf life of fruit and vegetables*, was rated useful to varying degrees by 12 (57%) of the 21 store managers (see Graph 3). Other resources which store managers reported useful were *Guidelines for stocking healthy food*, *Heart Foundation Buyer's Guide* and the *Checklist: How healthy is your store?*. Store managers found the *Checklist: How healthy is your takeaway?* least useful. Less than 10% of store managers identified as very useful.

The majority of store managers reported, 'Don't know,' when asked if the resources were useful to them. Comments included: 'not familiar enough with the resources', 'couldn't remember them well enough to comment' and 'never read them'.

Graph 4: Nutritionists' rating of the usefulness of the RIST resources (%)

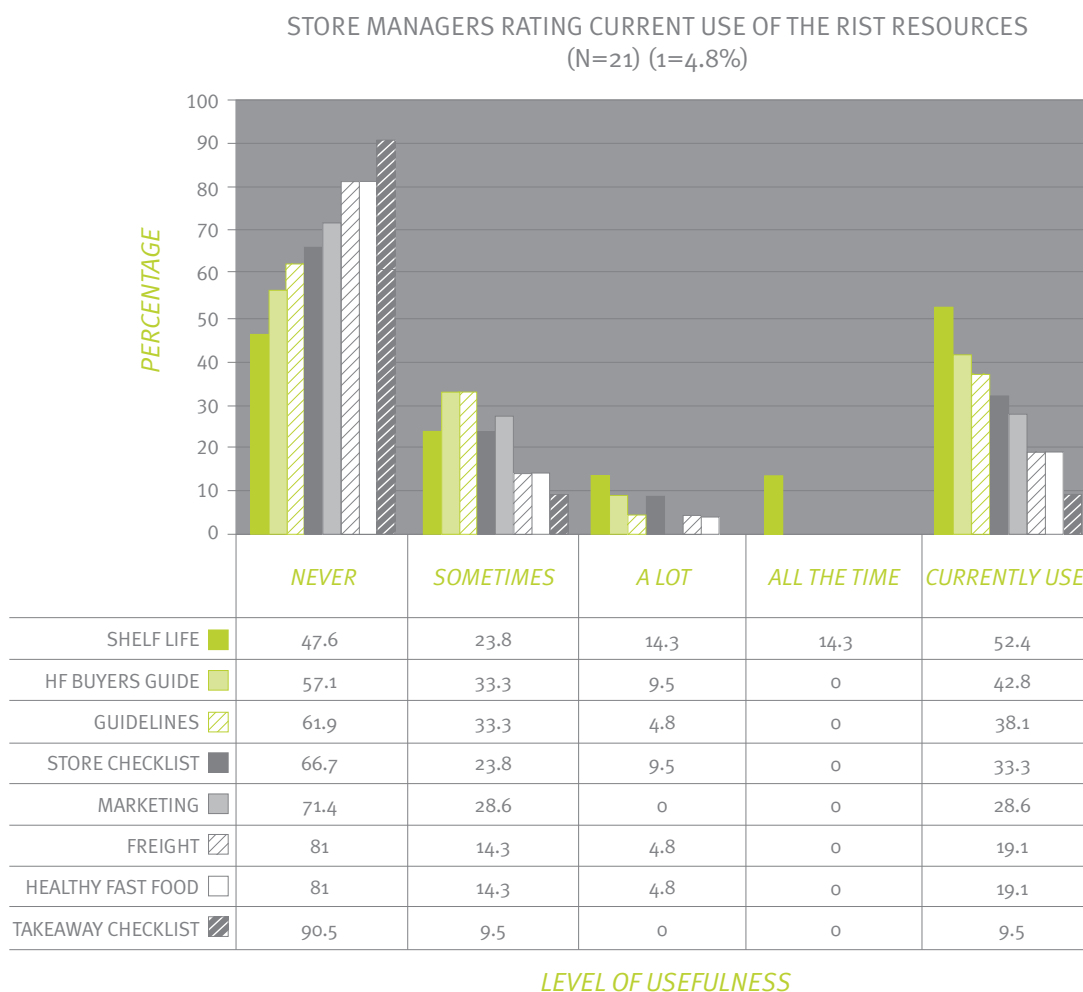


The *Guidelines for stocking healthy food* and *Marketing ideas for healthy food* were rated useful to varying degrees by all nutritionists (see Graph 4). Thirteen out of 14 nutritionists rated the *Heart Foundation Buyer's Guide*, *Maximising the shelf life of fruit and vegetables* and the *Checklist: How healthy is your store?* useful to varying degrees. The least useful resource was the *Checklist: How healthy is your takeaway?* More than 40% found the resources very useful.

Few nutritionists responded with 'Don't know' when asked if the individual resources were useful.

6.8.1.2 Current use of the RIST resources

Graph 5: Current use of the RIST resources – store managers



The A3 poster, *Maximising the shelf life of fruit and vegetables*, was the most used resource, being used by 11 (52%) of the 21 store managers (see Graph 5). The *Heart Foundation Buyer’s Guide* and *Guidelines for stocking healthy food* were used ‘Sometimes’ by seven (33%) of the store managers. The *Checklist: how healthy is your takeaway?* was the least used resource.

As the graph shows, even the resource which was most used by store managers was used by only about half of the managers.

Graph 6: Current use of RIST resources – nutritionists



The *Guidelines for stocking healthy food* and the *Checklist: How healthy is your store?* were the most used resources by 13 (93%) of the 14 nutritionists (see Graph 6). The A3 poster, *Maximising the shelf life of fruit and vegetables*, and the *Freight improvement tool kit* were the least used resources by nutritionists/dietitians.

Nutritionists reported high levels of current use of the resources, with nearly all respondents using the *Guidelines for stocking healthy food*, *Checklist: How healthy is your store?*, *Heart Foundation Buyer’s Guide* and *Marketing ideas for healthy food*. Even the least used resource, the *Freight improvement tool kit*, was used by 57% of nutritionists.

6.8.1.3 Future use of the RIST resources

Graph 7: Future use of the RIST resources – store managers

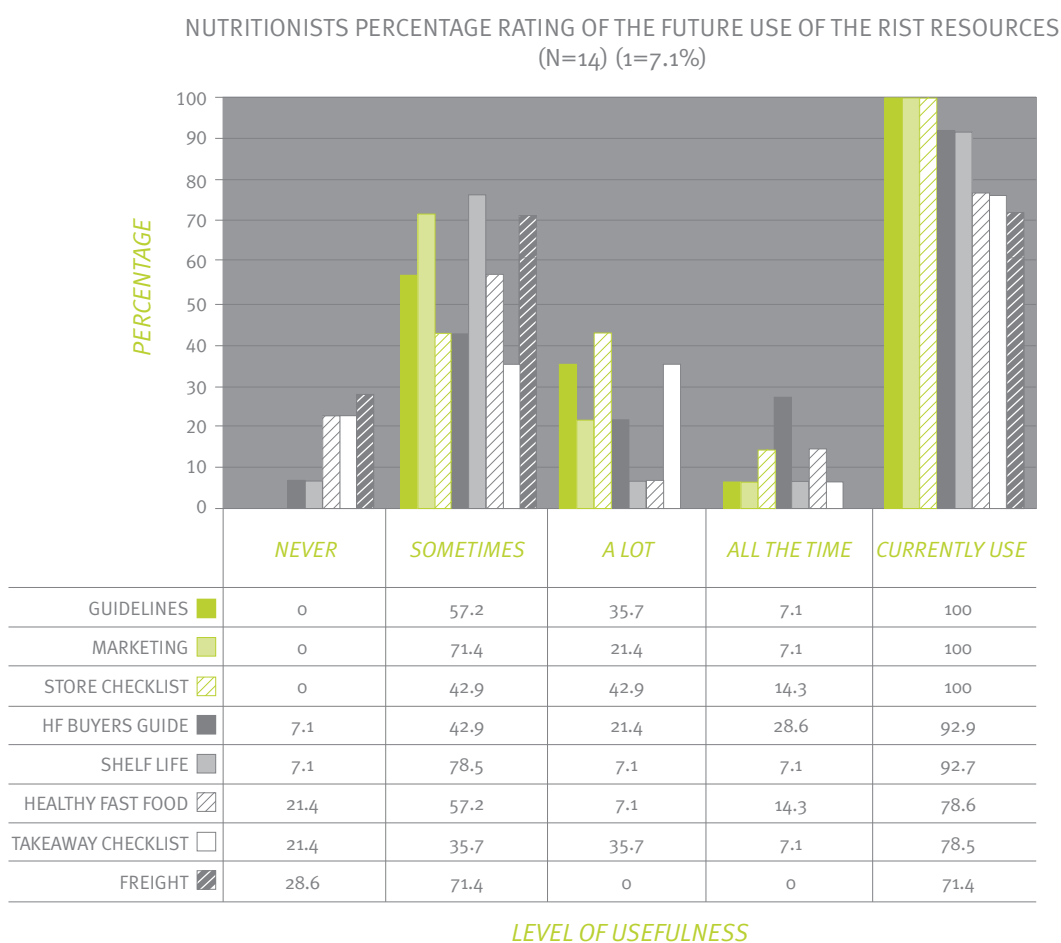


The *Heart Foundation Buyer’s Guide* was rated most highly in terms of anticipated future use by store managers, with fourteen (67%) reporting that they will use this to some degree in the future (see Graph 7).

Eleven (52%) of the store managers reported that they will use the *Checklist: How healthy is your store?* and the A3 poster, *Maximising the shelf life of fruit and vegetables*, at some time in the future.

Most store managers (76-90%) reported they would never use the resources, *Healthy fast food*, *Freight improvement tool kit* and the *Checklist: How healthy is your takeaway?*.

Graph 8: Future use of the RIST resources – nutritionists



All or nearly all of the 14 nutritionists reported that they expect to use *Guidelines for stocking healthy food*, *Marketing ideas for healthy food*, the *Checklist: How healthy is your store?* and the *Heart Foundation Buyer’s Guide* in the future (see Graph 8).

As the graph shows, more than 70% of the nutritionists anticipate using all the RIST resources in future.

6.8.1.4 Length of service

There was no correlation between length of service of store managers and their perception of the usefulness of the resources, their use of the resources or their anticipated future use.³⁷ The one exception to this was that managers who had worked longer in remote stores were more likely to perceive *Healthy fast food* as useful.

There was no correlation between length of service of nutritionists and their perception of the usefulness of the resources, their use of the resources or their anticipated future use.³⁸

³⁷ See Appendix J

³⁸ See Appendix K

6.8.1.5 Store ownership

Of the 21 store managers, six work in privately-owned stores, nine work in community-controlled stores and six work in government-supported stores.³⁹

Compared with other managers, the store managers who work in privately-owned stores tended to rate all the RIST resources at a higher level of usefulness and the *Heart Foundation Buyer's Guide* at a higher level of future use.

Compared with other managers, store managers in government-supported stores rated *Healthy fast food*, the *Checklist: How healthy is your store?*, the *Checklist: How healthy is your takeaway?*, *Freight Improvement tool kit* and *Heart Foundation Buyer's Guide* at a higher level of usefulness.

Compared with other managers, store managers in community-controlled stores rate *Marketing ideas for healthy food* and the poster, *Maximising the shelf life of fruit and vegetables*, at a higher level of usefulness.

The store managers in government-supported stores were least likely to anticipate using the *Heart Foundation Buyer's Guide* in the future, compared with other store managers.

None of these differences reached statistical significance.

6.8.1.6 Store manager working with a nutritionist

The 14 store managers who work with a nutritionist (including dietitians and/or nutrition promotion officers and/or nutrition health workers) use the resources to a greater extent than those managers (7) who do not work with a nutritionist.⁴⁰ The exception to this is *Marketing ideas for healthy food* where there was no difference.

Again, the differences were not sufficient to reach statistical significance.

6.8.1.7 Relevance of the resources

Store managers who perceived the RIST resources to be relevant to their work reported a higher level of current use and expected future use of the resources compared with those managers who thought the resources were not relevant.

Once again, the differences did not reach statistical significance.⁴¹

6.8.1.8 Benefits of nutrition training

Store managers who perceived that training would be of benefit reported a higher level of current use of the resources. This higher usage was statistically significant with respect to the current use of the poster, *Maximising the shelf life of fruit and vegetables*, but not with respect to the other RIST resources.⁴²

39 See Appendix L

40 See Appendix M

41 See Appendix N

42 See Appendix O

6.8.1.9 Other resources used in stores

Nine out of 21 store managers and eight out of 14 nutritionists use other nutrition resources. The most common resources used are posters, e.g. 'Veggie Man', and recipes from the *Deadly Tucker* cookbook.

Eight store managers reported that they received these resources from nutritionists or dietitians, one store manager couldn't remember and the remaining store managers didn't answer.

Eleven (28%) out of 39 respondents preferred using the RIST resources to other resources but most respondents did not answer this question.

Comments include:

- Better than most available
- More relevant to store managers
- They are different. Can't really compare
- Don't think any resources are effective in isolation and one needs to do extra reading, speaking with colleagues, read literature and do their own investigations of other material and resources. However, in the context of the stores the RIST resources would be sufficient for store managers and staff to make changes to improve the supply, promotion and sales of healthy food in their stores without necessarily needing the support from a nutritionist
- All resources fill different needs, and are not better or worse.

6.8.1.10 Suggestions for improving the RIST resources

Guidelines for remote community stores: Guidelines for stocking healthy food in remote community stores

Ways for improvement

- Could show guidelines for stocking healthy cereals, e.g. ‘low in added sugar’. Could state level/100g to look for. Could also add fibre guideline to cereals section and savoury biscuit section
- For the ‘guidelines’ and ‘checklists’ there could be some form of Excel spreadsheet developed to enable recording of results. The guidelines and checklists could be carried out every 6 months and these results added to the spreadsheet to see whether the store is improving.
- Have a numbers system with each item/category where one can tally how many items of each category are available. This way a statistic can be allocated or summed up straight away.
- Have an electronic version that can be edited so that copies can easily be made for all parties involved. Include a recommendation and summary page pro-forma to assist in providing feedback to stores to highlight areas for actions
- Highlight foods that are low-GI
- Include a line in the introduction saying that using the resources means placing a tick in every box – the more ticks, the healthier the store.

Comments

- The resource is already excellent
- Very good resource to use, especially after the wet season. Sometimes you can forget what has been in the store.

Marketing ideas for healthy food in remote community stores

Ways for improvement

- Have photos of examples of displays, etc. Make it more visual
- This resource is very wordy. Maybe include a list of all types of strategies at the front and then direct the reader to more information in the back. This way, managers can decide which strategy they want to use, and then go looking for more detailed information. I think a strategy that should be included is a ‘meal deal’ – basic items required to make a meal, packaged together at a discount, and including a recipe card or something with school lunches and takeaway meals.

Comments

- The resource is already excellent
- Very good ideas. However, hard to use the ideas in a community and use this tool to its fullest capacity, i.e. at times community members are not around to talk to and educate or communicate with
- Very good resource for store managers and nutritionists who are relatively new to remote areas/Indigenous settings.

Healthy fast food

Ways for improvement

- Break it down into more reader-friendly sections
- List of pre-prepared foods or links to websites that offer healthier choices with minimal preparation required. List of equipment and examples of healthier foods that can be prepared with them, e.g. pie warmer, microwave etc.
- Minimum range p3 could be in the form of a checklist. Photos of daily menu suggestions would increase interest in these items; same with recipes included. Daily menu suggestions would be better in tables. Not sure if Appendix A and B are needed – this information is available in other places. Bain marie layout section is good, but again, photos would help.

Comments

- Temperature guide very useful with a few hints
- There is a lot of reading involved with this resource. It takes time to read through the information. It would be better if the information was clear and concise.
- Too much writing. Takes too long to read and when busy, will not read it.

Checklist: How healthy is your store?

Ways for improvement

- Add 'high fibre' to 'The store sells low-fat dry biscuits'
- Add 'The store does not sell blended vegetable oil' to mono/poly oil question
- Electronic version that can be edited and a pro-forma for an action plan or summary that can be provided to the store management
- Separate some of the questions into 2 questions e.g. Sells pasta? Sells basmati low-GI rice? Store sells low-fat milk? Don't need addition of full-cream milk. Butter should be added to hardened fats
- How practical is it to list the free chilled water? What is the purpose of this question?
- This could be added to the end of the 'guidelines for stocking healthy foods' resource instead of being a separate resource – with instructions to copy it before using (similar to Healthy fast food)

- Basmati rice can be expensive. There are other examples of low-GI rice that can be used
- Only 250ml fruit juice packs is not realistic – address fruit juice drinks instead
- Group canned foods together, fresh foods together, meats together, etc. so you are not walking back and forth and across the store. It is easy to miss items if you have to go back and find them
- Move delivery of fresh fruit and vegetables to management
- To add ‘All water and low sugar/diet drinks at eye level’
- It duplicates the ‘Guidelines’ – can they be combined?

Comments

- Excellent for tracking changes
- Good resource, straight to the point.
- This is good as it gives a clear idea about what is and is not in the store. Good indicator of what the store has and hasn’t got. Great that nutrition for babies is assessed. Difficult to place a tick for margarines being mono and poly ‘only’ in store.

Checklist: How healthy is your takeaway?

Ways for improvement

- Electronic version that can be edited and a pro-forma for an action plan or summary that can be provided to the store management.

Comments

- Excellent for tracking changes and also for remembering important points to discuss with the takeaway managers. Nevertheless, in my opinion takeaways are one of the biggest contributors to poor nutrition in remote communities and structural issues need to be addressed, e.g. should be required to have nutrition policies, employee training etc.
- Good resource, but also appears in Healthy fast food. I would think for both checklist resources that a store manager might use these first, and if they found their store lacking, they would move onto the other resources.

Freight improvement tool kit

Ways for improvement

- No suggestions for improvement.

Comments

- Excellent resource. However, I wonder about the capacity for independent stores to put the suggested strategies in place. The store groups may find it useful, although they probably have their own strategies already. I think store managers will need a lot of support from state or federal government to make progress in this area.
- Don't have time in my work to use this resource.

Heart Foundation Buyer's Guide 2008: For managers of remote Indigenous stores and takeaways

Ways for improvement

- The guide does not provide the array of products which are in our range. It would be great if the booklet contained the NHF criteria so that other products not included in the book could be measured against this. The buyer's guide also contains 'toasted muesli' as an everyday food which is questionable due to its high saturated-fat content.
- Clearly specify the criteria, use the traffic light colours with which people are familiar and do not advocate promoting 'sometimes' foods. These foods are for 'damage control', not for promotion.
- Excellent resource which can be quite useful to store managers as it lists actual brands to order. However, from what I have heard, it needs to have a greater range of products listed to cater for areas that do not have a great range available to them. Also, nutritionists using the Buyer's guide would like to have criteria for product inclusion available to them.
- Wrong colours and lack of inclusion criteria make it useless. It appears that the HF did not consult with anyone on the ground regarding the resource. Many communities in Queensland have previously used green label or similar and community members are used to green, amber, red. A waste of a lot of money, in my opinion.
- As we are all aware, if it doesn't get the heart food tick, it will not be listed.⁴³ Therefore, it does limit the choice of what the storeowners will know what to order if they are solely relying on this resource. Good to have guidelines next to it, so they would know that what they order is suitable. More extensive list would be helpful
- Hamper and pies should not be in the 'sometimes' category. They should not be grouped in with the vegetable and steak category (as these are everyday foods). Pies and hamper should be in a section for better choices within the unhealthy foods category.

⁴³ Note: the *Heart Foundation Buyer's Guide* does include items which do not have the Heart Foundation Tick. These items either meet the criteria for the Heart Foundation Tick or the provisional criteria developed specifically for the *Heart Foundation Buyer's Guide*.

- ‘Sometimes’ foods should not to be promoted as stated on the top of every page in the orange section in the HF book. It should read: Better options of foods for ‘sometimes’ consumption – not to be promoted.

Comments

- It would be beneficial to work more closely with suppliers. Wholesalers restrict what the store can order. Important that the wholesaler has these foods in stock.
- Needs to be in hard copy for practical reasons in remote locations with regular updates (annual)
- Needs to be electronic so easy addition of suitable foods
- A lot of products we don’t have access to. Need to make sure that the supplier has the products which are listed in the book
- Need to talk with wholesalers and warehouses to ensure they have these foods available
- Pretty good as it is
- Excellent resource
- The resource is already excellent. Any further additions are always helpful.
- Extending this to online guide that could be more regularly updated and potentially that could be searched.

Maximising the shelf life of fruit and vegetables

Ways for improvement

- There could be an additional fruit and vegetable handling book associated with the posters which includes photographs to represent some of the ideas presented in the poster, e.g. ‘remove damaged parts of produce’. There also seems to be a lack of knowledge of the stores about deterioration of fruit and vegetables and when produce needs to be marked down or thrown out. Similarly, often fruit and vegetables are inappropriately put in dry, chilled storage, e.g. bananas and potatoes in the fridge and grapes on the fridge – a resource including this type of information would also be great.
- Add temperature controls and include training for all staff.
- It should have images of fruits and vegetables being stored correctly, including a photo of a thermometer.
- Brighter colours, more visual to include real life pictures. Could change wording to simplify, e.g. ‘throw out’ rather than ‘discard’. Could focus more on the display side, e.g. separate any apples with marks and put them on sale, take any old leaves off the lettuce etc.

Comments

- Clear and concise resource. Well spread out information.
- I don't like this poster.
- This resource lacks detail which I know would be complex. This area really requires a proper training.

6.8.1.11 Comment on the RIST resources in general

- Good resources, but most of the information I already know, so will only use them occasionally after initial use. Will be more useful for store managers, but most of them already work hours far in excess of their remuneration and are therefore disinclined to do anything other than core activities.
- They certainly assisted me in gaining an understanding of what we should be promoting and encouraging so as to achieve one of our key objectives which is to promote nutrition and wellbeing in the communities within which we operate.

6.9 Effectiveness of the RIST resources

The effectiveness of the *Checklist: How healthy is your store?* was assessed to determine if its use led to changes in store stocking practices and availability of healthy choices.

The effectiveness of the various nutrition promotion strategies described in the RIST resources was assessed by examining sales data to determine if sales patterns changed following the implementation of these strategies.

6.9.1 Checklist: How healthy is your store?

The aim of the *Checklist: How healthy is your store?* is to enable store managers and others to assess whether a store is providing healthy food and drink options. The checklist can be used to monitor the availability and range/variety of healthy foods and drinks for the community.

The *Checklist: How healthy is your store?* contains 29 nutrition indicators of a healthy store, six management indicators and five promotion and marketing indicators. The checklist is completed by ticking a box where the store meets the indicator.

Fourteen stores in Queensland and four in the APY Lands of South Australia completed the store checklist twice, during the third quarter of 2008 and again in April 2009 (at the start of the second quarter) by either the store manager or nutritionist. The RIST nutritionist received a total of 36 completed checklists.

The small number of participating stores means that:

- it is not possible to make comparisons between stores in different locations
- it is not possible to compare results where the checklist was completed by different professional groups (e.g. store managers or, nutritionists).

6.9.1.1 Results

Table 7: Checklist: How healthy is your store? management indicators

Checklist: How healthy is your store? management item	Baseline third quarter 2008 √	Follow-up April 2009 √
The store has a documented active nutrition policy	5 (28%)	5 (28%)
The store does not serve children during school hours	9 (50%)	8 (44%)
All store staff have been trained in food safety	6 (33%)	6 (33%)
Dogs are not allowed in the store	17 (94%)	16 (89%)
All store staff comply with tobacco control legislation	16 (89%)	14 (78%)
The store does not have rubbish lying around	16 (89%)	16 (89%)

Most stores achieved a tick for tobacco, food safety and hygiene issues, but results were low for active nutrition policy and not serving children during school hours (see Table 7). No improvements were seen with respect to these indicators; in fact, the only changes were negative changes.

Some nutrition indicators, such as the availability of tinned fish, pasta or low Glycaemic Index (GI) rice, wholemeal, multigrain bread or 'better choice' white bread, were met by every store or nearly every store (see Table 8). With other indicators, e.g. 'at least six cuts of lean meat', 'only selling 100% fruit juice in small-sized packs', 'all sausages sold low-fat', 'at least 50% of drinks in the fridge are low-sugar drinks', few stores got a tick.

Improvements were seen with respect to the availability of evaporated skim milk, low-fat coconut milk/cream, iron-enriched baby cereal, and bowls, spoons and feeding cups suitable for babies, as well as increased variety of fresh fruit, and yellow and red vegetables. Negative changes were seen with respect to tinned fruit in juice or water and hardened fats.

Table 8: Checklist: How healthy is your store? nutrition indicators

Checklist: How healthy is your store? nutrition item	Baseline third quarter 2008 √	Follow-up April 2009 √
Wholemeal or multigrain bread or 'better choice' white bread	17 (94%)	17 (94%)
At least 3 healthy breakfast cereals	16 (89%)	15 (83%)
Pasta or low-GI rice	18 (100%)	18 (100%)
Low-fat biscuits (≤10g/100g)	16 (89%)	18 (100%)
At least 8 types of fresh fruit	12 (67%)	17 (94%)
Tinned fruit in natural juice or water	8 (44%)	6 (33%)
Delivery of fresh fruit and vegetables every week all year round	17 (94%)	15 (83%)
At least 4 different types of white/green vegetables	16 (89%)	16 (89%)
At least 3 different types of salad vegetables	18 (100%)	18 (100%)
At least 3 different types of yellow/red vegetables	17 (94%)	18 (100%)
Reduced-fat, low-fat or skim milk in addition to full-cream milk	17 (94%)	17 (94%)
Evaporated skim milk	7 (39%)	10 (55%)
Low-fat coconut milk/cream	6 (33%)	13 (72%)
Not sell hardened or solidified fats	9 (50%)	8 (44%)
Only sells mono-polyunsaturated margarines and oils	8 (44%)	10 (55%)
At least 2 different types of canned beans	16 (89%)	17 (94%)
At least 5 different types of canned or frozen vegetables	18 (100%)	17 (94%)
At least 6 lean cut meat options	1 (6%)	3 (16%)
Store stocks tinned fish	18 (100%)	18 (100%)
All sausages sold are low-fat	1 (6%)	2 (11%)
Reduced-fat tinned meats (≤10g/100g fat)	11 (61%)	15 (83%)
Baby feeding cups	7 (39%)	9 (50%)
Bowls and spoons suitable for babies	8 (44%)	11 (61%)
At least 1 type of fruit-based baby food for babies 6-9 months old	15 (83%)	14 (78%)
At least 1 type of savoury baby food	16 (89%)	16 (89%)
At least 1 type of iron-enriched baby rice cereal	9 (50%)	14 (78%)
Store has bubbler and/or offers free chilled drinking water	3 (16%)	3 (16%)
Only sells 100% fruit juice in small portion packs (250ml or smaller)	3 (16%)	2 (11%)
At least 50% of drinks in the fridge are low-sugar drinks	2 (11%)	4 (22%)

The results show small improvements in promotional materials displayed and positioning of healthy foods in the store, but declines with respect to other indicators (see Table 9).

There were large changes with respect to cross-subsidies of healthy choices by increased mark-up on less healthy items, but the reasons for this are not clear. Further consideration of this indicator is required as there is no evidence that this practice contributes to improved nutrition.

Table 9: Checklist: How healthy is your store? promotion and marketing indicators

Checklist: How healthy is your store? promotion and marketing item	Baseline third quarter 2008 √	Follow-up April 2009 √
Generally, healthy food items have the best position in all displays	6 (33%)	8 (44%)
The store does not promote lollies, chocolate or crisps	6 (33%)	4 (22%)
The store uses colourful posters and display boards to promote healthy products	5 (28%)	9 (50%)
The store has pieces of fresh fruit and/or other healthy snack items at point of sale	5 (28%)	4 (22%)
The store cross-subsidises healthy foods by marking up less healthy items	15 (83%)	8 (44%)

The results indicate that there are areas for improvement within the store and also areas for improvement of the checklist. These results not only reflect the practices in stores but also the quality of the checklist and the need for standardised methodology in using the checklist.

6.9.2 Effectiveness of the strategies included in other RIST resources

A tracking sheet was developed to record planning of nutrition promotion strategies and activities used by store managers and/or nutritionists.⁴⁴ This planning template was distributed to all nutritionists, dietitians and store managers involved in the detailed evaluation, and they completed this for six months over two consecutive quarters (October–December 2008 and January–March 2009) to record the nutrition promotion activities conducted.

Eighteen stores were involved in this detailed evaluation which included recording promotion activities on the tracking sheet and providing sales data to the RIST nutritionist.

The RIST tool, *Keeping track of healthy food*, is an Access database management system that uses scanned sales data to assess and monitor store sales of key foods. *Keeping track of healthy food* can be used to generate reports on sales of certain indicator foods and drinks. Quarterly sales data were collected over a 12-month period (four quarters: April–June 2008; July–September 2008; October–December 2008; January–March 2009).

Some stores were only able to provide quarterly sales data for three quarters. The sales data from some stores included information about quantities of sales – number of units sold and weights or volumes (kilograms and litres) – while most stores provided dollar value of sales as

44 See Appendix F

well. Store managers were contacted when further information was required with respect to weights/units of foods and drinks.

If not already in Excel, the raw store sales data were converted to Excel and then imported into *Keeping track of healthy food* for analysis. As the process of entering and analysing the data required nutrition expertise, a senior public health nutritionist was employed to assist the RIST nutritionist with this work. Reports generated from the analysis were provided to store managers/group managers and nutritionists.

The aim of collecting the sales data was to ascertain if the nutrition promotion strategies undertaken by the nutritionists/store managers had any influence on the sales of the particular foods/drinks targeted.

The completed planning track sheets showed that the following RIST resources and strategies were used:

Checklist: How healthy is your store?

The RIST *Checklist: How healthy is your store?* was used 13 times and triggered promotions of fresh fruit, vegetables, wholegrain bread, and low-sugar soft drinks (decreasing the sales of high-sugar soft drinks). The promotional activities used to assist in increasing the sales of these foods/drinks were cooking demonstrations, stock improvement and placing food and drinks on the appropriate shelves.

Marketing ideas for healthy food

Nutritionists and store managers used the *Marketing ideas for healthy food* resource 16 times with the aim of improving the sales of fresh fruit, vegetables, wholegrain/wholemeal bread and low-sugar/diet soft drinks. Strategies used were shelf-talkers, taste testing and cooking demonstrations.

Guidelines for stocking healthy food

The *Guidelines for stocking healthy food* resource was used five times with the aim of improving the sales of fresh fruit and vegetables, good fats/oils and low-sugar soft drinks. Strategies used were mainly cooking demonstrations and improving the variety of low-sugar soft drinks.

Healthy fast food

Only one person used the *Healthy fast food* resource to assist with improving the sales of good oils and fats. This was done by a cooking demonstration.

Heart Foundation Buyer's Guide

The *Heart Foundation Buyer's Guide* was used nine times by store managers and/or nutritionists to assist with increasing the sales of wholegrain/wholemeal bread, low-fat milk and low-sugar drinks. This resource was used to improve the choice of healthier options available, together with strategies from *Marketing ideas for healthy food*, such as taste testing and placing healthier food and drink options on the appropriate shelves.

Maximising the shelf life of fruit and vegetables

The *Maximising the shelf life of fruit and vegetables* A3 poster resource was identified twice in work to improve the shelf life of fruit and vegetables.

Checklist: How healthy is your takeaway?

Checklist: How healthy is your takeaway? was used three times to increase the availability of wholegrain bread, low-sugar soft drinks and hot takeaway foods. Strategies undertaken to promote these included taste testing as well as product improvement by providing healthier options.

6.10 Other resources

Other resources were used by nutritionists 39 times during the six-month period to assist with improving the sales of fruit, vegetables, wholegrain/wholemeal bread, lean meat and good fats/oils. These included the Vegie Man poster and recipes from the *Deadly Tucker* cookbook. The activities undertaken were cooking demonstrations, placing shelf talkers in front of the healthier options and improving the stock of the healthier options.

In addition, the Green Label resource was used nine times in Queensland to improve the sales of fresh fruit, vegetables, wholegrain bread, low-fat milk and cheese, and low-sugar soft drinks. The Green Label resources were used in conjunction with strategies used to promote the healthier options such as taste testing of low-fat milk and cheese and low-sugar drinks.

6.11 No resources specified

A number of activities to assist with increasing the sales of healthy foods/drinks were undertaken without any specific resources being identified as a source of ideas for these promotional activities.

Another strategy used to decrease the sales of soft drinks and confectionery was product placement, e.g. placing low-sugar drinks in the refrigerator to cool while high-sugar soft drinks were placed on the store shelves, and placing confectionery behind the counters, where the confectionery is less visible to children and harder to access.

The strategy used to increase the sales of fruit, vegetables, wholegrain bread and good fats/oils and decrease the sales of confectionery and high-sugar soft drinks was taste testing fresh fruit and vegetables, low-fat cheese and low-joule soft drinks. In one store, a rewards system was implemented: if a person spent \$30 on fresh fruit and vegetables, he/she would then receive some type of reward.

The most commonly used RIST resource to assist with:

- improving the sales of fruit and vegetables was *Checklist: How healthy is your store?*
- increasing the sales of wholegrain bread was *Marketing ideas for healthy food*
- for healthier drink options (instead of sugary soft drinks) was the *Heart Foundation Buyer's Guide*.

6.12 Resources used in the APY Lands of South Australia

In the APY Lands of South Australia, *Marketing ideas for healthy food*, *Heart Foundation Buyer's Guide* and other resources were used to assist with increasing the sales of fresh fruit and vegetables. Strategies undertaken were appropriate product placement on the shelves and in refrigerators, improvement of the quality of produce, shelf talkers and having a rewards system in place, as mentioned above. This information is also included with the information from all locations described above. In addition, in one store on the APY Lands, a community initiative limited the availability of high-sugar drinks. This impressive initiative is not included here as it pre-dated this evaluation. The limited store scanning data meant that the interventions in the APY Lands could not be analysed in the same way as other store sales data.

6.13 Promotion of healthy food and drink choices – impact on sales

Promotion activities took place in 16 stores (in the fourth quarter of 2008, the first quarter of 2009 or in both quarters). No documented promotion activities took place in two stores. Some activities were 'one-off' such as a cooking demonstration, while others were ongoing, such as placement of shelf talkers. A total of 125 activities were described over the six-month period in 16 stores – an average of about 1.3 activities per month per store.

Foods and drinks promoted by nutritionists and/or store managers were consistent with the indicator foods identified in the reports of *Keeping track of healthy food*.

Quarterly sales data were analysed to show sales before these promotional activities commenced and for the two quarters for which the activities were conducted. Some results are presented in Graphs 9 and 10.

The results shown below do not demonstrate any association between the activities conducted and the sales of the foods and drinks being promoted.

There are wide fluctuations in the sales of some items which could be due to seasonal factors such as tourism and reduced access due to flooding. For example, in Graph 9 below, stores 5 and 6 were impacted by prolonged flooding in the first quarter of 2009.

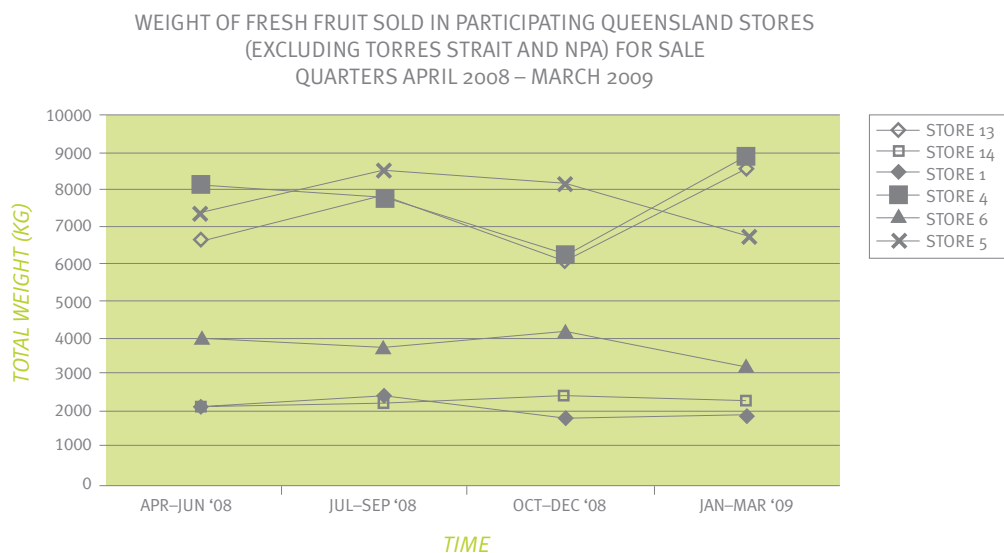
In other examples there is no identifiable explanation for the changes or lack of changes seen. In stores shown in Graph 9, promotions were conducted in store 1 but not store 14, but sales remain unchanged in both. Promotions were conducted in store 4 but not in store 13; despite this, sales in store 13 and store 4 both increased although there were access issues in both locations.

Similar inconsistent results were found for different foods and drinks promoted and for different locations. Additional results are shown in graphs in Appendix P.⁴⁵

Unfortunately, the short time frame in which this evaluation was conducted means that there are no results available for subsequent quarters, when sustained interventions may have demonstrated outcomes in terms of changes in sales patterns. In addition, this time frame means it is not possible to compare sales for any quarter with the sales in the same quarter in another year, which would have provided some control for seasonal factors.

⁴⁵ See Appendix P

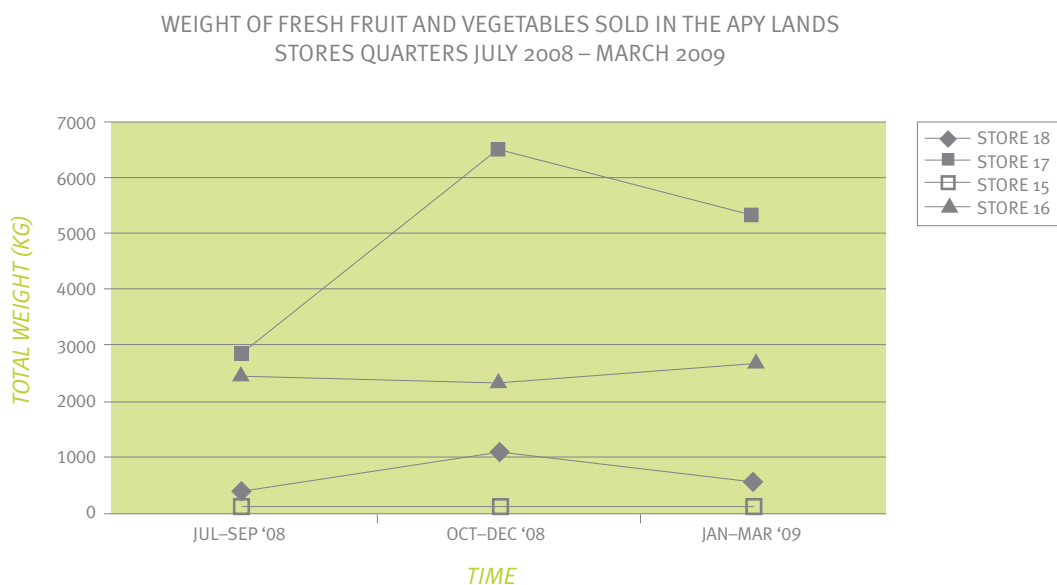
Graph 9: Weight of fresh fruit (kg) sold in participating stores in Queensland excluding the Torres Strait and NPA areas



Stores 5, 13, 14: no promotion activities

Stores 1, 4, 6: promotion activities by nutritionist

Graph 10: Fresh fruit and vegetables (kg) sold in participating stores in the APY Lands of South Australia



Stores 15, 16, 17, 18: promotion activities by nutritionist

6.13.1 Analysis of sales data and further development of *Keeping track of healthy food*

Keeping track of healthy food was designed to provide reports on sales of key indicator foods and drinks⁴⁶ that reflect the main nutrition issues in remote communities. These indicator foods were identified during development of the tool by examining the sales of foods and drinks in six stores in remote Aboriginal communities across northern Australia. The process of using the *Keeping track of healthy food* tool requires that all foods and drinks sold are imported into the data base, but analyses are conducted only on the sales of key indicator foods and drinks. All other food and drink items are classified as ‘not monitored’.

Keeping track of healthy food produces standardised reports which include information which can be reported to communities, store managers and store committees for use in planning nutrition interventions.

Keeping track of healthy food also has the capacity to provide a nutritional analysis of foods and drinks sold. This function was not used here as it is beyond the scope of this evaluation but such an analysis would also provide useful information for reporting to communities and planning nutrition promotion interventions.

During the evaluation, it became clear that the original design of *Keeping track of healthy food* could be enhanced by modifying the design to allow sales of any food or drink item to be analysed and to examine the foods sold in other ways such as:

- comparing sales of the foods from the five food groups (categorised as ‘core’ foods) and all other foods and drinks
- comparing sales of fruit and vegetables with sales of high-sugar soft drinks
- comparing the value of sales of food and drinks with sales of tobacco
- comparing sales of iron-rich baby foods with sales of other types of baby food.

These enhancements would allow more flexibility in preparing information to assist in community planning. This work also identified the need for a reporting template which can accommodate local priorities. It is planned to incorporate this additional flexibility into *Keeping track of healthy food* in future.

This section provides results of this further analysis of sales data from some Aboriginal community stores and some Torres Strait outer island stores. The results illustrate the kind of information which can be provided to communities for local-level community-based planning of nutrition interventions.

⁴⁶ See Appendix Q

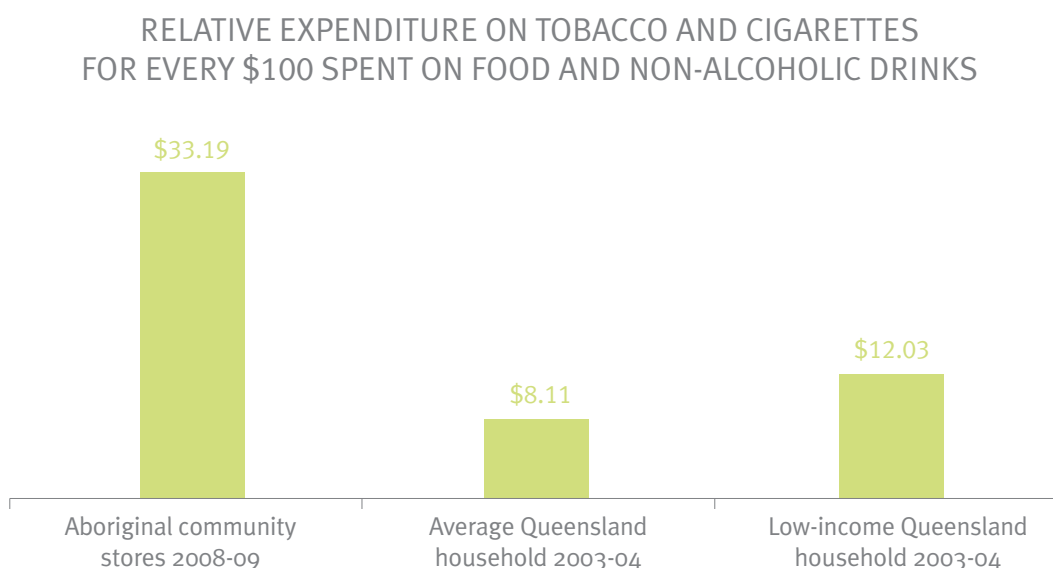
The following information describes the patterns of sales from remote community stores for Aboriginal communities and stores on Torres Strait outer islands (see Graphs 11-22). Information from stores on the Northern Peninsula Area and Thursday Island are not included here because of the relatively high proportion of non-Indigenous residents and tourists in these locations. Dollar value of sales information is presented only for stores in Aboriginal communities as this was not available for all of the Torres Strait outer island stores.

6.13.1.1 Tobacco sales in remote Aboriginal communities 2008-09

Information on the value of sales was available for some Aboriginal community stores, allowing comparisons to be made between the amount of money spent on food and drinks and the amount of money spent on tobacco and cigarettes. In Aboriginal community stores, for every \$100 worth of food and drinks sold, there was in addition \$33.19 worth of tobacco and cigarettes sold (see Graph 11).

The relative expenditure of tobacco and cigarettes in remote Aboriginal community stores is high compared with mainstream Queenslanders. The Household Expenditure survey⁴⁷ shows that the average Queensland household spends \$8.11 on tobacco and cigarettes for every \$100 spent on food and non-alcoholic drinks. The relative expenditure on tobacco for Queensland households was highest for households in the lowest and second lowest income categories, with about \$12.03 spent on tobacco and cigarettes for every \$100 spent on food and non-alcoholic drinks.

Graph 11: Relative expenditure on tobacco and cigarettes compared with food and drinks



Unfortunately, the absence of dollar value information for some Torres Strait outer island stores means that equivalent information cannot be provided for the Torres Strait communities.

⁴⁷ Australian Bureau of Statistics. *Household Expenditure Survey 2003/04*. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6530.02003-04>

6.13.1.2 Core food, non-core food and other foods

Core foods are the foods and drinks which are good sources of important nutrients, lower in fat, sugar and salt and/or higher in fibre. Core foods are comprised of the five food groups which form the basis of a healthy diet, and include fruit, vegetables, dairy foods such as milk, cheese and yoghurt, meat and other high-protein foods such as fish, eggs, most nuts and lentils, and cereal foods such as bread and rice.

Core foods are recommended for health in the Dietary Guidelines for Australians by the National Health and Medical Research Council and the Commonwealth Department of Health and Aging.⁴⁸ The *Australian Guide to Healthy Eating* (AGHE)⁴⁹ describes how much of each food group is appropriate for people at different ages.

Non-core foods are foods and drinks which are higher in fat, sugar and/or salt and lower in nutrients and fibre. Non-core foods are usually more energy-dense, i.e. they provide more energy for the same amount (by weight or volume), compared with core foods. Non-core foods and drinks are associated with overweight and obesity and linked to the development of chronic diseases.

While healthy active people can enjoy some non-core foods in small amounts occasionally, if people have chronic health conditions such as diabetes or high blood pressure, they are advised to avoid non-core foods.

As part of this evaluation, the RIST tool was modified to categorise all foods and drinks sold into 'core' and 'non-core'. This process was guided by the AGHE⁵⁰ and the *Heart Foundation Buyer's Guide*.

During this process, certain food and drink choices which could not be easily categorised were identified. These were grouped into another category called 'other'.⁵¹ For example, fats and oils are classified as 'extras' in the AGHE but these have been included in the 'other' category as certain fats and oils do have health benefits⁵². Peanut butter, tea and instant coffee are examples of foods and drinks included in the 'other' category. Baby foods were excluded from all categories, as these are not included in the AGHE or the *Heart Foundation Buyer's Guide*.

The sales data for the Aboriginal community stores and for the Torres Strait outer island stores were classified into 'core', non-core' and 'other'.

Graph 12 shows that in the Aboriginal community stores, about half of store sales by dollar value are for non-core foods. Another way of describing this result is that for every \$100 of sales in the Aboriginal community stores, about \$49 of sales are for non-core food and drink choices.

48 Commonwealth Department of Health and Aging and National Health and Medical Research Council. Food for Health – A Guide to Healthy Eating. Dietary Guidelines series. 2003

49 Commonwealth of Australia. Australian Guide to Healthy Eating. 1998. ISBN 0 642 27257 <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-food-guide-index.htm>

50 Ibid

51 See Appendix R for details of the food and drink categories, 'core', 'non-core' and 'other'

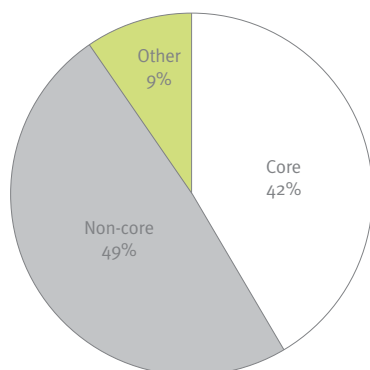
52 National Heart Foundation of Australia. A review of the relationship between dietary fat and cardiovascular disease. Nutrition and Dietetics. 1999;56: S1-S22

In the Aboriginal community stores, where both dollar values and quantity (weight/volume) are available, core foods and drinks contribute more to the quantity sold than to the dollars spent, i.e. core foods are better value, in terms of weight/volume. Non-core choices were 44% by weight/volume of food and drinks sold (see Graph 13) and 49% of the dollar value of sales. Products such as packet chips and confectionery are energy-dense but do not weigh much, compared with core foods such as fresh vegetables and fruit.

In the Torres Strait outer island stores, in terms of weight and volume, just over half (53%) of the food and drinks sold by the stores are core foods. About one-third (37%) of sales by weight/volume are for non-core food and drinks (see Graph 14). This is a different pattern from that seen in the Aboriginal community stores, but it is hard to assess the scale of these differences without corresponding dollar value information.

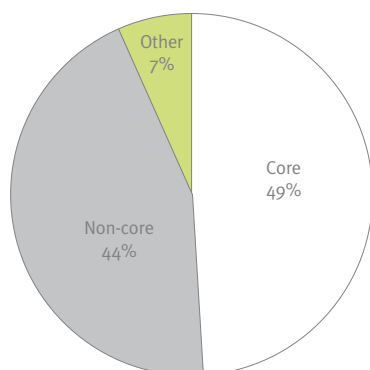
Graph 12: Aboriginal community stores: sales by dollar value

ABORIGINAL COMMUNITY STORES SALES: DOLLARS (\$) SPENT ON CORE VS NON-CORE VS OTHER FOODS AND DRINKS 2008-09



Graph 13: Aboriginal community stores: sales by weight/volume

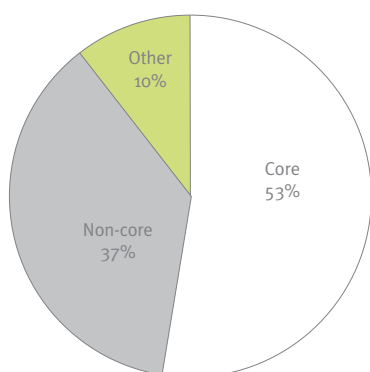
ABORIGINAL COMMUNITY STORES SALES: WEIGHT/VOLUME OF CORE VS NON-CORE VS OTHER FOODS AND DRINKS 2008-09



In both settings, these graphs show that the sales of non-core foods and drinks comprise a large proportion of total sales in remote community stores. This is consistent when looking at sales in terms of dollar value or in terms of the weight/volume of foods and drinks sold.

Graph 14: Torres Strait outer islands stores: sales by weight/volume

TORRES OUTER ISLANDS: COMPARISON OF TOTAL WEIGHT/VOLUME SOLD OF CORE VS NON-CORE VS OTHER FOODS AND DRINKS



6.13.1.3 Highest sellers of foods and drinks in community stores

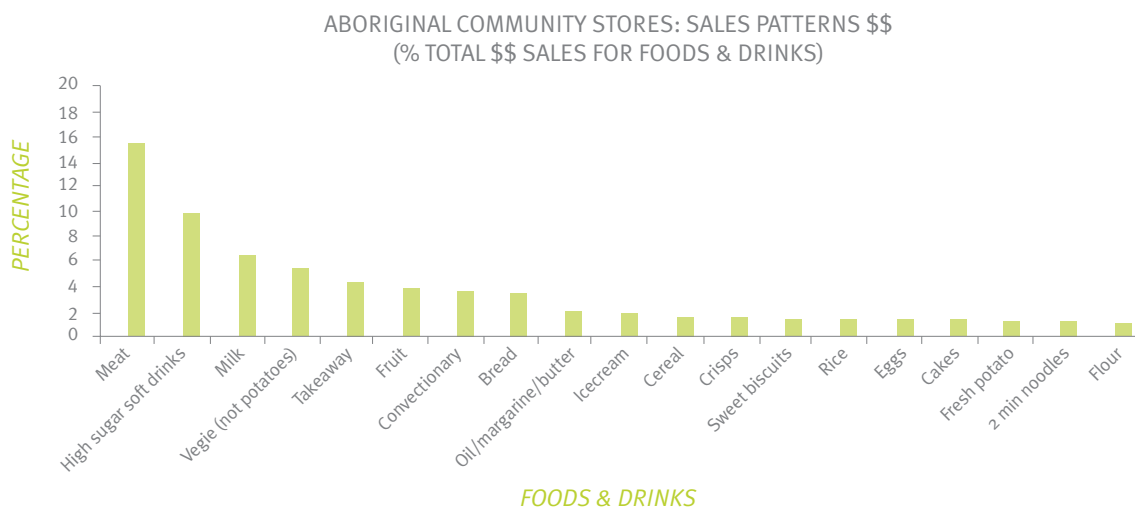
The total quantity of food and drinks sold was calculated in terms of weight (in kilograms) and volume (in litres). The quantities of different foods and drinks sold were then calculated as percentages of the total food and drink sales.

The same process was used to estimate percentages of dollar value of food and drink sales for the stores in the remote Aboriginal communities where information on both quantity and dollar values was provided. The analysis for dollar value of sales was not done for Torres Strait outer island stores as information on the dollar value of sales was not available for all the stores.

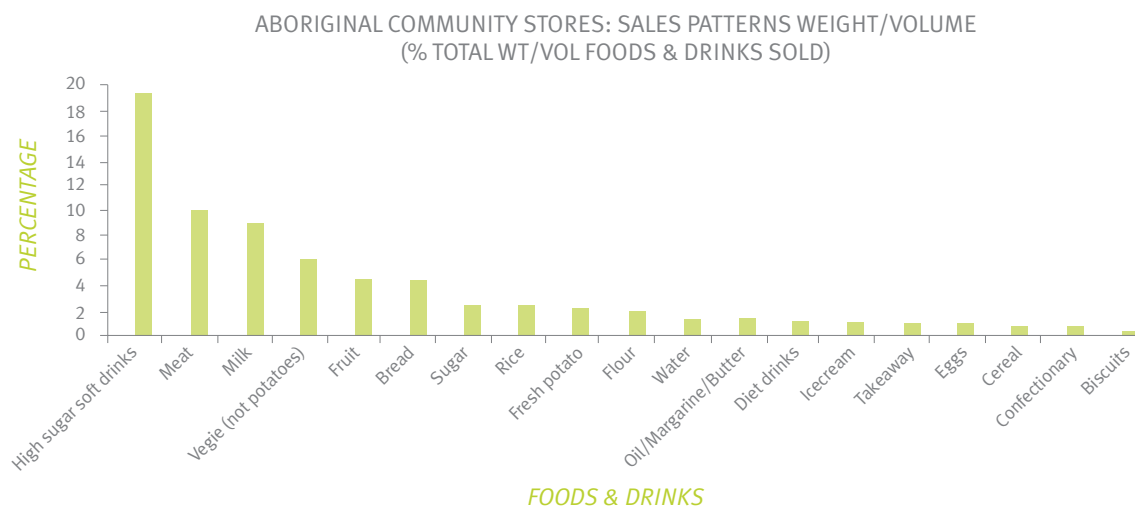
Graph 15 shows that in the stores in Aboriginal communities, about 15% of food and drink sales, in terms of dollars, were sales of meat. The next largest category of sales was high-sugar soft drinks, worth 10% of the food and drink sales.

High-sugar soft drinks are the largest single category of sales in terms of quantity (see Graph 16), accounting for nearly 20% of all the food and drinks sold by the stores. A similar pattern was seen in the Torres Strait outer island stores (see Graph 17).

Graph 15: Aboriginal community stores: food and drinks sales patterns by dollar value



Graph 16: Aboriginal community stores: sales patterns by quantity (weight/volume)



Graph 17: Torres Strait outer islands: sales patterns by quantity (weight/volume)



Meat sales

The types of meat sold are very similar in Aboriginal and Torres Strait stores, with most meat sales being fresh or frozen, fatty cuts of meat (see Graph 18). Only a small amount of the meat sold is lean meat – 6.6% of all meat sales in the Aboriginal community stores and less than 1% (0.7%) of meat sales in the Torres Strait outer island stores.

There is an opportunity to contribute to improved health and nutrition by increasing the proportion of lean meat sold, especially in the Torres Strait outer island stores.

Graph 18: Types of meat sold in Aboriginal community stores and Torres outer island

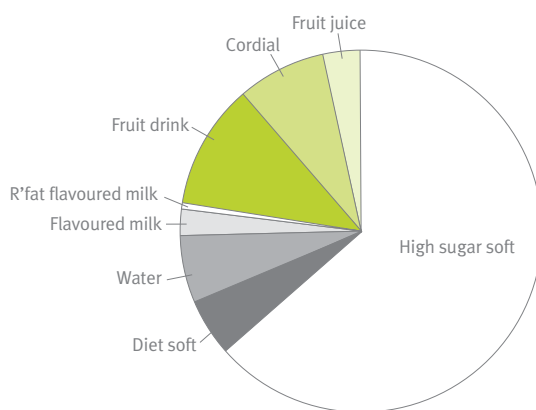


It was notable that canned meats are not a large proportion of sales when sales information is presented on a weight basis. In the Aboriginal community stores, canned meat comprised only 11.5% by weight of meat sales, but 24% of the dollar value of meat sales and 28% of all meat items (unit sales). In the stores on the Torres Strait islands, canned meat was 11.9% of meat sales by weight, but 24% of meat items sold.

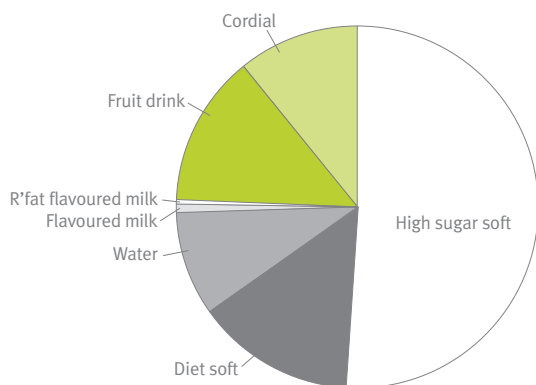
Types of cold drinks sold

The information on sales of cold drinks (see Graphs 19 and 20) shows that there are opportunities to contribute to improved nutrition and health by changing the types of drinks sold, to increase the proportion of low-sugar drinks, especially in the Aboriginal community stores.

Graph 19: Aboriginal community stores: sales of cold drinks



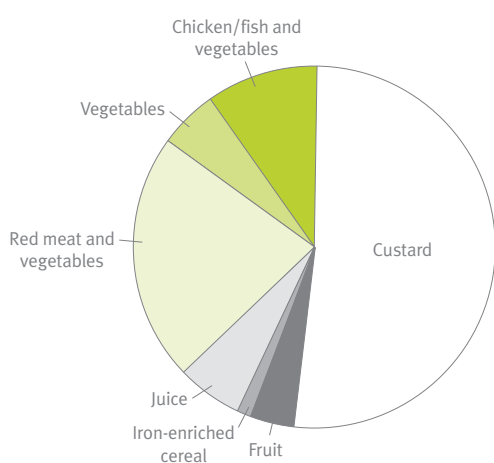
Graph 20: Torres Strait outer islands stores: sales of cold drinks



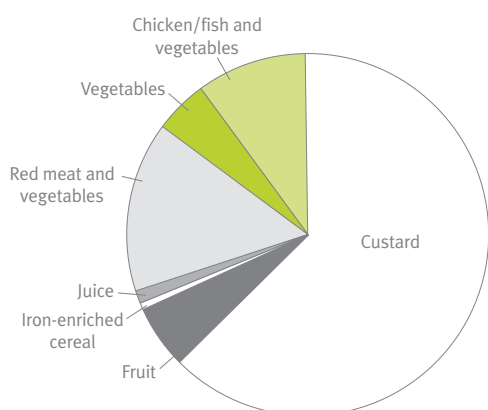
Types of baby foods sold

Graphs 21 and 22, which illustrate purchasing patterns for baby food, show the predominance of custard as a food purchased for babies. This information could be used in planning interventions addressing childhood anaemia or childhood growth issues.

Graph 21: Aboriginal community stores: proportion of baby food (not formula) to total weight sold



Graph 22: Torres Strait outer islands stores: Proportion of different types of baby food (not formula) to total weight sold



6.13.2 Key points from sales data

Some simple comparisons can be made from the sales data. These could assist in forming targets both for store food and nutrition policies for altered stocking patterns and in-store promotions, and for community-based interventions to influence purchasing preferences.

6.13.2.1 *Aboriginal community stores*

- 10% of the dollar value of food and drink sales was for high-sugar soft drinks. In comparison, Queensland households spent 3.3% of their food and non-alcoholic drink spending on soft drinks, including high-sugar drinks and diet drinks.¹
- The dollar value of sales of high-sugar soft drinks was greater (110%) than the dollar value of sales of fresh fruit and vegetables.
- Nearly 20% (19.3%) of the quantity (by volume/weight) of food and drinks sales was for high-sugar soft drinks.
- The quantity of high-sugar soft drink sold (in litres) was more than half as much again (156%) as the quantity of fresh fruit and vegetables sold (in kilograms).
- 49% of the foods and drinks sold (by weight/volume) and 44% (by dollar value) are not healthy choices. These include high-sugar soft drinks, cordial and 'junk foods' such as confectionery, crisps, sweet biscuits, cakes, pies and sausage rolls.
- More than 12 high-sugar soft drinks are sold for every diet soft drink sold, between 5 and 6 times more than in Australia generally. As a comparison, in Australia in 2006, just over two (2.2) high-sugar soft drinks were sold for every diet soft drink sold.²
- 88% of the noodles sold are regular '2-minute' noodles which are high in saturated fat.
- Less than 7% of the meat sold is lean meat.
- Baby food sales are mostly for baby foods which are poor sources of iron and other important nutrients.

6.13.2.1 *Torres Strait outer island stores*

- The quantity of high-sugar soft drink sold (in litres) is nearly equal (97%) to the quantity of fresh fruit and vegetables sold.
- More than one-third (37%) of the foods and drinks sold (by weight/volume) are not healthy choices. These include high-sugar soft drinks, cordial and 'junk foods' such as confectionery, crisps, sweet biscuits, cakes, pies and sausage rolls.
- Nearly four (3.6) high-sugar soft drinks are sold for every diet soft drink sold, about 50% more than for Australia as a whole.³
- Less than 1% of the meat sold is lean meat.
- 77% of the noodles sold are the regular '2-minute' noodles which are high in saturated fat.
- Baby food sales are mostly for baby foods which are poor sources of iron and other important nutrients.

Comparing the relative quantities of food and drinks sold in Aboriginal stores and Torres Strait outer island stores:

- Stores in both the Aboriginal community settings and the Torres Strait outer islands sell large quantities of nutritionally poor foods and drinks.
- Stores in Aboriginal communities sell (by weight/volume) more soft drink (19% vs 14%), more meat (10% vs 8.5%) and more sugar (3% vs 2%) than the Torres Strait outer islands stores.
- The proportion of fresh vegetables sold, including potatoes, is slightly greater in the Aboriginal community stores (7.8% vs 7.3%). However, proportionally more fresh fruit is sold in the Torres Strait outer island stores (7.5% vs 4.9%).
- Comparing the weight of goods sold, stores in the Torres Strait outer islands sell proportionally more:
 - rice (7% vs 2.8%)
 - bread (4.8% vs 3.0%)
 - flour (4.6% vs 2.3%)
 - sweet biscuits (1.6% vs 0.6%).
- Aboriginal community stores sell about 8 (7.6) times as much canned meat as canned fish whereas Torres Strait island stores sell about three (2.7) times as much canned meat as canned fish.
- Stores in both the Aboriginal community settings and the Torres Strait outer islands sell relatively small amounts of lean meat, especially the stores in the Torres Strait outer islands.

6.13.3 Comparisons of remote stores sales data with other locations

It is difficult to identify similar information with which remote stores sales data can be compared. Store sales information for mainstream stores is not publicly available. Some relevant information may be purchased but that is beyond the resources and scope of this evaluation. In addition, in mainstream settings, food is purchased from multiple outlets, whereas in remote communities most food is purchased from community stores.⁵³

⁵³ Brimblecombe J, Mackerras D, Clifford P, O'Dea K. Does the store-turnover method still provide a useful guide to food intakes in Aboriginal communities? *Australian and New Zealand Journal of Public Health*. 2007; 30(5); 444-7

The Australian household expenditure surveys⁵⁴ provide information on total household expenditure. This includes details of money spent on food and non-alcoholic drinks (and other items) in total, whereas the information from community stores includes only information about expenditure in those stores. As residents of remote communities also purchase food and non-alcoholic drinks in other outlets, total expenditure may be higher than shown here. While the Australian household expenditure survey results for 2003–04 are not directly comparable with the results of this survey, they do provide some interesting relevant information.

Table 10: Aboriginal food and drink sales compared with Queensland household expenditure

Food/drink item	% of total food and drink sales in 2008–09 in Aboriginal community stores	% of income spent on food and non-alcoholic drinks in the Queensland Household Expenditure Survey 2003–04
Meat	15.5	13.3
Soft drinks	10.0	3.3
Vegetables (not potato)	5.6	6.0
Fruit	4.1	5.7
Confectionery	4.0	4.0
Rice	1.6	0.3

The most striking difference between the sales patterns in Aboriginal community stores and the Queensland household expenditure is with respect to sales of soft drinks, with Aboriginal community stores selling three times the amount of soft drinks (see Table 10). Sales of rice are also higher.

It would be useful to be able to compare purchasing patterns at remote stores with relevant benchmarks. These could include ‘pragmatic’ benchmarks to allow comparisons with sales patterns in mainstream Australia. However, in recent years, the increasing epidemic of overweight and obesity, and associated increases in chronic disease, among all Australians indicate that mainstream purchasing patterns do not necessarily equate with good health outcomes.⁵⁵ Consequently, it would also be important to have a ‘gold standard’ benchmark, related to purchasing a healthy diet and based on nutrition recommendations such as the Dietary Guidelines for Australians.⁵⁶

⁵⁴ Australian Bureau of Statistics *Household Expenditure Survey 2003/04*. <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6530.02003-04>

⁵⁵ Cameron AJ, Welborn TA, Zimmet PZ, Dunstan DW, Owen N, Salmon J, Dalton M, Jolley D, Shaw JE. Overweight and obesity in Australia: the 1999-2000 Australian Diabetes, Obesity and Lifestyle Study (Ausdiab). *Medical Journal of Australia*. 2003; 178:427-32

⁵⁶ Commonwealth Department of Health and Aging and National Health and Medical Research Council (2003). *Food for Health – A Guide to Healthy Eating*. Dietary Guidelines series. 2003

7: Discussion



This report describes the results of the evaluation of the RIST resources, which was conducted over one year – from mid-2008 to mid-2009 – in Queensland and the APY Lands of South Australia.

The RIST resources were designed to assist managers of stores and takeaways in remote Indigenous communities to provide and promote healthy food and drink choices.

The evaluation aimed to identify who was using the RIST resources in Queensland and the APY Lands, how useful they found them, any improvements and changes needed, and what outcomes could be achieved by using the resources.

The evaluation has generated much useful information, despite a short time frame and the relatively small number of participants in the detailed evaluation. Most of the information in this report relates to remote community stores, as very few takeaway food outlets ordered the RIST resources or participated in the evaluation.

As well, the evaluation generated some unanticipated information with respect to store sales. This finding highlights the need to address sales of less healthy choices in remote stores and takeaways, as well as increased availability and sales of healthy choices.

This evaluation did not extend to the Northern Territory where the Australian Government Emergency Response means that remote stores operate under a store licensing scheme which does not exist in other jurisdictions. The results described here should not be extrapolated to settings where the policy context is very different.

In the course of this evaluation, colleagues in the Northern Territory described how the RIST resources formed the basis of policies and practices developed by various government and store agencies involved in the store licensing scheme. Consequently, the RIST resources may have had uses and applications which are not captured in this evaluation.

7.1 Who uses the RIST resources and how useful are they?

The evaluation showed that the RIST resources were used mainly by nutritionists working with remote community stores, rather than by store managers. Few store managers used the resources; even the resources deemed most useful by store managers were used by only about half the managers.

In contrast with the store managers, nutritionists rated the RIST resources highly, currently use most of the resources, and expect to continue doing so in the future. The most useful resources were used by more than 90% of nutritionists, and rates of expected future use were 100%.

These results are different from expected but demonstrate that the resources were being used and were useful.

In their responses to survey questionnaires, store managers reported that they are supportive of nutrition promotions based on the RIST resources (or other similar resources) but they rely on collaborations with nutritionists to promote healthy choices as they do not have the time or the expertise to conduct such nutrition promotions themselves. Store managers reported that their responsibility for general store operations and store profitability – and their lack of relevant nutrition expertise – means that they are unable to undertake the additional work of nutrition promotion. Store managers generally support promotion of healthy choices but rely on collaborations with nutritionists who conduct the promotions.

This information highlights the importance of establishing and supporting a local-level nutrition workforce to work with remote communities – including with remote community stores and takeaways – on the development, implementation, evaluation and reporting of nutrition promotion programs.

In Queensland, the RIST resources were offered across the state but orders for the resources came mainly from the north and west of the Queensland where most remote Aboriginal and Torres Strait Islander communities are located. Distribution in the APY Lands of South Australia was through the nutritionist working with those stores.

7.2 Which resources are most useful?

The resources which were used by store managers tended to be those that are most clear and concise:

- *Guidelines for remote community stores: Guidelines for stocking healthy food in remote community stores* (7-page booklet)
- *Maximising the shelf life of fruit and vegetables* (A3 poster)
- *Checklist: How healthy is your store?* (4-page booklet).

The resource rated least useful by store managers was the *Checklist: How healthy is your takeaway?*. This may reflect the fact that in Queensland most takeaways operate independently of – and often in competition with – stores.

The resources used by more than 85% of the nutritionists were:

- *Guidelines for remote community stores: Guidelines for stocking healthy food in remote community stores*
- *Marketing ideas for healthy food in remote community stores*
- *Heart Foundation Buyer's Guide*
- *Checklist: How healthy is your store?*

The resource least used by nutritionists was the *Freight improvement tool kit*. However, more than half the nutritionists used this resource, and more than 70% expected to use it in future.

There were some trends in how the RIST resources were perceived and used, related to factors such as length of time in current position, whether a nutritionist worked with the store manager, and the type of store ownership. However, none of these factors reached statistical significance.

Repeat orders for the resources reflected the fact that the checklists are designed for ‘one-off’ use and so need to be frequently replaced, while the other resources are designed to be used repeatedly.

7.2.1 Heart Foundation Buyer’s Guide

The *Heart Foundation Buyer’s Guide* is designed to assist store managers to order healthy choices from distributors. Store managers who work in a store group do not usually have responsibility for ordering. Despite this, the *Heart Foundation Buyer’s Guide* was rated well by store managers, in terms of current use and anticipated future use. This resource was also used and highly rated by nutritionists.

This result was different from that reported in an evaluation conducted by the Heart Foundation.⁵⁷ The more positive response of store managers involved in this evaluation may reflect the work of the RIST nutritionist, who was familiar with working in remote community settings and who provided information and support to store managers during visits to the communities and through ongoing telephone contact.

Nutritionists using the *Heart Foundation Buyer’s Guide* asked for the nutrition criteria used in the guide to be included in the document for transparency and in order to enable them to assess new products quickly.

7.3 Information and training

In the course of the evaluation, store managers often identified that having the support of nutritionists was an important factor in determining whether they were actively engaged in nutrition promotion, using the RIST resources or other resources. This included contact and support from the RIST nutritionist who provided managers with information about the resources and how they might be used, and/or similar support from community-based nutritionists.

Store managers frequently highlighted the need for more ‘on-the-ground’ support and promotion for good nutrition. They also identified a need for basic training in nutrition for store staff.

Again, this highlights the need for a nutrition workforce to develop and deliver nutrition promotion strategies in remote communities. Work is currently ongoing to develop a training package which nutritionists could use to deliver nutrition training to store staff.

⁵⁷ Wooden D. *The Heart Foundation Buyer’s Guide for Managers of Remote Indigenous Stores and Takeaways. Evaluation report.* Heart Foundation: October 2009

The training for nutritionists in *Keeping track of healthy food* which was delivered by Menzies School of Health Research staff, was well received and showed a positive outcome in ongoing use of *Keeping track of healthy food*. This is an important tool for evaluation of store-based nutrition interventions, and the training contributed to an expansion of the skills of nutritionists involved in or supporting these interventions. This kind of training is required on an ongoing basis for nutritionists working in remote settings, and there needs to be a mechanism in place to ensure that this can happen.

7.4 Effectiveness of the RIST resources

The evaluation included a more detailed evaluation component with 18 stores to assess whether implementation of the strategies included in the RIST resources led to changes in sales of healthy choices in those stores. The results of the evaluation of effectiveness were less positive than results in terms of use and usefulness. Some positive changes in stocking practices were seen but there were no clear outcomes regarding sales of more healthy choices.

7.4.1 Effectiveness of the Checklist: How healthy is your store?

The *Checklist: How healthy is your store?* is used to assess whether healthy choices are available in stores, and whether stores have policies and practices consistent with promotion of good nutrition. This checklist was used twice (before and after the intervention) in each of the 18 stores participating in the detailed evaluation.

A limitation with this resource is that some people may feel that they are being assessed on the results of the checklist. Consequently, it is possible that the veracity of the results could vary, depending on who is completing the checklist. However, consistent objective use of the checklist can provide useful comparative information about trends over time.

Some positive changes were seen with respect to stocking, such as improved availability of baby food and some low-fat products, but other changes noted were increases in less healthy choices.

Despite the mixed results, the process was very useful in identifying changes required to make this resource more practical and easier to use. Some of the criteria included in the checklist appear to be unnecessarily stringent, such as the criterion regarding pack size of 100% fruit juice. This should be modified when the checklist is updated.

7.5 Internal cross-subsidies

In the promotion and marketing section of the *Checklist: How healthy is your store?* one criterion is that ‘the store subsidises healthy foods by marking up less healthy items’.

This evaluation did not provide any evidence that the practice of internal cross-subsidies contributes to improved sales of healthy choices. Further research is needed to determine the impact, if any, that internal cross-subsidies have on sales. Certainly, the analysis of sales data discussed below shows that sales of soft drinks and tobacco products are very high in remote stores, compared with the sales of more healthy choices. It may be that increasing the cost of less healthy items, such as soft drinks and tobacco products, reduces the money customers have available to spend on healthy choices. There is evidence from studies in the United States that households with adults who smoke experience more food security problems than households without smokers.⁵⁸ This was especially true for low-income households.

Given the uncertainties about the effect of internal cross-subsidies, it would be better to have a criterion regarding various strategies in place to reduce the cost of healthy choices. Internal cross-subsidies is one such strategy, but other strategies include specific deals with suppliers and increased efficiency in freight.

In addition, research is needed to assess the impact of the proposed increase in taxes on tobacco products⁵⁹ on the purchase of healthy food choices.

7.6 Effectiveness of other nutrition promotions

Eighteen stores in Queensland participated in interventions designed to promote sales of more healthy choices and to reduce sales of less healthy choices. These interventions were conducted over a period of about six months, with an average of 1.3 promotional activities conducted in each store, each month.

The effectiveness of these interventions was assessed by using *Keeping track of healthy food* to analyse store sales before and after the intervention. (The lack of complete sales scanning systems in stores on the APY Lands meant that this part of the evaluation could only be conducted in Queensland stores.)

The results did not demonstrate any clear trend, either in increased sales of healthy choices or in reduced sales of less healthy choices. Other factors such as seasonal variations in access, population fluctuations due to tourism, and store management practices appeared to have had greater impact than the promotional activities conducted.

58 Cutler-Triggs C, Fryer GE, Miyoshi TJ, Weitzman M. Increased rates and severity of child and adult food insecurity in households with adult smokers. *Archives of Pediatric Adolescent Medicine*. 2008; 162(11):1056-62

59 National Preventative Health Strategy. *Overview: Australia: The Healthiest Country by 2020*, p17. ISBN: 1-74186-925-0 Online ISBN: 1-74186-926-9

Reasons for this finding may include the following factors:

- The rate of promotional activities was not sufficient and/or not sustained for long enough to achieve the desired outcome.
- The promotions were ‘piecemeal’ and implemented to different degrees in different locations.
- Major holiday periods, which may also have an effect of sales, fell within the period when the promotions were conducted.
- The short time frame of the detailed evaluation meant that it was not possible to compare sales for the same time period (e.g. third-quarter sales with third-quarter sales) which means that there was no control for seasonal factors.

Other possible reasons relate to the context in which remote stores operate, where costs involved in running a business are high, compared with non-remote locations. In this context:

- the cost of healthy food and drink choices is high compared with main centres.
- the income of the population is low compared with mainstream populations.
- household size is large, and so lower incomes have to provide for more people.

An analysis of food purchasing patterns in a remote community in the Northern Territory showed that food and drink purchases were predominantly those which were considered by purchasers as ‘good value’ in terms of energy content – foods such as flour, white bread, white rice, tinned meat and sugar.⁶⁰ More nutritious foods were more expensive and purchased less.

This is consistent with international research showing that where there are economic constraints, limited finances are used to purchase foods with the greatest energy content at the expense of more nutritious foods.⁶¹

Recent Australian research demonstrates that even in a capital city, where food costs are lower than in remote areas, the cost of a healthy diet is beyond the means of welfare-dependent families.⁶²

In New Zealand, a recent trial of different interventions demonstrated that price discounts were effective in leading to increased sales of healthy food choices. The increased purchasing of healthier choices continued (to a reduced extent) even after the discounts ceased. Tailored nutrition education had little sustained effect, although this may have been partly due to concurrent increases in food costs.⁶³

60 Brimblecombe JK, O’Dea K. The role of energy cost in food choices for an Aboriginal population in northern Australia. *Medical Journal of Australia*. 2009;190:549-51

61 Drewnowski A, Darmon N. Food choices and diet costs: an economic analysis. *Journal of Nutrition*. 2005;135:900-4

62 Kettings C, Sinclair AJ, Voevodin M. A healthy diet consistent with Australian health recommendations is too expensive for welfare-dependent families. *Australian and New Zealand Journal of Public Health*. 2009;33(6):566-72

63 Ni Mhurchu C, Blakely T, Jiang Y, Eyles HC, Rodgers A. Effects of price discounts and tailored nutrition education on supermarket purchases: a randomized controlled trial. *American Journal of Clinical Nutrition*. 2010;91:736-47

The World Health Organization states in respect of prevention of chronic disease that:

‘Individual responsibility can have its full effect only when individuals have equitable access to healthy life, and are supported to make healthy choices.’⁶⁴

The existing cost structure which means that healthy food and drink choices cost more than less healthy choices is a major structural barrier, especially where household incomes are low. This situation needs to be addressed.

Even within the economic constraints of remote communities, there are opportunities to improve the stocking and promotion of healthier foods and drinks. For example, the stores in the Torres Strait outer islands sell a higher proportion of low-sugar drinks compared with stores in Aboriginal communities. This may reflect the outcomes of a Queensland Health program which included promotion of more healthy drink choices, conducted in the Torres Strait and Northern Peninsula Area in 2003–04.⁶⁵ A similar example from the APY Lands is discussed in Section 7.10 below.

The sales data from remote stores (discussed below) does show that a substantial proportion of the foods sold are actually junk food and soft drinks. It is important to invest in nutrition promotion of healthy choices while also continuing to address the economic constraints to healthy food choices.

7.7 Nutrition workforce

Most nutritionists who participated in this evaluation work to promote good nutrition in remote community settings. These nutritionists need appropriate, useful, up-to-date and effective resources. They also need professional and technical support to work with communities – including stores and takeaways – to develop, implement, evaluate and report on nutrition interventions. Lack of adequate funding, lack of housing and insufficient professional support are some of the many barriers to recruiting and retaining staff. These factors need to be addressed, if effective nutrition programs are to be implemented in remote locations.

7.8 Sales patterns

The analysis of sales data was required for the evaluation of the interventions based on the strategies described in the RIST resources. This analysis provided unanticipated information on store sales of tobacco products.

7.8.1 Sales of tobacco

The high dollar value of sales of tobacco products in remote Aboriginal communities is especially concerning. Well Persons Health Check information from 1998 to 2001 showed that a very high proportion of residents in remote communities are smokers. In the Cape York Aboriginal

⁶⁴ World Health Organization. *Preventing Chronic Disease: A vital Investment*. Geneva: World Health Organization; 2005

⁶⁵ Personal communication, Professor Robyn McDermott

communities more than 70 per cent of people over 15 years old were smokers and, in the Torres Strait and Northern Peninsula Area more than 50 per cent of residents over the age of 15 years were smokers.⁶⁶ In comparison, about 16 per cent of Queenslanders over the age of 18 years are smokers.⁶⁷

This high prevalence of smoking and expenditure on tobacco must impact on the capacity of remote community residents to purchase healthy food choices. It is important to report this information to the communities concerned and to discuss the health and social implications of tobacco smoking.

7.8.2 Sales of soft drink and other less healthy food and drink choices

The high proportion of sales of less healthy food and drink choices, and especially high-sugar soft drinks, reduces the capacity of people to purchase more healthy choices.

In the Aboriginal community stores, just under half (49%) of all food and drinks sales by dollar value were for less healthy choices such as soft drinks, pies, crisps and confectionery. Soft drinks alone account for 10% of all food and drinks sold by dollar value and nearly 20% of food and drinks sales in terms of quantity. A similar pattern, albeit to a lesser degree, is seen in the Torres Strait stores.

In Queensland, unhealthy diet is estimated to cause 16% of premature death and ill health.⁶⁸ The consumption of energy-dense, nutrient-poor foods and drinks, especially high-sugar soft drinks, is associated with the development of obesity in children⁶⁹ and Type 2 diabetes in adult women.⁷⁰

In remote communities where overweight and obesity and associated chronic diseases are high compared with other Queenslanders and other Australians, these excessive sales of energy-dense, nutrient-poor foods and drinks are especially concerning.

- The prevalence of obesity among school-aged children in the Torres Strait is three times the prevalence of obesity in other Queensland children.⁷¹
- In addition to the existing high prevalence of diabetes⁷², the incidence of new cases of diabetes in young women (15 years to 35 years) in Torres Strait is three times that

66 Miller G, McDermott R, McCulloch B, Leonard D, Arabena K, Muller R. The Well Persons Health Check, a population screening program in indigenous communities in north Queensland. *Australian Health Review*. 2002;25(6):136-47

67 Queensland Health: Pollard G, White D, Harper C. 2009 *Self-Reported Health Status: Queensland. 2009 Survey Report*. Brisbane: Queensland Health; 2009

68 Queensland Health. The Health of Queenslanders 2008: *Prevention of Chronic Disease. Second Report of the Chief health Office, Queensland*. Brisbane: Queensland Health; 2008

69 Ludwig D, Peterson K, Gortmaker S. Relation between consumption of sugar sweetened drinks and childhood obesity: a prospective, observational analysis. *The Lancet*. 2001;357(9255):505-8

70 Schulze MB, Manson JE, Ludwig DS, Colditz GA, Stamfer MJ, Willet WC, Hu FB. Sugar sweetened beverages weight gain and incidence of type 2 diabetes in young and middle aged women. *Journal of the American Medical Association*. 2004;292:927-34

71 Valery PC, Moloney A, Cotterill A, Harris M, Sinha AK, Green AC. Prevalence of obesity and metabolic syndrome in Indigenous Australian youths. *Journal compilation © 2008 International Association for the Study of Obesity. Obesity reviews*

72 McDermott R, McCulloch B, Campbell S, Young D. Diabetes in the Torres Strait Islands of Australia: Better clinical systems but significant increases in weight and other risk factors among adults 1999-2005. *Medical Journal of Australia*. 2007;186(10): 21 May

reported among non-Indigenous Australian women aged 25-34 years during the same period.

- In Cape York the incidence of diabetes among young women is even higher, being six times the mainstream rate.⁷³

A recent study demonstrated that the increase in food energy supply in the United States since the 1970s is sufficient to explain the epidemic of obesity due to weight gain in adults and children in the following three decades to the 2000s.⁷⁴ In recent years, remote area stores have increasingly adopted mainstream business practices and stocking patterns. A similar increase in food energy supply must have occurred in remote communities as a result and must contribute to the accelerating epidemic of chronic disease in these communities.

There is a need for research to quantify the impact of these sales of energy-dense, nutrient-poor foods and drinks on the health of people who live in remote Aboriginal and Torres Strait Islander communities. Such research could provide information on the likely benefits of changes in sales patterns, for example:

- a reduction of 'x%' in soft drink sales would result in 'y%' reduction in new cases of diabetes
- an increase of 'z%' in fruit and vegetable sales would lead to 't%' reduction in overweight and obesity.

Again, this type of information would be of great value as a topic for discussion with people in remote communities about their health and possible nutrition promotion programs.

7.8.3 Store sales and profitability

Sales of less healthy choices may be more beneficial for store profits than they are for the health of people of the remote communities. Less healthy food and drink choices tend to be more profitable both for the manufacturer and the retailer because of the relatively low production, distribution and storage costs. For example, the ingredients of soft drinks cost a mere 5% to 10% of the retail price.⁷⁵

Remote store managers have responsibilities regarding store profitability and viability which can lead to pressure to generate maximum profits for the store. Some remote store managers will argue that people in remote settings should have the same freedom of choice as people elsewhere in Australia. However, this also equates to freedom to maximise profits in remote stores at the expense of the health of the community.

The present situation can place store managers in a situation of conflict of interest, as pressure for profitability can be inconsistent with pressure to increase the proportion of sales of healthy choices.

73 Schulze MB, Manson JE, Ludwig DS, Colditz GA, Stamfer MJ, Willet WC, Hu FB. Sugar sweetened beverages weight gain and incidence of type 2 diabetes in young and middle aged women. *Journal of the American Medical Association*. 2004;292:927-34

74 Swinburn B, Sacks G, Ravussin E. Increased food energy supply is more than sufficient to explain the US epidemic of obesity. *American Journal of Clinical Nutrition*. 2009;90:1453-6

75 Monteiro CA. Nutrition and health. The issue is not food, nor nutrients, so much as processing. *Public Health Nutrition*. 2009;12(5):729-31

7.9 Nutrition policies for stores and takeaways

This information from the analysis of sales data highlights the need for remote stores to develop and implement nutrition policies with the dual aims of increasing sales of healthy food choices and reducing sales of less healthy choices. Such policies should include measurable targets and transparent reporting on progress towards achieving such targets.

Performance targets – and, where appropriate, remuneration – of store managers and takeaway managers could also be linked to sales of healthy food and drink choices.

Increased local-level nutrition promotions of healthy choices are also needed to complement and support these policies.

Store and takeaway managers reported that they focus on business objectives, which are largely financial and do not include nutrition. A store and takeaway nutrition policy could have the effect of making nutrition indicators part of the core business indicators, thus incorporating these into the roles and responsibilities of managers.

In Queensland, many remote stores receive government support in different forms, ranging from direct auspicing of the store business to provision of store buildings. The Queensland Government should consider how it can link ongoing support to leveraging further gains in sales of healthy foods and reduced sales of unhealthy foods in remote stores and takeaways.

Another potential strategy is to link a portion of social security payments to sales of healthy food and drink choices. This would encourage consumers to purchase healthy food and drinks, and provide greater financial incentive for remote store managers to stock and promote healthy choices.

7.10 Example from the APY Lands – reporting and partnerships with communities

The information generated by the analysis of store sales information can be used to inform communities about their purchasing patterns. This can form the basis of collaborations with communities and the stores servicing the communities, to increase the sales of more healthy choices.

One example of an effective community-led intervention comes from the APY Lands where a community of about 400 people instructed their store manager not to stock high-sugar drinks but only low-sugar or sugar-free drinks. This action was a result of previous discussions with the community about nutrition issues in general and the negative impact of soft drinks on health in particular.

Analysis of sales data using *Keeping track of healthy food* showed the drop in sales of high sugar drinks resulted in sales of high sugar soft drinks being reduced by 37% over one year. This reduced sugar consumed by two tonnes per year.

Preliminary store finance reports indicated that the money not spent on high-sugar drinks was spent on other food and drinks in the store. Community support for the ban is ongoing.⁷⁶

The situation of communities in Queensland is rather different in that most remote stores are not owned by the communities in which they operate. Consequently, there may be reluctance to discuss store operations with the communities. However, where stores are supported by government, this should not be a barrier to sharing information and developing collaborations regarding health and nutrition.

Information sharing is important and should include information on the dollar value of sales so that residents in remote communities can be better informed about their expenditure and purchasing patterns.

Work is currently underway to develop an enhanced version of *Keeping track of healthy food* to enable greater flexibility in analysing and reporting sales data to managers and to communities.

7.11 Future updates and a ‘home’ for the RIST resources

Because the RIST resources deal with aspects of the food supply, which is constantly changing, it is important that the resources are regularly revised and updated. For this to occur there is a need to establish a ‘home’ for the RIST resources. Currently, there is no agency which has this responsibility. Any agency which undertakes this work will need to be competent and experienced in working in remote community settings and have extensive contacts with nutritionists and store agencies who work with remote communities.

At the National Nutrition Networks in March 2008,⁷⁷ a recommendation was made to ‘establish a national function with responsibility for the evaluation and revision of the National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (NATSINSAP), development of new goals and targets, securing funding for the next phase and leading implementation with accountability to the relevant government departments and AHMAC.’

If such a ‘national function’ were established, this agency would be the ideal home for the RIST resources which were developed under the auspices of NATSINSAP. However, two years have passed since this recommendation was made with and there is no indication that such a national function will be established.

Within Queensland, responsibility for work related to remote food supply issues lies with the Queensland Health Division of the Chief Health Officer. Responsibility for the RIST resources in Queensland should continue to remain with the Division of the Chief Health Officer,

⁷⁶ Butler R. Removing Coke, Passionara and Powerade from Amata Community Store: A twelve month review. Nganampa Health Council; July 2009

⁷⁷ National Nutrition Networks Conference March 2008 Priority Recommendations <http://nrha.ruralhealth.org.au/otherconferences/docs/NNNCRRecommendations.pdf>

and this responsibility should include liaison with other interested parties to establish a home for the RIST resources.

The current work on food security for remote communities, requested by the Council of Australian Governments, may provide an opportunity to establish a national function with responsibility for the RIST resources.⁷⁸

7.12 Gaps in the RIST resources

The RIST resources were designed to be used to promote healthy food. In the course of this evaluation it became obvious that the RIST resources need also to deal with issues of stocking and sales of less healthy choices.

Some resources which are needed to address this gap in the RIST resources include:

- guidelines for proportional stocking so that stocks of less healthy choices (non-core foods and drinks) are in proportion to stocks of more healthy choices (core foods and drinks)
- a tool/methodology for measuring relative shelf space allocated in stores to core and non-core foods and drinks
- the fruit and vegetable spreadsheet which was planned as one of the RIST resources but not completed. This could be used to assess quantities of fruit and vegetables ordered against recommended intakes
- a benchmark describing usual sales patterns and/or purchasing patterns of the wider Australian population. This would facilitate comparisons of sales patterns in remote stores with typical Australian patterns. However, use of this benchmark would need to take into consideration the increasing burden of obesity and chronic disease in the wider Australian population, which is an indication that mainstream purchasing patterns are not consistent with healthy outcomes⁷⁹
- a benchmark for comparison of store sales data with nutritional recommendations such as those detailed in the Australian Dietary Guidelines series.⁸⁰ This would allow comparisons of sales data with nutritional recommendations for health.

78 Council of Australian Governments Communique. December 2009. http://www.coag.gov.au/coag_meeting_outcomes/2009-12-07/index.cfm?CFID=130316&CFTOKEN=41595825#food_security

79 Cameron AJ, Welborn TA, Zimmet PZ, Dunstan DW, Owen N, Salmon J, Dalton M, Jolley D, Shaw JE. Overweight and obesity in Australia: the 1999-2000 Australian Diabetes, Obesity and Lifestyle Study (Ausdiab). *Medical Journal of Australia*. 2003; 178:427-32

80 Commonwealth Department of Health and Aging and National Health and Medical Research Council. *Food for Health – a Guide to Healthy Eating*. Dietary Guidelines series. 2003

7.13 A focus on takeaways

The lack of participation of takeaway food outlets in this evaluation is a concern, given the anecdotal reported reliance on takeaway food by residents of remote communities.

Takeaways often operate independently of remote community retail stores and in competition with the stores. A recent mapping of takeaways in remote Cape York communities found an average of two takeaway food outlets per community, in addition to the store. Some of these sold some healthy options such as healthy hot meals and sandwiches, salads, fruit salad and low-sugar drinks. All of them sold high-fat food such as pies, sausage rolls, deep-fried food and high-sugar soft drinks.⁸¹

Work to improve sales of healthy food and drink choices in stores in remote communities will be ineffective unless takeaway food outlets are specifically addressed. Otherwise, changes in stocking and sales patterns in remote stores will simply result in takeaway food outlets using this as an opportunity to increase their sales of nutritionally poor foods and drinks.

On the other hand, takeaway food outlets selling healthy food have the potential to contribute to improved health and nutrition in communities in situations where overcrowding and poor kitchen facilities in the home make storage and preparation of healthy food difficult. Inclusion of takeaway food outlets in nutrition and food security initiatives for remote communities is important also for this reason.

There is a need for a specific focus on takeaway food outlets in remote community settings. Preliminary formative research and consultation are required to describe the current situation properly and to determine how best to address the issue of takeaway food in remote community settings.

⁸¹ Personal communication, Elizabeth Whitlock, September 2009



8: Recommendations

The situation of poor nutrition and health of Aboriginal and Torres Strait Islander people living in remote communities reflects an underlying situation of social and economic disadvantage. Issues of equity in nutrition and health will not be resolved until this social and economic disadvantage is resolved and it is essential that government policy and investments continue to attempt to address this underlying disadvantage.

The recommendations listed below do not attempt to address these larger underlying issues but identify action and commitments in respect of the RIST resources only. These are recommendations which can be undertaken immediately and which can contribute positive outcomes in a short time frame.

8.1 Establish a stores and takeaways policy context to support the use of the RIST resources

Government agencies which support remote store and takeaway operations and/or assets, have the opportunity to leverage this support to improve sales of healthy choices and reduce sales of less healthy choices by:

- requiring stores and takeaways receiving government support to have nutrition policies with the dual aims:
 - aim 1): to increase sales of healthy food and drinks choices
 - aim 2): to reduce sales of less healthy food and drinks choices
- AND
- with meaningful and measurable targets and transparent reporting on progress towards achieving such targets
- with store management performance targets and, where appropriate, remuneration linked to achieving both these aims
- with routine reporting to communities about sales and purchasing patterns (including dollar values of sales).

8.2 Provide a ‘home’ for the RIST resources

The RIST resources need a ‘home’ with an agency that is competent and experienced at operating in remote community settings across Australia. This agency would be responsible for:

- ongoing review and update of the RIST resources in consultation with users of the resources
- ongoing promotion and dissemination of the RIST resources, as well as training and support for users of the resources.

Within Queensland, responsibility for the RIST resources should continue to rest with the Queensland Health Division of the Chief Health Officer. This responsibility should include work with interested parties across Australia, to establish a home for the RIST resources. This may be feasible as part of the current COAG work to address food security in remote communities.

8.3 Address the gaps in the RIST resources

There are gaps in the current suite of RIST resources which need to be addressed by developing the following additional resources:

8.3.1 For stores

- guidelines for proportional stocking so that stocks of less healthy choices (non-core foods and drinks) are in proportion to stocks of more healthy choices (core foods and drinks)
- a tool/methodology for measuring relative shelf space allocated in stores to core and non-core foods and drinks
- a fruit and vegetable spreadsheet to assess quantities of fruit and vegetables ordered against recommended intakes
- a benchmark describing usual sales patterns and/or purchasing patterns of the wider Australian population. This would facilitate comparisons of sales patterns in remote stores with typical Australian patterns (bearing in mind that mainstream purchasing patterns are not consistent with healthy outcomes⁸²)
- a benchmark for comparison of store sales data with nutritional recommendations such as those detailed in the Australian Dietary Guidelines series.⁸³ This would allow comparisons of sales data with nutritional recommendations for health.

8.3.2 For takeaways

There is a need for a specific focus on takeaway food outlets in remote community settings.

Initiatives focused on remote community stores must be supported by similar initiatives in takeaway food outlets, to avoid a situation where improvements to sales patterns in remote stores are undermined by takeaway food outlets operating in competition with stores.

Preliminary formative research and consultation are required to describe the current situation properly and to determine how best to address the issue of takeaway food in remote community settings.

82 Cameron AJ, Welborn TA, Zimmet PZ, Dunstan DW, Owen N, Salmon J, Dalton M, Jolley D, Shaw JE. Overweight and obesity in Australia: the 1999-2000 Australian Diabetes, Obesity and Lifestyle Study (Ausdiab). *Medical Journal of Australia*. 2003;178:427-32

83 Commonwealth Department of Health and Aging and National Health and Medical Research Council. *Food for Health – A Guide to Healthy Eating*. Dietary Guidelines series. 2003

8.4 Ensure access to training

- Develop and deliver a training package in basic nutrition for store and takeaway staff (currently under development).
- Provide ongoing training and support for nutritionists working in remote settings using *Keeping track of healthy food*.

8.5 Make provision for updating the current RIST resources

Recommendations with respect to future updating of specific current resources include the following:

8.5.1 Checklist: How healthy is your store?

- Change the criterion regarding small-sized packs of 100% juice to include larger sizes.
- Change the criterion about internal cross-subsidies to include various strategies to minimise the cost of healthy food and drink choices.

8.5.2 Keeping track of healthy food

- Enhance to provide:
 - more flexibility in reporting (e.g. healthy vs less healthy choices and tobacco vs food expenditure) to provide better information to communities and other partners about sales patterns
 - ability to make comparisons over time and between different locations.
- Develop web-based access to *Keeping track of healthy food*.

8.5.3 Heart Foundation Buyer's Guide

- Include the criteria used to categorise foods in any future editions.
- Revise the colours to be consistent with other resources used by nutritionists working with remote stores (e.g. the 'traffic light' system).
- Delete any wording about promotion of 'sometimes' foods.

8.6 Establish and sustain a nutrition workforce to use the RIST resources with remote community stores and takeaways

A nutrition workforce⁸⁴ is needed in remote community settings which:

- will develop, deliver and evaluate sustained nutrition promotion strategies in remote community settings
- works in partnership with community representatives and other agencies such as stores and takeaways
- delivers the training in nutrition for store staff, as requested by store managers
- reports information on store and takeaway sales and community purchasing patterns (including sales of tobacco products) to the communities with which they work
- is adequately funded and resourced
- includes Aboriginal and Torres Strait Islander team members
- is provided with professional support, especially with respect to program planning and evaluation.

8.7 Fund and conduct research

Research is needed to:

- investigate and identify options for reducing the relatively high costs of healthy food choices in remote community settings
- explore the option of providing social security payments linked to the purchase of healthy food choices
- trial and evaluate interventions to increase purchasing of healthy food and drinks choices by people in remote communities and decrease purchasing of less healthy choices
- quantify the impact of energy-dense, nutrient-poor foods sold by remote stores and takeaways on the health of people of remote Aboriginal and Torres Strait Islander communities and estimate the cost-benefits of interventions
- assess the current impact in remote communities of expenditure on tobacco on purchasing of healthy food and drinks choices

⁸⁴ The National Nutrition Networks conference (March 2008) recommended 100 nutrition positions per 100,000 Aboriginal and Torres Strait Islander population by 10 years in urban, rural and remote settings. <http://nrha.ruralhealth.org.au/otherconferences/docs/NNNCRRecommendations.pdf>

- measure the impact, if any, of internal store cross-subsidies on food purchasing patterns in remote communities
- assess the potential impact on purchasing patterns of food and drinks of the proposed increases in the cost of tobacco products, as recommended by the Preventative Health Taskforce,⁸⁵ and identify strategies to mitigate this.

⁸⁵ The National Preventative Health Taskforce and the National Preventative Health Taskforce Tobacco Working Group. *Australia: The Healthiest Country by 2020. Technical Report No 2. Tobacco Control in Australia: Making Smoking History.* June 2009. ISBN: 1-74186-929-3

Appendices

Appendix A: RIST resources

Guidelines for stocking healthy food in remote community stores

Aim: To provide store managers with a checklist of a minimum range of core foods to be stocked in any store, regardless of its size.

Use: This booklet can be used on a regular basis by store managers to assess whether they have all of the minimum core foods in stock. In conjunction with the *Heart Foundation Buyer's Guide*, store managers can use the checklist to order items from the guidelines that are not available in their stores to ensure a range of healthy foods and drinks are available at all times.

Marketing ideas for healthy food in remote community stores

Aim: To provide ideas on how to promote healthy food and drinks in a remote store setting.

Use: Marketing suggestions that have successfully been used in remote stores to promote healthier food and drink choices are explained in detail. Strategies include: shelf talker programs; cooking demonstrations; food tasting; shelf position and face displays; store tours; promotional posters; incentives; and store layout.

Healthy fast food

Aim: To provide stores and takeaways with ideas on how to supply tasty, safe and affordable healthy takeaway options.

Use: This manual is intended for use by the manager of the takeaway and provides practical information to assist in the preparation and delivery of a range of healthy meals and food options. Topics covered include: recommendations for healthy eating; how stores and takeaways can promote healthy eating; recommended minimum range of menu items; daily menu suggestions; preparation and cooking tips; basic recipes; menu and workflow planning; food safety; storing food; preparing food; Australian dietary guidelines; reading food labels and nutrition information panels; and nutrient claims. Also included in the manual are *Checklist: How healthy is your store?* and *Checklist: How healthy is your takeaway?*

Heart Foundation Buyer's Guide for managers of remote Indigenous stores and takeaways

Aim: To assist managers of remote Indigenous stores and takeaways in ordering healthier food products within specific food categories.

Use: This resource is based on the types of food items presented in the *Guidelines for stocking healthy food* and the foods most frequently purchased by customers of remote stores. It provides information on suitable products for each food category.

Foods have been broadly grouped into two sections: foods recommended for promotion for 'everyday' consumption; and those recommended to be promoted as foods to be consumed occasionally or 'sometimes' foods. This guide will make stocking healthier choices easier.

Freight improvement tool kit

Aim: To guide store managers and others involved in the food supply chain by providing information and tools to improve freight transport of healthy foods to remote stores.

Use: This resource was developed following the RIST National Food Transport Forum. It is a two-part document that is intended to give people using freight services in remote Indigenous communities the information they need to get the best out of the services provided. Part A provides background information on the opportunities and pitfalls of perishable goods transport, while Part B provides practical examples to help improve methods of transport.

Checklist: How healthy is your store? and Checklist: How healthy is your takeaway?

Aim: The checklists aim to assist store and takeaway managers to identify an outlet's capacity to provide healthy food and drink options.

Use: The checklists can be used to monitor the availability of sufficient varieties of healthy foods and drinks for the community.

Maximising the shelf life of fruit and vegetables

Aim: To provide store managers and staff with general handling guidelines that will maximise the shelf life of fresh fruit and vegetables.

Use: This A3-sized poster can be displayed in areas where fresh fruit and vegetables are stored.

Keeping track of healthy food monitoring tool

Aim: To measure a community's consumption of key foods and nutrients, and gain an understanding of a remote community's food purchasing habits and nutrition issues.

Use: The monitoring tool enables the examination of sales of key indicator foods and nutrients and helps communities and nutritionists to identify specific targets, develop food and nutrition policies for the communities, evaluate stores interventions and provide a guide for nutrition education programs.

Appendix B: RIST resources flyer



Remote Indigenous Stores & Takeaways

June 2008

RIST Resources for Remote Community Stores and Takeaways

The Remote Indigenous Stores and Takeaways (RIST) Project was established in 2005 by South Australia, Western Australia, Northern Territory, Queensland, New South Wales and Australian Government Health Departments to improve access to a healthy food supply for Aboriginal and Torres Strait Islander people in remote communities. As part of the project, a set of resources was developed for use in remote community stores and takeaways. They are intended for use by store managers, and nutrition and health staff.

These resources are free of charge but there are only a limited number of hard copies.

Although the RIST resources have been developed for Indigenous communities they may also be useful in other settings such as remote townships where many residents are Aboriginal and Torres Strait Islander people.

The following RIST resources are now available:

- *Guidelines for stocking healthy food* (a checklist of minimum core foods to be stocked in stores)
- *Maximising the shelf life of fruit and vegetables* (A3 poster)
- *Marketing ideas for healthy food in remote community stores* (manual)
- *Healthy fast food* (manual for takeaways)
- *Checklist: How healthy is your store?* (A4 sheet)
- *Checklist: How healthy is your takeaway?* (A4 sheet)
- *Freight improvement tool kit* (booklet and CD)
- *Heart Foundation Buyer's Guide for managers of remote Indigenous stores and takeaways.*

Another resource which will be finalised in the coming months is the fruit and vegetable quantity spreadsheet, designed to set community-specific purchasing and sales targets for fruit and vegetables, in light of current national nutritional recommendations

Place your order now and we will send it out to you when it is available.

The final RIST product will be the *Keeping track of healthy food* monitoring tool. This is a sales data analysis system, developed to monitor sales of key indicator foods and drinks. This is designed to be used by nutritionists in collaboration with store managers and/or management committees. Users will require training in this tool. Please indicate on the fax form if you are interested in learning more about the *Keeping track of healthy food* monitoring tool.

Electronic versions of all the RIST resources are available at <http://www.healthinonet.ecu.edu.au>. Select Health – Nutrition – Programs, projects and lessons.

In future the *Heart Foundations buyer's guide* will also be available electronically from the Heart Foundation website.

Please refer to the attached RIST brochure for more details regarding the resources.

If you would like copies of any of the resources, simply fill in your details on the attached form.

For more information ring me on 4050 3654.

**Anthea Gregoriou – Advanced Nutritionist
RIST Project Officer, Tropical Regional Services – Cairns Public Health Unit
Queensland Health**

Order Form – RIST Resources
 FAX back to: 4050 3662



Resource (all resources are free of charge)	Maximum available*	Quantity
Guidelines for stocking healthy food	2	
Maximising the shelf life of fruit and vegetables	2	
Marketing ideas for healthy food in remote community stores	2	
Healthy fast food: A resource for remote stores and takeaways	2	
Checklist: How healthy is your store?	5	
Checklist: How healthy is your takeaway?	5	
Freight improvement tool kit (booklet)	1	
Proceedings of RIST Transport Forum including the Freight improvement tool kit (CD)	1	
Heart Foundation Buyer's Guide for managers of remote Indigenous stores and takeaways	1	
Fruit and vegetable quantity spreadsheet (when available)	1	

Would you like more information about the resource, *Keeping track of healthy food*?

Yes No

Date: _____

Name: _____

Profession: _____

Business/organisation: _____

Postal address: _____

Telephone: _____

If you need extra resources, please contact:

**Anthea Gregoriou – Advanced Nutritionist
 RIST Project Officer, Tropical Regional Services – Cairns Public Health Unit,
 Queensland Health**

Telephone: 07 4050 3654

Email: anthea_gregoriou@health.qld.gov.au

Appendix C: RIST survey questionnaire – Initial usage of RIST resources and possible involvement with evaluation

Part 1: RIST survey questionnaire

Name: _____

Profession: _____

Store/organisation: _____

Who owns the store? (Please circle)

Privately-owned / OASIP / IBIS / Community/Council / Other: _____

Have you looked at the resources? Yes No

Are you using them? Yes No

If yes, which resources are you using?

RIST resources	Tick
<i>Guidelines for stocking healthy foods</i>	
<i>Marketing ideas for healthy food in remote community stores</i>	
<i>Healthy fast food: A resource for remote stores and takeaways</i>	
<i>Checklist: How healthy is your store?</i>	
<i>Checklist: How healthy is your takeaway?</i>	
<i>Freight improvement tool kit</i>	
Booklet/CD	
<i>Maximising the shelf life of fruit and vegetables</i>	
<i>Heart Foundation Buyer's Guide</i>	

When did you start using the resources? _____

Has anyone discussed with you how to use/implement the RIST resources?

Yes No

If yes, who discussed these resources?

RIST nutritionist Community nutritionist Other: _____

If you are not using the RIST resources, why not? _____

Training

Would you like further training for you and your staff on how to implement the RIST resources?

Yes No

If yes, please indicate which resources you would like training on:

Topic	Tick
<i>Guidelines for stocking healthy foods</i>	
<i>Maximising ideas for healthy food in remote community stores</i>	
<i>Healthy fast food: A resource for remote stores and takeaways</i>	
<i>Checklist: How healthy is your store?</i>	
<i>Checklist: How healthy is your takeaway?</i>	
<i>Freight improvement tool kit</i>	
Booklet/CD	
<i>Heart Foundation Buyer's Guide</i>	

Would you like further training for you and your staff on general nutrition related to Aboriginal and Torres Strait Islander health? Yes No

Are there any other topics related to nutrition in remote stores and takeaways that you think you and your staff could benefit from?

Is there anyone else in the community that you think could benefit from having a set of the RIST resources? (e.g. Aboriginal Health Worker, nutritionist, nutrition worker, etc.)

Would you be interested in taking part in the evaluation of this RIST project?

Yes No

The evaluation will involve:

- Working with the community nutritionist/nutrition health worker (if applicable) to document activities or promotions you have carried out in the store to increase the sales of healthy foods and drinks over 6 months and identify whether you have used the RIST resources. A tracking sheet will be provided.
- Providing the RIST project officer or community nutritionist with store turnover data for four periods:
 - April, May, June 2008
 - July, August, September 2008
 - October, November, December 2008
 - January February, March 2009

You will be given a report at the end of each quarter. If sales data are not available, store turnover quantity data is sufficient to generate reports.

- Completing the RIST checklist now (if hasn't been done) and in April 2009, and providing a copy to the RIST project officer.

Part 2: RIST survey results – Initial usage of RIST resources and possible involvement in evaluation

Qualitative data

Fifteen store managers were interviewed regarding their initial usage of the RIST resources and whether they would like to be involved in the detailed evaluation.

Location of store where surveys were completed

Health Service District	Number of surveys completed	% of surveys completed
Cape York	4	26
Torres Strait and Northern Peninsula Area	2	13
Cairns and Hinterland	2	13
Mount Isa	1	6
Townsville	1	6
Central Queensland	1	6
APY lands	4	26
Total	15	

Have the RIST resources been looked at?

	Number	%
Yes	8	53
No	7	47

Usage of the RIST resources

	Number	%
Yes	6	40
No	9	60

Of the 53% of store managers who have looked at the resources, 75% (n=6) of the store managers are using them.

Resources being used

RIST resources	Yes	%	No	%
Guidelines for stocking healthy foods	4	27	11	73
Marketing ideas for healthy food in remote community stores	2	13	13	87
Healthy fast food: A resource for remote stores and takeaways	1	7	14	93
Checklist: How healthy is your store?	5	33	10	67
Checklist: How healthy is your takeaway?	0	0	15	100
Freight improvement toolkit	0	0	15	100
Booklet/CD				
Maximising the shelf life of fruit and vegetables	2	13	13	87
Heart Foundation Buyer's Guide	3	20	12	80

Commencement of the RIST resources

Of the six respondents using the resources, three store managers commenced using the resources after the RIST nutritionist had visited the community store. The three remaining store managers commenced the use of the RIST resources in October and January.

Reasons why store managers were not using the RIST resources

- Not a high priority. Too busy. Haven't referred to them again since the RIST nutritionist went through them
- Reported that he they had not received the resources. Sent out another package of resources (2 responses)
- New to the store. Store manager familiarising with store set-up, computers, stocking etc. Doesn't have time to look at the resources.
- New store manager. The store practices haven't been effective. The resources are not a priority at this stage.
- The resources are more for people who don't run stores. Finds the information too basic and is focused more on takeaway stores
- Hasn't had time to look at the resources
- Store manager on holidays; relieving store manager, was not given any of the resources.

Has anyone discussed with you how to use/implement the RIST resources?

Yes	6
No	3
No answer	3

Who discussed with you how to use the RIST resources?

RIST nutritionist	5
Community nutritionist	1

Of the 15 store managers interviewed five store managers reported that they had discussions with the RIST nutritionist, and one store manager had discussions with the community nutritionist on how to use/implement the RIST resources.

Further training

Would you or your staff like further training on how to implement the RIST resources?

Yes	2
No	11
No answer	2

Two out of the 15 store managers requested further training for themselves with all the resources. The project officer conducted further training for these store managers.

No further training

Comments included:

- They are self explanatory. Therefore I don't feel like I need training.

Training for store managers and store staff on general nutrition relating it to Aboriginal and Torres Strait Islander health?

Yes	10
No	3
Unsure	2

Sixty-six per cent of store managers requested that they and their staff have further training in general nutrition relating to Aboriginal and Torres Strait Islander health.

Topics suggested by store managers to include:

- food safety, hygiene and cleaning hands (3 responses)
- healthy foods and drinks and the reasons why healthy foods are important (5 responses)
- store tours
- general nutrition (2 responses)
- fruit and vegetable preparation
- Stock rotation (3 responses)
- oils and the most appropriate for cooking include draining times, etc
- promoting healthy foods
- placement of healthy foods (3 responses)
- teaching local community members how to prepare and cook food
- developing recipe cards for customers
- appropriate price ticketing (changed weekly) to be put in the store to indicate healthy and not healthy foods
- appropriate language
- very important for the store managers to be trained as well. They need to be trained in nutrition and health. Need to educate the community as well. Need to continue to update the Heart Foundation Buyer's Guide as products change all the time. Adding a 5th column would be helpful to explain why consuming foods would be beneficial, e.g. low in fat, high in fibre, low in cholesterol.

The following are reasons why store managers are opposed to nutrition training:

- It won't help. The staff do not have any direct contact with customers
- Only store manager and wife/husband work in store. Feel they don't need extra nutrition training
- Training would be a lot more effective if the store staff are permanent staff
- Very difficult to train anyone if they are not permanent
- Very difficult for store staff to be trained as they are all on CDEP. They won't do extra training.

Other people in the community who could benefit from having a set of the RIST resources?

There were no other community members that the store managers thought would benefit from the RIST resources.

Interest in being involved in the detailed evaluation

One hundred per cent of the store managers interviewed were interested in taking part in the detailed evaluation.

Appendix D: Guidelines for store managers and nutritionists

Part 1: Criteria

The store manager/organisation is prepared to provide sales data every three months from April 2008 to March 2009 (April–June 2008, July–September 2008, October–December 2008 and January–March 2009).

The store manager/staff /nutritionist are prepared to complete the tracking sheet and provide it to the RIST project officer for the evaluation report.

Stores are based in different locations within Queensland, ensuring a mix of IBIS, OATSIP, community-owned and independent stores in the northern, central and southern regions.

More than 85% of the population within the community are Aboriginal and/or Torres Strait Islander people.

Part 2: Guidelines

It is recommended that the store managers and nutritionists/nutrition workers are involved in the planning, so that the project is realistic and agreed upon by all parties.

The track sheet will need to be completed on an ongoing basis, outlining the specific foods and drinks that are being promoted, the mix of strategies and resources used (i.e. RIST resources and/or other resources) and who is undertaking the activities. These tracking sheets will need to be forwarded to the RIST project officer for the evaluation.

- Record the strategies/promotional ideas you wish to implement over the next six months using the planning track sheet template. While the strategies will reflect local needs and priorities, specific indicator foods are tracked in the *Keeping track of healthy food* reporting tool that will be used for this evaluation. Because the reporting tool is limited to these foods, only the sales/turnover of these indicator foods can be monitored during the evaluation. The indicator foods include fruit and vegetables
- bread
- meat and meat products
- fish and seafood
- fats and oils
- milk and milk products

- cheese
- sugars
- confectionery
- drinks (not including tea, coffee or powder-based drinks)
- takeaway foods
- potato crisps.

The store manager/owner will provide sales data to the RIST project officer or community nutritionist/nutrition worker for the periods:

April, May, June 2008

- July, August, September 2008
- October, November, December 2008
- January, February, March 2009.

The RIST Project Officer will generate a report at the end of each period to the store manager and community nutritionist/nutrition worker to indicate how the strategies/ promotional activities are going and what strategies may need to be implemented. The community nutritionist/nutrition worker can generate reports after completion of *Keeping track of healthy food* training (workload permitting). The RIST project officer will generate reports in the absence of a community nutritionist/nutrition worker.

The *Checklist: How healthy is your store?* is to be completed by the store manager or nutritionist/nutrition worker in July, August and September 2008 and in April 2009.

Appendix E: RIST survey results

Part 1: RIST survey results for store managers who did not order the RIST resources

Name: _____

Profession: _____

Organisation: _____

Did you receive the flyer to order the RIST resources? Yes No

Would you like to order the RIST resources? Yes No

If No, what is the reason:

Community not supportive

Not relevant to my work

Not interested

Don't have time

Not sure what the resources are about

No-one to assist to help implement any of the resources

Other: _____

Do you use any other resources about nutrition for stores and takeaways?

Would you like training on how to use the RIST resources?

How would you prefer training?

In a group

One-on-one

Is there anyone else in the community that you think could benefit from having a set of the RIST resources (e.g. Aboriginal Health Worker, nutritionist or nutrition worker)?

Thank you

Part 2: Survey results for store managers who did not order the RIST resources

Profession

11 store managers surveyed

Health Service District where store managers worked

Health Service District	No. of surveys completed
York	4
Mount Isa	6
Darling Downs–West Moreton	1
Total	11

Did you receive the flyer to order the RIST resources?

Yes	5
No	6

Would you like to order the resources?

Yes	2
No	9

Reasons why resources were not ordered

Reason	Yes	%
Community not supportive	0	0
Not relevant to my work	4	36
Not interested	6	54
Don't have time	5	45
Not sure what the resources are about	0	0
No-one to assist to help implement any of the resources	0	0

Other reasons include:

- Already sell healthy food and drinks (3 responses)
- Sell a lot of fruit and vegetables
- The nutritionist who works in the store can focus on the resources.
- The store manager reported that he got criticised at work all the time for not doing the right thing.
- The store manager received the flyer, and so wanted to receive the flyer first and then possibly order the resources.

Do you use any other resources about nutrition for stores and takeaways?

Yes	3
No	6
Not sure	2

Other resources used

- Green label (2 responses)
- Shelf talkers
- Work closely with the nutritionist and she provides all the resources, e.g. posters (2 responses).

Would you like training on how to use the RIST resources?

Yes	0
No	8
No answer	3

Is there anyone else in the community that you think could benefit from having a set of the RIST resources (e.g. Aboriginal Health Worker, nutritionist or nutrition worker)?

- Health promotion officers
- Would like to work with nutritionists in the future.

Appendix F: Remote Indigenous stores and takeaways evaluation

– Template for planning track sheet

Objectives (What specific foods and drinks are you going to target or promote?)	Promotional activity/strategy (What are you going to do to meet objective?)	Date start	Date end	By whom	Resources used

Remote Indigenous stores and takeaways evaluation planning track sheet – Example template

Objectives (What specific foods and drinks are you going to target or promote?)	Promotional activity/strategy (What are you going to do to meet objective?)	Date start	Date end	By whom	Resources used
Reduce the sales of sweet drinks	<ul style="list-style-type: none"> • Increase the selection of recommended drinks • Set quantity and portion size limits for soft drinks provided for sale • Design shelf talkers which identify healthy drink choices and re-arrange shelves in the refrigerator cabinet so that sweet drinks are less accessible • School education sessions to promote water and reduce sweet drink consumption • Store policy restricting the sale of sweet drinks during school hours 	Sept 2008		Store manager / nutritionist Nutritionist /store staff Health worker / teachers/ nutritionist/ store committee/ store manager nutritionist	Heart Foundation Buyer's Guide and Guidelines for remote community stores Heart Foundation Buyer's Guide Marketing ideas

Appendix G: Evaluation of workshop training session on the RIST tool, Keeping track of healthy food

Part 1: Evaluation questionnaire for workshop training session on Keeping track of healthy food, presented by Dr. Julie Brimblecombe and Robyn Liddle, Menzies School of Health Research, 20–21 November 2008

1. To help us with the RIST evaluation and to make this training effective, please answer the following questions. Did you find today's workshop useful? Yes No

If yes, what did you find useful?

Do you feel confident in using the RIST tool, Keeping track of healthy food? Yes No

Comments:

2. Do you think you will use this tool in the future? Yes No

If yes, how? If no, why not?

Do you have any suggestions on how we could improve the workshop?

Thank you



Remote Indigenous
Stores & Takeaways

Part 2: Results of evaluation of workshop training session on the RIST tool, Keeping track of healthy food

Fifteen out of 19 (79%) evaluations completed (combined for both days)

Did you find today's workshop useful?

Yes	15
No	0

What parts did you find useful?

- The step by step guide on how to use and trouble-shoot the tool by the tool's creators
- Very practical (4 responses)
- Orientation to RIST tool and its applications
- Monitoring store data, mismatched data
- Hands-on training in how to use the tool
- Background information regarding development of the tool helped increase the understanding (2 responses)
- Practical application of the tool (2 responses)
- Julie and Robyn – plenty of support and time to trouble-shoot with all participants
- Good to have the manual as backup, but to also go through practising to use the application with assistance
- Everything
- Enjoyed it very much, especially the development of the graph according to the food groups.

Do you feel confident in using the RIST tool, Keeping track of healthy food?

Yes	14
No	1

Yes

- Used some more features today that haven't been used before. Can go back now and trouble-shoot my own problems better
- Seems pretty easy to follow
- Will need to use it again soon in less than 3 months to remember but manual would help to remember/prompt processes
- With the back-up of the help desk
- It was straight-forward but I feel it's important to also track unhealthy food. Some 'not monitored' foods, e.g. biscuits, should be monitored

- Apart from the time-consuming aspect
- Need more practice.

No

- Have to use it completely to be familiar with it

Do you think you will use this tool in the future?

Yes	14
Uncertain	1
No	0

Yes

- Can easily use as part of the Green Label program. Will pick up the quantitative aspect of evaluation that the program has lacked in previous evaluations
- When monitoring the food in the store
- Improve healthier choices in the stores and educate store managers, too, about good choices to order
- Will consider its use within remote community store in Woorabinda
- Has application in the west but stores not ready to change yet
- In remote stores in collaboration with store managers and produce reports that may highlight examples of store turnover of healthy foods, e.g. fruit and vegetables
- Monitor non-IBIS stores (if possible) in the Torres Strait
- Support IBIS nutritionist
- To develop or check appropriateness of key indicator foods for Torres Strait
- Food outback project – increase sales of fruit and vegetables
- Have written the use of the RIST monitoring tool into our project! It is both a valuable strategy and analysis tool
- Very useful also for collecting household food selection.

Do you have any suggestions on how we could improve the workshop?

- Work up a suggestion of an MOU between Government/NGOs and communities on the use of store data
- Being able to add into food group report strategies (don't think this is possible electronically, but is a hope one day)
- Make it clearer
- Need copy of procedure manual
- Printouts of morning sessions – figures too small to read

- An audiovisual example of the program being used (in the store) would be helpful to demonstrate how the program works, although the program is available on the internet to download the program which may or may not be useful (in a store).
- Not following 3 days of other meetings and workshops
- Have 2 days where people have their own data and spend half a day discussing practical applications/strategies
- It was very enjoyable
- The workshop is beneficial. Suggest that RIST software should be on CD and distributed to people who are doing work in food supply
- The content and length were good.

Extra comments

The workshop itself was great. Interactive and the presenters did a wonderful job.

Appendix H: Follow-up evaluation of the training in *Keeping track of healthy food*

Part 1: Evaluation questionnaire

1. Are you using the RIST tool, *Keeping track of healthy food*?

Yes No

a. If No, why not?

2. Do you feel confident in using the *Keeping Track of healthy food* tool?

Yes No

Comments _____

3. Do you think you will use the RIST tool in the future?

Yes No

Comments _____

4. Have you generated a report from the tool?

Yes No

a. If yes, did you provide this report to anyone? _____

b. How did they respond to the report?

5. Do you have any suggestions on how the RIST tool could be improved?

Thank you



Remote Indigenous
Stores & Takeaways

Part 2: Evaluation results

14 out of 17 (82 %) of the evaluation questionnaires completed

Are you using the RIST tool, Keeping track of healthy food?

Yes	6
No	8

Six (43%) of the respondents are using the RIST tool.

If No, why not?

- The stores that we service are constantly changing hands. As we are only in the community once every 6 weeks (if that) it's very difficult to firstly explain the concept and secondly, to teach and encourage store staff to maintain records. In other communities, for me it's not a priority when I know the stores run successfully and they have ample healthy food supply when there are bigger issues that I need to tackle.
- My staff are using it.
- The main reason I did the training was so that I could train and support other team members in the use of the tool. Unfortunately, there have been no nutrition members in one of the offices for over 6 months now, and so I haven't used the tool recently.
- It is not my major role.
- Have not allocated time to it yet. However, would like to do so.
- Food supply/store is not a large part of my current workload.
- Currently not working with remote stores.

Do you feel confident in using Keeping track of healthy food?

Yes	11
No	3

Yes

- To a point I feel confident, but certainly I would need to spend some time now refreshing on the tool's use.
- I do feel confident in using the tool. However, I still encounter little issues here and there, which I don't immediately know how to respond to (and not in the procedure manual), and therefore I need to ring Robyn Liddle. What about an FAQ page?
- Would be a bit rusty but with practice feel confident that I could use it.

No

- I would probably need a refresher training to say that I felt confident in using it.
- I have not had time to look at it since the training.
- I will with practice.

Do you think you will use the RIST tool in the future?

Yes	12
No	1
Unsure	1

Yes

- It certainly does have great potential to be used in some of the communities I visit. At this point in time with 6 weekly visits, however, I do not have the capacity. If the community visits were more frequent and I had more time in the communities, then yes. Also if the store staff were stable in their position and competent.
- I will use the tool again for training and support purposes as new nutrition team members commence their roles.
- Depending on job role, if working with store would certainly use it or perhaps its updated version by then.
- I think I will use it in the modified form which will allow for more food groups to be tracked. Also I may use the nutrition composition facility.
- This is very handy tool. It could be used even for assessing the household food consumption, if shopping lists for households are taken record of within a given period of time (e.g. 3 months) and the finding could be used to advise individual households on what food items they need to increase or reduce. I am planning to use the tool for post implementation survey data analysis at the store after the implementation of my current project called 'Healthy food choice for the community'.
- However, would prefer changes for the report so that we can change the indicator foods that are specific to the needs of Cape York and Torres Strait communities in Queensland.

No

- It is not a high priority at the moment to use it.

Have you generated a report from the tool?

Yes	6
No	8

If yes, did you provide this report to anyone?

- Yes, to a number of store managers, CEOs of store groups and a few nutritionists
- No. After the training course I produced the report so that I was aware what the results looked like
- Not yet
- We are about to. However, the report isn't the easiest to read. Our reports generate writing over writing
- Not directly

- No, as the indicator foods in the report did not provide us with the desired information.

How did they respond to the report?

- Store group managers responded very positively, saying that it will really assist them with targets and how they will work in the future.
- Some store managers responded by saying that the report was quite difficult to read and not very helpful.
- Some store managers did not have time to look at the report

Do you have any suggestions on how the RIST tool could be improved?

- It would be useful to add the strategy section at the bottom of the report. If the producer of the report and the store/takeaway manager negotiated/agreed on some strategies, it would look more professional if there was a facility to type in text under the strategies section sub-headings.
- Flavored milk should be in with liquid drinks. It's better to classify items according to how they are consumed, rather than nutrition content. This will be more useful to stores looking at strategies to change purchasing patterns.
- Need to be able to analyse more things, e.g. top-sellers, more foods and breakdown. For example, would be able to look at sales of wholegrain and hi-fibre bread relative to white bread sales, rather than just on their own.
- It would be great if different types of reports could be generated, e.g. a report to thoroughly analyse the purchasing of fruit and vegetables. An FAQ page would be handy for trouble-shooting. I'm finding it's not the easiest to get assistance when issues arise during data entry (purely due to time). What about a blog for RIST store monitoring tool users? I would find that very useful – it would also enable us to work out our problems together.
- Too much data manipulation required. Needs to be simplified so more people can and will use it.
- Would be useful to be able to set foods that are relevant to a specific region or store to look at, as well what the standard report generates.
- Haven't used the RIST tool much. However, keeping it as simple as possible to use and understand. Definitely required and advising people of any updates, changes to the database, etc. is really important
- The tool needs to be changed to allow more flexibility in tracking different foods and drinks, plus more flexibility in reporting. Also it would be useful to be able to sum up expenditure on tobacco as well as different foods.
- Need pie graphs for each quarter in the report to track trends over time (not just the latest pie chart for that quarter in the report – unrealistic to expect store managers to get their last report to compare pie charts). Need more indicator food categories as the ones in the report are not specifically indicator foods for Queensland Cape York and Torres Strait communities.

Appendix I: RIST resources evaluation by store managers, nutritionists and health professionals

Part 1: Evaluation questionnaire administered 6-8 months after distribution of resources

RIST RESOURCES EVALUATION

For store managers, nutritionists and health professionals

Name:

Profession:

Store/organisation:

Q1. Who owns the store?

- Privately-owned Community/Council IBIS
 Retail stores Other: *(please specify)* _____

Q2. How long have you worked in/with the store: _____ Years _____ Months

Q3. Do you work with a nutritionist? Yes No

Q4. Have you received RIST resources? Yes No

Don't remember *(re-send resources if wanted)*

Q5. If you received the resources, when did you start using them?

- At once After 1 month After 3 months After 6 months Never

If never, why not? _____

Accessing RIST resources

Q6. How did you receive the RIST resources?

- RIST nutritionist Community nutritionist Website
 Other _____

a) Do you know about the Australian Indigenous HealthInfoNet website?

- Yes No

b) Have you looked at the website?

- Yes No Don't have access

c) Have you downloaded any RIST resources from the website?

Yes No Don't have access

Comment: _____

Training

Q7. Has anyone discussed how to use/implement the RIST resources with you?

Yes No

If yes, who discussed these resources?

RIST nutritionist Community nutritionist Other (please specify): _____

Q8. Did having someone discuss the RIST resources with you make it easier to use the resources? Yes No

Q9. Would nutrition training benefit you and/or your staff in using these resources?

Yes No

Comment: _____

Q10. The RIST resource package includes the following resources for use in remote stores and takeaways. Please fill in the table using the 1 to 5 scoring system outlined.

RIST resources	How useful is this resource in your work?	How often do you use this resource?	How often do you expect to continue using this resource?
	1 = Don't know 2 = Not useful 3 = Somewhat 4 = Useful 5 = Very useful	1 = Never 2 = Occasionally 3 = Sometimes 4 = A lot 5 = All the time	1 = Never 2 = Occasionally 3 = Sometimes 4 = A lot 5 = All the time
a. Guidelines for stocking healthy foods 			
b. Marketing ideas for healthy food in remote community stores 			
c. Healthy fast food: A resource for remote stores and takeaways 			
d. Checklist: How healthy is your store? 			
e. Checklist: How healthy is your takeaway? 			
f. Freight improvement tool kit Booklet/CD 			
g. Heart Foundation Buyer's Guide 			
h. Maximising the shelf life of fruit and vegetables – A3 poster 			

Q11. How do you think the resources could be improved?

RIST resources	Ways for improvement
a. Guidelines for stocking healthy foods	
b. Marketing ideas for healthy food in remote community stores	
c. Healthy fast food: A resource for remote stores and takeaways	
d. Checklist: How healthy is your store?	
e. Checklist: How healthy is your takeaway?	
f. Freight improvement tool kit Booklet/CD	
g. Heart Foundation Buyer's Guide	
h. Maximising the shelf life of fruit and vegetables	

Q12. Do you think these resources are relevant to your work?

Yes No

Comment: _____

Q13. a) Do you use any other resources about nutrition for stores and takeaways?

Yes No

If yes, what resources do you use?

b) Is there a charge for these resources? Yes No

c) Where do you obtain these resources?

d) Do you prefer these resources to the RIST resources? Yes No

If yes, why?

Thank you!

Part 2: Evaluation results from 6–8 month follow-up

Surveys completed by the following professions:

Profession	Number of surveys returned	%
Store manager	21	54
Takeaway manager	1	3
Nutritionists	14	36
Health professional	2	5
Other	1	3
Total	39	

Of the 109 people who received the package of RIST resources, all were sent out a RIST resource evaluation questionnaire after 6 months. Thirty-nine people (36%) responded to the questionnaire. Of the respondents, 54% were store managers and 36% were nutritionists.

Responses by Health Service District

Health Service District	Number of surveys returned	%
Torres Strait and Northern Peninsula Area	9	26
Cairns and Hinterland	4	12
Cape York	10	29
Mount Isa	3	9
Townsville	3	9
Mackay	0	0
Central West	0	0
Central Queensland	0	0
South West	4	12
Darling Downs–West Moreton	0	0
South East Queensland	1	3
Total	34	
APY Lands	5	13

Within Queensland 73% of the RIST resources were distributed to locations in north Queensland, and approximately 85% of the responses to the six-month survey were returned from locations in north Queensland.

Questionnaires returned by store ownership and profession

Store ownership	Number of surveys sent						Number of surveys returned	%
	SM	Nut	TA	HP	Other	Total		
Community-controlled	9	8	0	0	0	17	14	82
Government-supported	27	10	0	1	0	38	14	37
Privately-owned	12	1	7	0	0	20	8	40
Not working directly with stores	0	18	0	7	3	28	3	11
Total	48	37	7	8	3	103	39	

SM = store manager; Nut = nutritionist/dietitian; TA = takeaway; HP = health professional

People working with community-controlled stores had the highest response rate (82%), while 14 people (37%) working with government-supported stores responded. Eight (40%) of the 20 people working with privately-owned stores returned the survey. The least number of surveys returned were from the nutritionists/dietitians not working directly with stores.

Length of time store managers and nutritionists have been working in the store

Length of time working in the store (months)	Nutritionists/dietitians	Store managers	No. of total respondents
0-3	2	2	5
4-6	3	1	6
7-12	3	5	8
13-24	1	3	5
25-60	4	3	8
61-120	0	1	1
>120	0	6	6
Total	14	21	39
Not working with stores			1

Of the 14 nutritionists who responded eight had worked for less than one year with the store, and the remaining six for less than five years. Of the 21 store managers, eight had been with the store for less than 12 months, while six had been there for more than ten years.

Store managers who work with nutritionists

Response	No. of respondents	%
Yes	14	66.6
No	7	33.3
Total	21	

Two-thirds of store managers reported that they work with nutritionists, while one-third reported that they do not work with nutritionists.

Numbers of respondents who had received the RIST resources

Response	No. of respondents	%
Yes	38	97
No	0	0
Don't remember	1	3
Total	39	100

97% of the respondents had received the RIST resources.

Commencement of using the RIST resources

Time when resources started to be used	No. of respondents	%
At once	14	36
After 1 month	6	15
After 3 months	2	5
Never	15	39
No answer	2	5
Total	39	100

Thirty-six per cent of the respondents who had received the RIST resources commenced using them at once. Fifteen (39%) reported they had never used the resources.

Respondents gave the following reasons for not using the RIST resources:

- A lot of things are already in place. Therefore, there is no need to use them at the moment
- Did not have time to use the resources and am happy for the nutritionist to visit the store and discuss issues and give guidance and direction
- No time to read them - too busy
- Away for 2 months; therefore not a chance to read them
- Looked through them and didn't find them relevant
- Misplaced the resources
- More designed for takeaways and roadhouses. The resources are designed for people who have never worked in a remote store before. They are too basic and 'dumbed' down. The resources are a bit insulting.
- Priority was to keep the store financially viable, not to use the RIST resources. There

are so many time pressures constantly prioritising and unfortunately health is at the bottom of the list

- Read them when received them. However, they provide basic information and they make sense
- The resources wouldn't make much difference as the communities are set in their ways and they know what they like and don't like
- Were not given handover or any explanation about the resources when the store was taken over. Difficult to know how to use them. (2 responses)

Accessing the RIST resources

The majority of respondents received the RIST resources package from the RIST nutritionist.

Respondents' profession	How the respondents received the RIST resources			
	RIST nutritionist	Nutritionist/dietitian	Website	Other
Store manager	17	3	0	1
Takeaway manager	0	1	0	0
Nutritionist	9	0	0	0
Dietitian	5	0	0	0
Health professional	2	0	0	0
Other	1	0	0	0
Total	34	4	0	1

Of the 39 respondents who completed the questionnaire, 34 (87%) received the RIST resources from the RIST nutritionist. Four respondents received the RIST resources from other nutritionists who had been supplied the resources by the RIST nutritionist.

Respondents' awareness of the Australian Indigenous HealthInfoNet website, by profession

Profession	Yes	No
Store manager	3	18
Takeaway manager	1	0
Nutritionist	13	1
Health professional	2	0
Other	1	0

The Australian Indigenous Health/InfoNet website allows the download of the RIST resources. The majority of nutritionists/dietitians were aware of the website. However, only 16% of the store managers were aware of it.

Respondents who have looked at the website, by profession

Profession	Yes	No	No access
Store manager	2	15	4
Takeaway manager	1	0	0
Nutritionist	8	1	0
Dietitian	4	1	0
Health professional	2	0	0
Other	1	0	0

Eighteen (46%) of respondents had looked at the Australian Indigenous Health/InfoNet website. Ten per cent of respondents did not have access to the website.

Respondents who have downloaded the RIST resources from the Australian Indigenous HealthInfoNet website, by profession

Profession	Yes	No	No access
Store manager	1	16	4
Takeaway manager	1	0	0
Nutritionist	4	9	1
Health professional	0	2	0
Other	0	1	0

Four nutritionists, one store manager and one takeaway manager had downloaded the RIST resources from the Indigenous Health/InfoNet website.

Comments regarding accessing the RIST resources from the website included the following:

- Excellent website, easy access to the RIST resources. Have recommended the website to others
- Read pages on the website
- Will have a look now that I know about it.

Supporting information/training

Has anyone discussed with you how to use/implement the RIST resources?

Profession	Yes	%	No	%
Store manager	9	23	12	31
Takeaway manager	1	2.5	0	0
Nutritionist	13	33.5	1	2.5
Health professional	2	5	0	
Other	1	2.5	0	
Total	26	66.5	13	33.5

Two-thirds (n=26) of the respondents reported that they had discussed how to use/implement the RIST resources with someone.

Who discussed how to use/implement the RIST resources?

Respondents' profession	Who discussed how to use/implement the RIST resources?	
	RIST nutritionist	Community nutritionist
Store manager	6	3
Takeaway manager	0	1
Nutritionist	13	0
Health professional	2	0
Other	1	0
Total	22	4
No answer/not sure = 13		

Twenty-two (56%) of the respondents said that the RIST nutritionist discussed how to use/implement the resources with them, while four reported that the community nutritionist had discussed how to use the resources. One-third of the respondents either could not recall or did not answer.

Did having someone discuss the RIST resources with you make it easier to use the resources?

Respondents' profession	Was it easier to use the RIST resources after someone discussed them with you?	
	Yes	No
Store manager	6	5
Takeaway manager	1	0
Nutritionist	12	0
Health professional	2	0
Other	1	0
Total	22	5

Twenty-two (56%) of the respondents reported that they found the RIST resources easier to use after they had discussed them with someone. Five store managers reported that they did not find it easier to use the RIST resources after discussing them.

Would nutrition training benefit you and/or your staff in using the RIST resources?

	Would nutrition training be beneficial for store manager or store staff?	
Respondents' profession	Yes	No
Store manager	14	7
Takeaway manager	1	0
Nutritionist	11	2
Health professional	2	0
Other	1	0
Total	29	9
No answer = 1		

Eleven (85%) of the 13 nutritionists said nutrition training would be beneficial for store managers/store staff. Fourteen (66%) of the 21 store managers agreed while seven (33%) disagreed.

Nutrition training beneficial: comments from store managers

- Could be very beneficial for store staff
- Definitely. All the staff recently completed a food safety course. They found the course very useful. The Indigenous store staff are very interested to learn more
- Very useful to have training for staff especially in temperature control, rotation of stock and use-by dates
- It would help
- There are a lot of fruit and vegetables already. The drinks fridge has a lot of low joule drinks. We try to have a balance. There are a lot of health promotion activities going on in the community. A lot of the sugary drinks are bought by community members and sold privately at sporting events and weekends when the store is not open
- The more the store staff know, the better it will be
- The store staff are interested in nutrition
- Need to sell healthy foods. People need to be shown what to eat and how to cook the foods. Store manager has no time for promoting healthy foods
- Currently store managers try and provide nutrition information, although have not been trained. Would really benefit from training
- Store training in nutrition would be beneficial for store staff
- It would be beneficial to train store staff and store manager. Store manager currently

giving nutrition advice. Would like information on foods suitable for kids, label reading etc. People really want to know this information

- Staff won't pass on the knowledge as it is not appropriate. The information will only benefit the staff not the community.
- We feel we know enough about nutrition
- Very aware of nutrition and healthy foods.

Comments from nutritionists and health professionals

- The store staff would definitely require training in the resources. However, not all resources would be relevant to all store staff due to a centralised ordering system
- Already have enough nutrition knowledge
- Given I work in sole position I can ask questions when/if required but feel quite confident in using the resources
- Would benefit others but not myself
- Training would benefit all staff who would be using resources, particularly non-nutrition focused staff, i.e. store management, other store staff and health promotion officers
- Definitely for store staff
- Training for the community-based staff is essential and part of our ongoing work around food supply issues.

The ownership of the store and the number of store managers who responded "Don't know" to whether the package of RIST resources was useful

Ownership of store	Store managers who responded 'Don't know'	Total number of store managers	%
Privately-owned	1	6	16.6
Community-controlled	4	9	44.4
Government-supported	3	6	50.0

The above table shows that managers in privately-owned stores were less likely to respond, 'Don't know,' when asked if the RIST resources were useful, compared with managers in community-controlled or government-supported stores.

Are the resources relevant to your work?

Profession	Yes	No	No answer
Store manager	14	5	2
Takeaway manager	0	0	1
Nutritionists	14	0	0
Health professional	2	0	0
Other	1	0	0

Fourteen (66%) of the twenty-one store managers reported that the RIST resources were relevant to their work. All (100%) of the nutritionists/dietitians reported that the RIST resources were relevant to their work.

Comments: Store managers

- Some of the resources are relevant. However, the resources can't be used unless suppliers have appropriate foods that can be accessed.
- We are a small independent store owned by the community. Our location denies us the opportunity to be more selective in the things we do, e.g. choose freight providers, stock providers, etc. There are ways we could improve our lot, but at the expense of purchasing equipment so as to duplicate what we already have. Then we have the problem of no reliable operator. I don't find the resources relevant.
- Want to sell products that are good for the community. Aware of the issues with health and want to help improve it. These resources are very relevant.
- Definitely relevant, although can't really comment as not really using them.
- If the store managers have experience, they are not relevant.
- Mainly deal with old people and very few Indigenous people come into the store. Therefore they are not relevant.
- We don't have any Indigenous people in our area. Therefore they are not relevant.

Comments: Nutritionists

- At times, the RIST resources are difficult to integrate into current work/project.
- The RIST resources were particularly useful when starting my position as remote food supply was a new area. The simple and easy to use format of the RIST products gave me great overview of the ways to improve food supply, promotion and sales of healthy foods in remote stores. The guidelines checklists also provided a good starting point for collecting baseline data/assessments of how healthy stores were and what areas need improving.
- Very relevant and unlikely to go out of date quickly. However, opportunities to promote and implement store-related strategies have been ad hoc due to distance and irregular visits to remote towns/stores in this area, for a number of reasons but primarily due

to a need to build considerable community support, collaborate with other workers visiting the areas before any intervention and an inability to monitor.

Comment: Other

- Not being a nutrition expert, I found them to be a very informative read that I could link to business objectives.

Do you use any other resources about nutrition for stores and takeaways?

Profession	Yes	No	No answer
Store manager	9	11	1
Takeaway manager	0	0	1
Nutritionists	8	6	0
Health professionals	1	1	0
Other	1	0	0

Other resources used by:

Store managers

- Information sheets for people with diabetes and cooking sessions
- Deadly Tucker
- Healthy plate poster and Vegie Man poster
- Posters, Mai Wiru cookbook
- Posters, top 10 sellers
- High iron and diabetes posters and information. Work closely with nutritionist and wellbeing centre to promote healthy foods and drinks at the end of aisles
- Cooking demonstration resources provided by the nutritionist, posters on healthy foods
- Green label, discussions with the nutritionists, product manufacturer sheet.

Nutritionists

- Brisbane markets fresh tastes
- Go for 2 & 5
- Mainly utilising networks with other public health nutritionists working in , e.g. ALPA, OBS, Nganampa Health. These people have been great to speak with and get ideas/ resources from. A better choice, healthy shopping guide, calorie king website, Diabetes Australia (healthy shopping and eating for diabetics), foodsense by WA and Deadly Tucker cookbook, better health channel, Mai Wiru regions stores policy and more
- Resources that are created by the nutritionist, e.g. posters, shelf talkers, recipe sheets, product analysis data sheets, Mai Wiru handbook
- Deadly tucker, green is good labels and other cook books

- Mainly recipes, e.g. deadly tucker, posters – fat in food
- Food lists from FOCis, A Better Choice Queensland healthy food policy
- Make resources as directed by community members. They tell me what information they want and I collate it accordingly. Also Queensland Health and Northern Territory government resources.

Is there a charge for these resources?

Profession	Yes	No	No answer
Store manager	9	11	1
Takeaway manager	0	0	1
Nutritionists	8	6	0
Health professional	1	1	
Other	1	0	

Where do you obtain these resources?

Eight store managers reported that they received resources from nutritionists, one store manager couldn't remember and the remaining store managers did not answer.

Do you prefer these resources to the RIST resources?

Profession	Yes	No	No answer
Store manager	2	6	13
Takeaway manager	0	0	1
Nutritionists	0	5	9
Health professional	0	0	2
Other	1	0	0

The majority of respondents did not answer. Eleven out of thirty-nine respondents preferred using the RIST resources to other resources.

Comments

- Better than most available
- More relevant to store managers
- They are different. Can't really compare
- Don't think any resources are effective in isolation and one needs to do extra reading, speaking with colleagues, read literature and do their own investigations of other material and resources. However, in the context of the stores the RIST resources would be sufficient for store managers and staff to make changes to improve the supply, promotion and sales of healthy food in their stores without necessarily needing the support from a nutritionist
- All resources fulfil different needs, and are not better or worse
- Partnering approach – targeted; content experts – as presently no nutritionists within retail stores
- Unsure to say as haven't used the RIST resources
- Not sure
- The food lists from FOCiS are useful in specific situations.

Appendix J: Use of RIST resources by store managers by length of service

Spearman's correlation matrix: Usefulness, current use and future use of RIST resources in relation to the length of service (in months) for store managers (N=21)

RIST resource	Correlation and significance	Usefulness	Current usage	Future usage
Guidelines for stocking healthy foods	Rho	.325	.293	.190
	Sig.(2-tailed)	.151	.197	.408
Marketing ideas for healthy food	Rho	.295	.152	-.128
	Sig.(2-tailed)	.194	.510	.580
Healthy fast food	Rho	.606 *	.289	.063
	Sig.(2-tailed)	.004	.204	.787
Checklist: How healthy is your store?	Rho	.145	-.060	-.288
	Sig.(2-tailed)	.531	.797	.205
Checklist: How healthy is your takeaway?	Rho	.405	-.031	-.031
	Sig.(2-tailed)	.069	.895	.895
Freight improvement tool kit	Rho	.471	.515	.515
	Sig.(2-tailed)	.031	.017	.017
Heart Foundation Buyer's Guide	Rho	.346	.192	.180
	Sig.(2-tailed)	.124	.405	.436
Improving the shelf life of fruit and vegetables	Rho	.177	-.069	.003
	Sig.(2-tailed)	.442	.765	.988

* Significant at a Bonferroni adjusted p-value of $<.006$

The results of the Spearman's correlation ($\rho = .606$, $p = .004$) show that there was a significant positive relationship between length of service for store managers and perceived usefulness of the *Healthy fast food* resource. The longer the length of service, the greater the reported usefulness of this resource. There was no significant relationship between length of service and perceived usefulness for each of the remaining resources ($p > .006$).

There was no significant relationship between length of service and current use for any of the RIST resources ($p > .006$).

There was no significant relationship between length of service and expected future use for any of the RIST resources ($p > .006$).

Appendix K: Use of RIST resources by nutritionists by length of service

Spearman's correlation matrix: Usefulness, current use and future use of RIST resources in relation to the length of service (in months) for nutritionists (n=14)

RIST resource	Correlation and significance	Usefulness	Current usage	Future usage
Guidelines for stocking healthy foods	Rho Sig.(2-tailed)	.216 .458	.042 .887	.102 .728
Marketing ideas for healthy food	Rho Sig.(2-tailed)	-.265 .360	-.169 .564	-.225 .439
Healthy fast food	Rho Sig.(2-tailed)	.121 .679	-.005 .987	-.274 .342
Checklist: How healthy is your store?	Rho Sig.(2-tailed)	.272 .347	.285 .323	.213 .464
Checklist: How healthy is your takeaway?	Rho Sig.(2-tailed)	.195 .503	.079 .789	-.131 .656
Freight improvement tool kit	Rho Sig.(2-tailed)	.102 .728	-.181 .536	-.156 .595
Heart Foundation Buyer's Guide	Rho Sig.(2-tailed)	.051 .862	.025 .933	.176 .548
Improving the shelf life of fruit and vegetables	Rho Sig.(2-tailed)	.067 .820	.062 .834	.045 .877

* Significant at a Bonferroni adjusted p-value of $< .006$

There was no significant relationship between length of service and perceived usefulness of the RIST resources among nutritionists.

There was no significant relationship between length of service and current use for any of the RIST resources ($p > .006$) among nutritionists.

There was no significant relationship between length of service and expected future use for any of the RIST resources ($p > .006$) among nutritionists.

Appendix L: Use of RIST resources by store managers by store ownership

Mean ranks for usefulness, current use and future use of RIST resources by store managers in relation to store ownership: Privately owned (n=6), community-controlled (n=9) and government-supported (n=6)

RIST resource	Store ownership	Mean ranks (ΣR)		
		Usefulness	Current usage	Future usage
Guidelines for stocking healthy foods	Private	14.08	12.75	11.42
	Community	9.72	9.67	10.11
	Government	9.83	11.25	11.92
Marketing ideas for healthy food	Private	13.83	12.00	10.58
	Community	9.89	10.00	10.39
	Government	9.83	11.50	12.33
Healthy fast food	Private	14.00	10.67	10.08
	Community	8.44	10.11	10.83
	Government	11.83	12.67	12.17
Checklist: How healthy is your store?	Private	14.75	11.25	9.33
	Community	8.11	9.61	10.94
	Government	11.58	12.83	12.75
Checklist: How healthy is your takeaway?	Private	12.42	10.00	10.00
	Community	10.17	11.11	11.11
	Government	10.83	11.83	11.83
Freight improvement tool kit	Private	14.08	12.42	12.42
	Community	9.17	9.00	9.00
	Government	10.67	12.58	12.58
Heart Foundation Buyer's Guide	Private	14.50	12.08	11.83
	Community	9.22	9.56	10.22
	Government	10.17	12.08	11.33
Maximising the shelf life of fruit and vegetables	Private	13.67	9.83	10.83
	Community	10.61	12.28	10.33
	Government	8.92	10.25	12.17

The above table shows that privately-owned store managers rated all of the RIST resources at a higher level of usefulness, compared with either community-controlled or government-supported store managers.

Government-supported store managers rated *Healthy fast food*, *Checklist: How healthy is your store?*, *Checklist: How healthy is your takeaway?*, *Freight improvement tool kit* and *Heart Foundation Buyer's Guide* at a higher level of usefulness, compared with community-controlled store managers. Conversely, community-controlled store managers rated *Marketing ideas for healthy food* and *Maximising the shelf life of fruit and vegetables* at a higher level of usefulness, compared with the government-supported store owners.

The above table also shows that managers of privately-owned stores rated the current use of the *Guidelines for stocking healthy food* and *Marketing ideas for healthy food* at a higher level than community-controlled or government-supported store managers. However, *Healthy fast food*, *Checklist: How healthy is your store?*, *Checklist: How healthy is your takeaway?* and *Freight improvement tool kit* booklet were rated at a higher level by the managers of government-supported stores. Managers of community-controlled stores rated the A3 poster, *Maximising the shelf life of fruit and vegetables*, at a higher level of current use than their counterparts at privately-owned or government-supported stores.

The government-supported store managers rated all the RIST resources at a higher level of future usage than store managers working in privately-owned or community-controlled stores, except for the *Heart Foundation Buyer's Guide*, which was rated higher for future use by managers of privately-owned stores. *Maximising the shelf life of fruit and vegetables* was the only resource rated higher for future usage by store managers working in community-controlled stores.

However, the results of the Kruskal–Wallis test revealed that the differences between the mean ranks for privately-owned, community-controlled and government-supported stores were not large enough to be statistically significant ($p > .05$).

Usefulness, current use and future use of RIST resources in relation to store ownership (n=21) (df=2)

RIST resource	Test statistic & significance	Usefulness	Current usage	Future usage
Guidelines for stocking healthy foods	Chi-square Sig.(2-tailed)	2.376 .305	1.196 .550	.405 .817
Marketing ideas for healthy food	Chi-square Sig.(2-tailed)	2.215 .330	.679 .712	.522 .770
Healthy fast food	Chi-square Sig.(2-tailed)	4.335 .114	1.358 .507	.629 .730
Checklist: How healthy is your store?	Chi-square Sig.(2-tailed)	5.232 .073	1.425 .490	1.051 .591
Checklist: How healthy is your takeaway?	Chi-square Sig.(2-tailed)	.648 .723	1.028 .598	1.028 .598
Freight improvement tool kit	Chi-square Sig.(2-tailed)	2.837 .242	3.490 .175	3.490 .175
Heart Foundation Buyer's Guide	Chi-square Sig.(2-tailed)	3.000 .223	1.061 .588	.295 .863
Maximising the shelf life of fruit and vegetables	Chi-square Sig.(2-tailed)	2.009 .366	.771 .680	.365 .833

The results of the Kruskal–Wallis tests (table above) revealed that there were no significant differences between privately-owned, community-controlled or government-supported stores, in relation to usefulness, current use or future use of any of the RIST resources ($p > .05$).

Appendix M: Use of RIST resources by store managers by whether they work with nutritionists

Mean ranks for current use of RIST resources by store managers in relation to working with nutritionists

RIST resource	Mean ranks (ΣR)	
	Works with nutritionist (N = 14)	Does not work with nutritionist (N = 7)
Guidelines for stocking healthy foods	11.04	10.93
Marketing ideas for healthy food	11.00	11.00
Healthy fast food	11.29	10.43
Checklist: How healthy is your store?	11.14	10.71
Checklist: How healthy is your takeaway?	11.50	10.00
Freight improvement tool kit	12.00	9.00
Heart Foundation Buyer's Guide	11.68	9.64
Maximising the shelf life of fruit and vegetables	11.07	10.86

The above table shows that where store managers work with nutritionists, they use the resources to a greater extent than if the managers do not work with nutritionists. The exception to this is *Marketing ideas for healthy food* where there was no difference.

However, the results of the Mann–Whitney U tests (see Table below) revealed that the difference between mean ranks was not large enough to be statistically significant ($p > .05$).

Current use of RIST resources by store managers in relation to working with a nutritionist (N=25)

RIST resource	Z-score	Sig.(2-tailed)
Guidelines for stocking healthy foods	-.043	.966
Marketing ideas for healthy food	-.000	1.000
Healthy fast food	-.436	0.663
Checklist: How healthy is your store?	-.180	0.858
Checklist: How healthy is your takeaway?	-1.025	0.306
Freight improvement tool kit	-1.524	0.127
Heart Foundation Buyer's Guide	-.790	0.429
Maximising the shelf life of fruit and vegetables	-.079	0.937

The results of the Mann–Whitney U tests revealed that there were no significant differences between the mean ranks for ‘Work with nutritionist’ and ‘Does not work with nutritionist’, in relation to current use of any of the RIST resources ($p > .05$).

Appendix N: Use of RIST resources by store managers by perceived relevance of RIST resources

Mean ranks for current use of RIST resources by store managers in relation to perceived relevance of RIST resources

RIST resource	Mean ranks (ΣR)	
	Relevant (N=14)	Not relevant (N=5)
Guidelines for stocking healthy foods	10.93	7.40
Marketing ideas for healthy food	10.50	8.60
Healthy fast food	10.07	9.80
Checklist: How healthy is your store?	10.46	8.70
Checklist: How healthy is your takeaway?	10.36	9.00
Freight improvement tool kit	10.71	8.00
Heart Foundation Buyer's Guide	10.61	8.30
Maximising the shelf life of fruit and vegetables	11.21	6.60

Store managers who perceived the RIST resources to be relevant to their work reported a higher level of current use of the resources. However, the results of the Mann–Whitney U tests revealed that the difference between mean ranks was not large enough to be statistically significant ($p > .05$).

Current use of RIST resources by store managers in relation to perceived relevance to their work (N=19)

RIST resource	Z-score	Sig.(2-tailed)
Guidelines for stocking healthy foods	-1.350	.177
Marketing ideas for healthy food	-.790	.430
Healthy fast food	-.130	.896
Checklist: How healthy is your store?	-.735	.463
Checklist: How healthy is your takeaway?	-.868	.385
Freight improvement tool kit	-1.299	.194
Heart Foundation Buyer's Guide	-.858	.391
Maximising the shelf life of fruit and vegetables	-1.645	.100

The results of the Mann–Whitney U tests show that there were no significant differences between the mean ranks for ‘Relevant’ and ‘Not relevant’ in relation to current use of any of the RIST resources ($p > .05$).

Mean ranks for future use of RIST resources by store managers in relation to perceived relevance of RIST resources (N=19)

RIST resource	Mean ranks (ΣR)	
	Relevant (N=14)	Not relevant (N=5)
Guidelines for stocking healthy foods	11.14	6.80
Marketing ideas for healthy food	10.68	8.10
Healthy fast food	10.29	9.20
Checklist: How healthy is your store?	11.25	6.50
Checklist: How healthy is your takeaway?	10.36	9.00
Freight improvement tool kit	10.71	8.00
Heart Foundation Buyer’s Guide	11.39	6.10
Maximising the shelf life of fruit and vegetables	10.96	7.30

Store managers who perceived the RIST resources to be relevant to their work reported a higher level of expected future use of the resources. However, the results of the Mann–Whitney U tests show that the difference between mean ranks was not large enough to be statistically significant ($p > .05$).

Future use of RIST resources by store managers in relation to perceived relevance to their work

RIST resource	Z-Score	Sig. (2-tailed)
Guidelines for stocking healthy foods	-1.612	.107
Marketing ideas for healthy food	-1.023	.306
Healthy fast food	-.479	.632
Checklist: How healthy is your store?	-1.745	.081
Checklist: How healthy is your takeaway?	-.868	.385
Freight improvement tool kit	-1.299	.194
Heart Foundation Buyer’s Guide	-1.889	.059
Maximising the shelf life of fruit and vegetables	-1.336	.182

The results of the Mann–Whitney U tests revealed that there were no significant differences between the mean ranks for ‘Relevant’ and ‘Not relevant’, in relation to expected future use of any of the RIST resources ($p > .05$).

Appendix O: Use of RIST resources by store managers by perceived training benefit

Mean ranks for current use of RIST resources by store managers in relation to perceived training benefit

RIST resource	Mean ranks (ΣR)	
	Training beneficial (N = 14)	Training not beneficial (N = 7)
Guidelines for stocking healthy foods	12.43	8.14
Marketing ideas for healthy food	11.86	9.29
Healthy fast food	11.29	10.43
Checklist: How healthy is your store?	12.07	8.86
Checklist: How healthy is your takeaway?	11.50	10.00
Freight improvement tool kit	12.00	9.00
Heart Foundation Buyer's Guide	12.11	8.79
Maximising the shelf life of fruit and vegetables	12.93	7.14

Store managers who perceived that training would be of benefit reported a higher level of current use of the resources. However, the differences between mean ranks for current use of the resources were not statistically significant ($p > .05$), with the exception of “Maximising the shelf life of fruit and vegetables” A3 poster ($z = -2.142$, $p = .032$).

Current use of RIST resources by store managers in relation to training benefit (N=21)

RIST resource	Z-Score	Sig. (2-tailed)
Guidelines for stocking healthy foods	-1.718	.086
Marketing ideas for healthy food	-1.127	.260
Healthy fast food	-.436	.663
Checklist: How healthy is your store?	-1.346	.178
Checklist: How healthy is your takeaway?	-1.025	.306
Freight improvement tool kit	-1.524	.127
Heart Foundation Buyer's Guide	-1.289	.197
Maximising the shelf life of fruit and vegetables	-2.142	.032

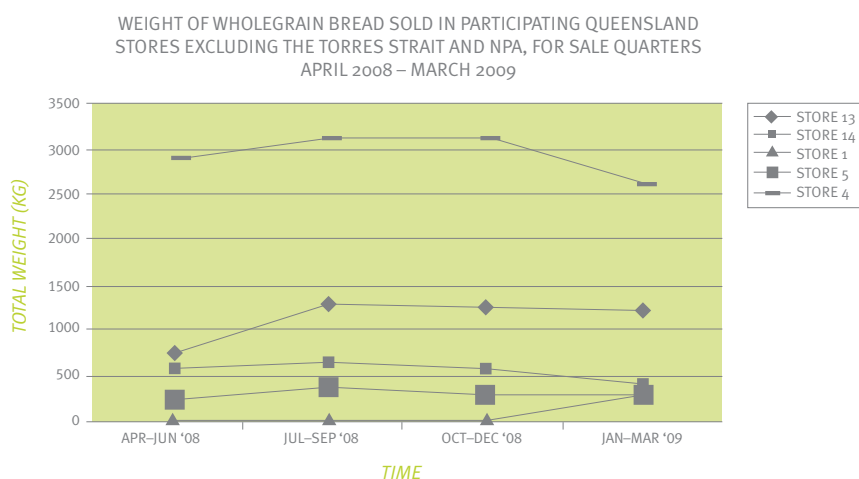
The results of the Mann–Whitney U tests show that there is a significant difference between the mean ranks for ‘Training beneficial’ and ‘Training not beneficial’ in relation to current use of *Maximising the shelf life of fruit and vegetables* by store managers ($z = -2.142$, $p = .032$), but not for the other resources.

Appendix P: Sales data for participating stores in Queensland and the APY Lands of South Australia

Foods promoted were wholegrain bread, fresh fruit and fresh vegetables. Drinks promoted were water and diet soft drinks.

Wholegrain bread sales

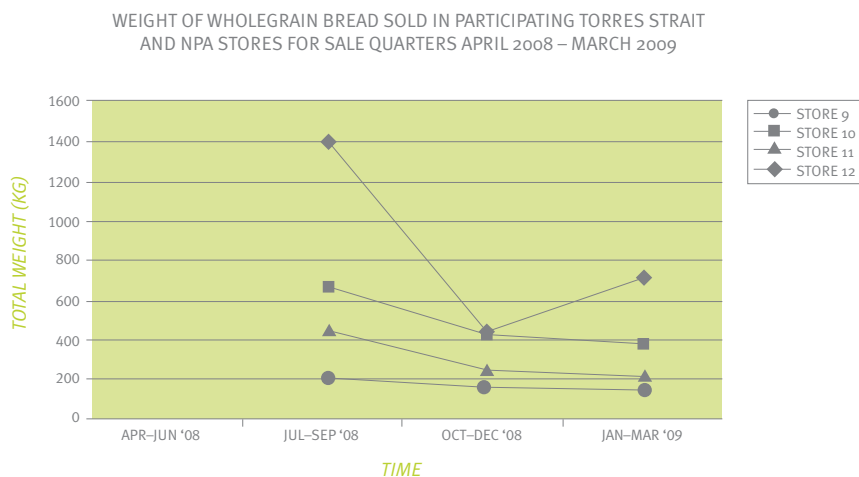
Wholegrain bread (kg) sold in participating stores in Queensland, excluding the Torres Strait and NPA area



Stores 13, 14: no promotion activities

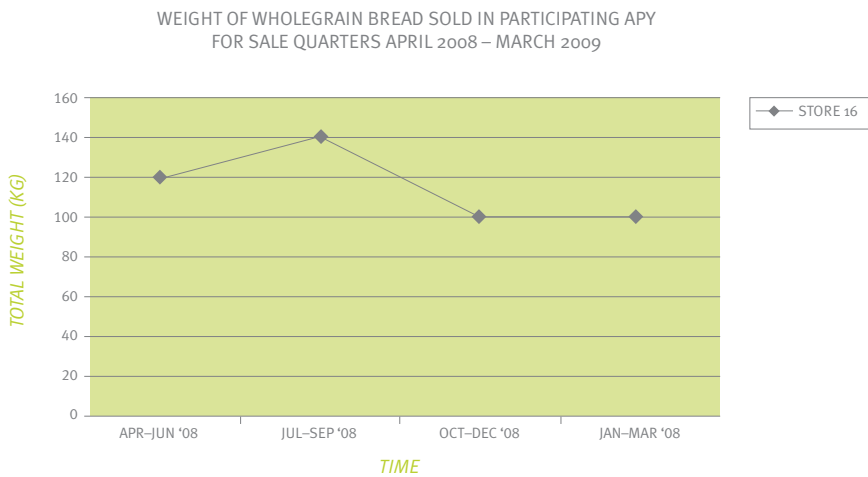
Stores 1, 4, 5: promotion activities by nutritionist

Wholegrain bread (kg) sold in participating Torres Strait and NPA stores



Stores 9, 10, 11, 12: promotion activities by nutritionist

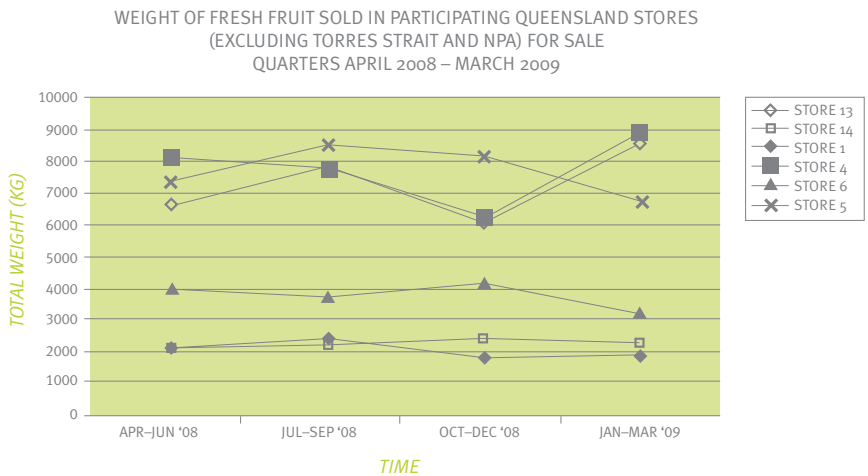
Wholegrain bread (kg) sold in participating APY land stores



Store 16: promotion activities by nutritionist

Sales of fresh fruit

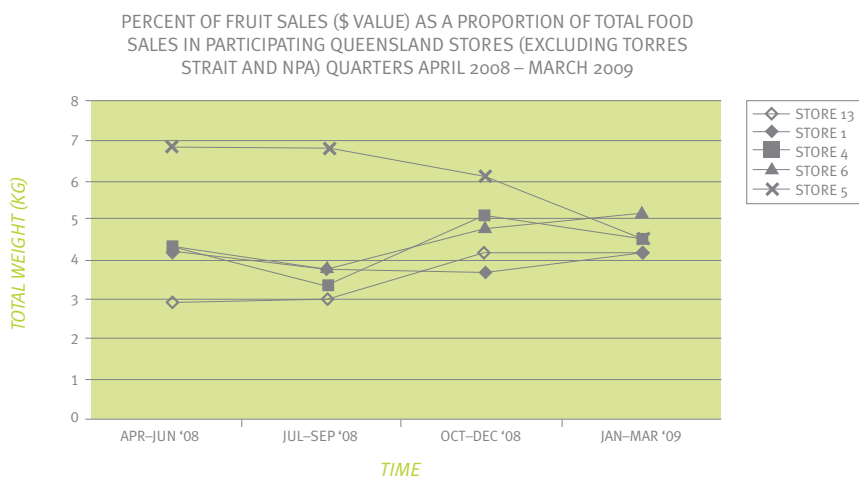
Fresh fruit (kg) sold in participating stores in Queensland excluding the Torres Strait and NPA area



Stores 5, 13, 14: no promotion activities

Stores 1, 4, 6: promotion activities by nutritionist

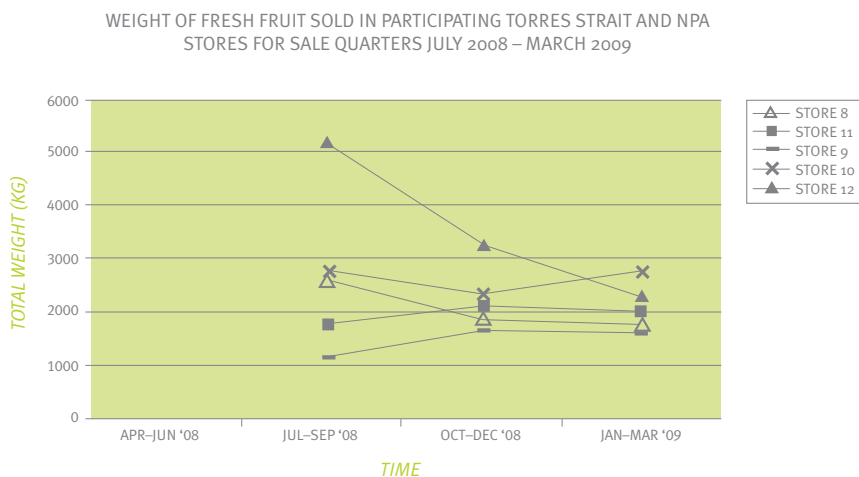
Fresh fruit sales as a proportion of total food sales (\$ value) in participating Queensland stores excluding the Torres Strait and NPA areas



Stores 5, 13: no promotion activities

Stores 1, 4, 6: promotion activities by nutritionist

Fresh fruit (kg) sold in participating Torres Strait and NPA stores

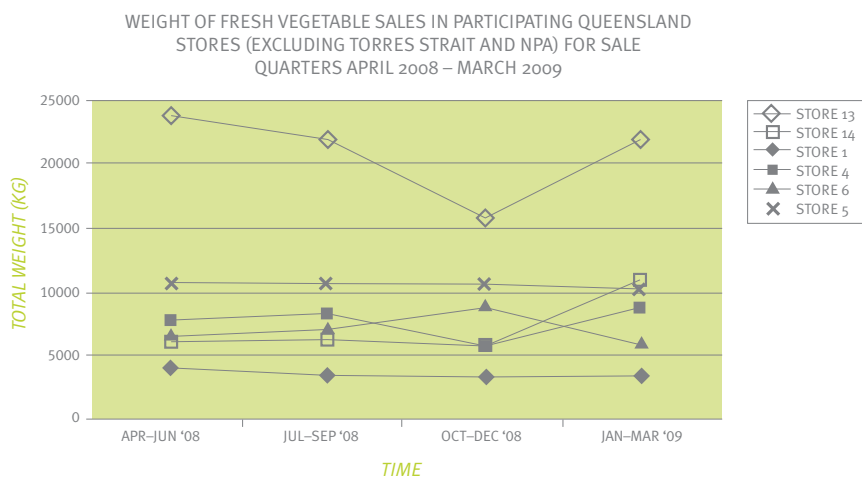


Store 8: promotion activity by store manager

Stores 9, 10, 11, 12: promotion activities by nutritionists

Sales of fresh vegetables

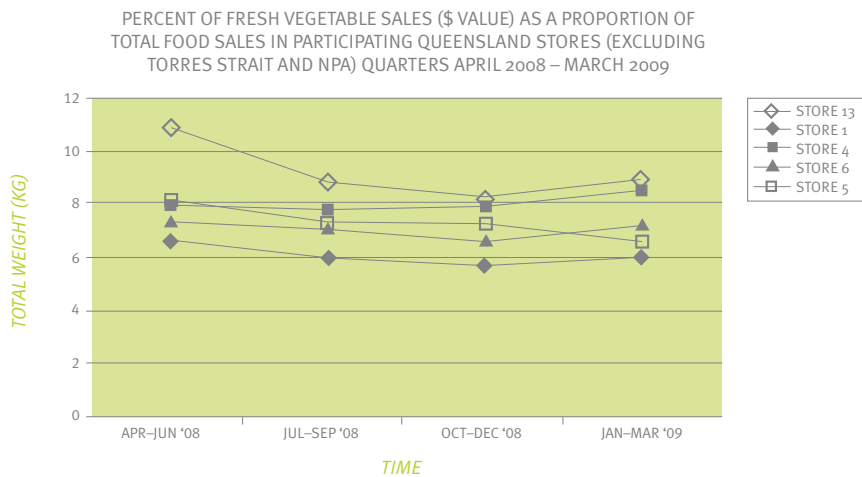
Fresh vegetables (kg) sold in participating Queensland stores excluding the Torres Strait and NPA areas



Stores 5, 13, 14: no promotion activities

Stores 1, 4, 6: promotion activities by nutritionist

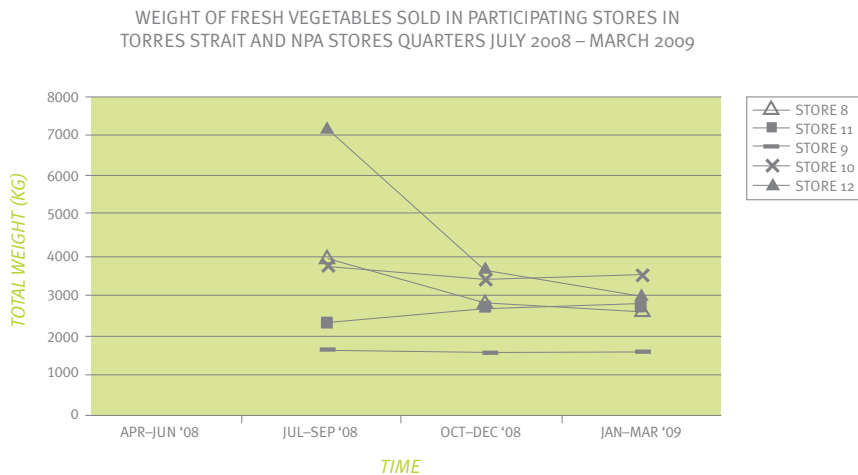
Fresh vegetable sales as a proportion of total food sales in participating Queensland stores excluding the Torres Strait and NPA area



Stores 5, 13: no promotion activities

Stores 1, 4, 6: promotion activities by nutritionist

Fresh vegetables (kg) sold in participating stores in the Torres Strait and NPA areas

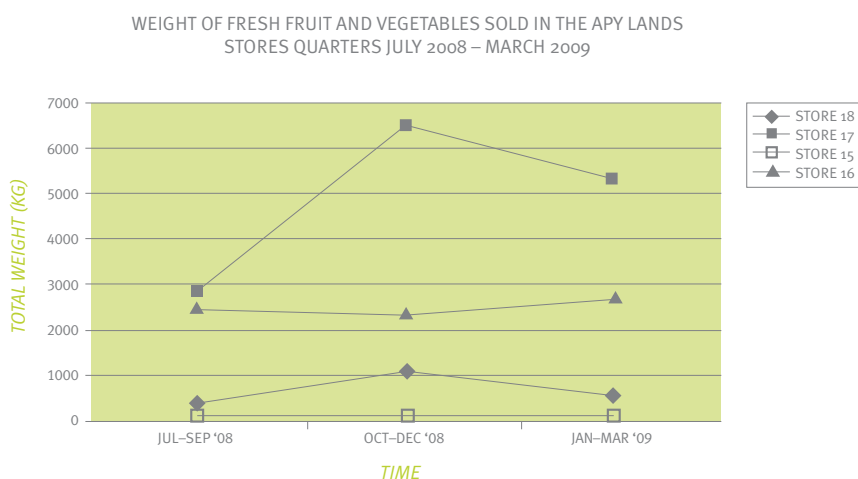


Store 8: promotion activity by store manager

Stores 9, 10, 11, 12: promotion activities by nutritionist

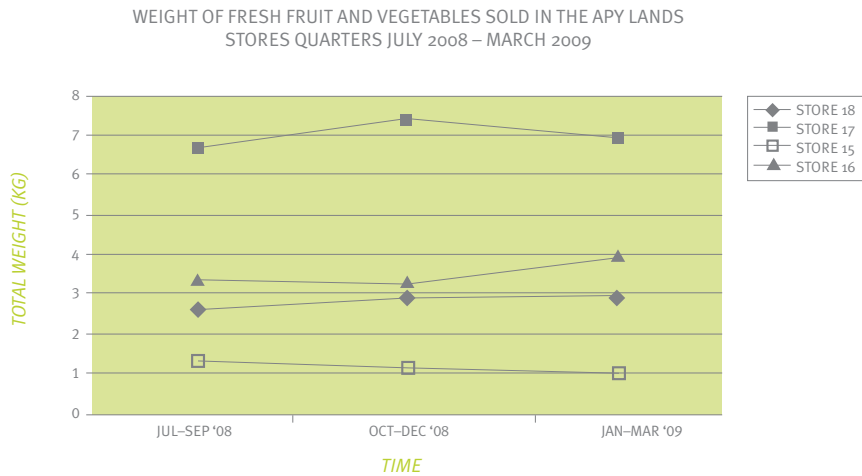
Sales of fresh fruit and vegetables in APY lands stores

Fresh fruit and vegetables (kg) sold in participating stores in the APY Lands of South Australia



Stores 15, 16, 17, 18: promotion activities by nutritionist

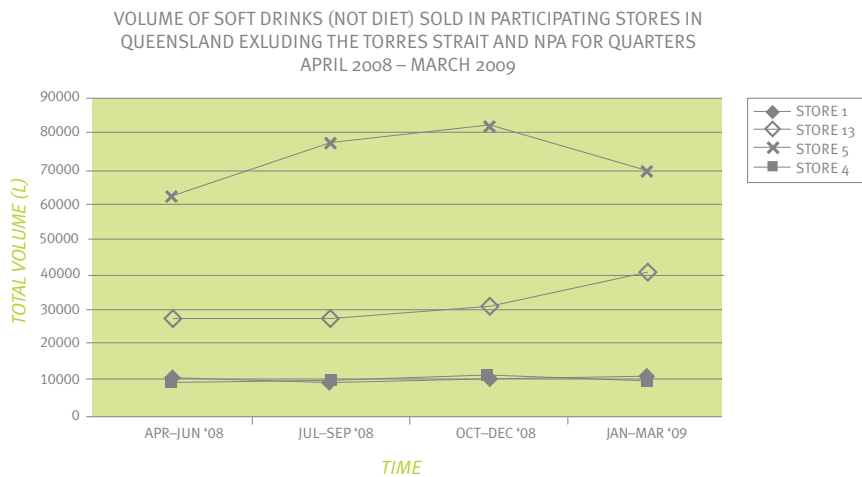
Fresh fruit and vegetable sales as a proportion of total food sales in participating stores in the APY Lands of South Australia



Stores 15, 16, 17, 18: promotion activities by nutritionist

Sales of soft drinks (not diet)

Soft drinks (not diet) (litres) sold in participating Queensland stores excluding the Torres Strait and NPA areas

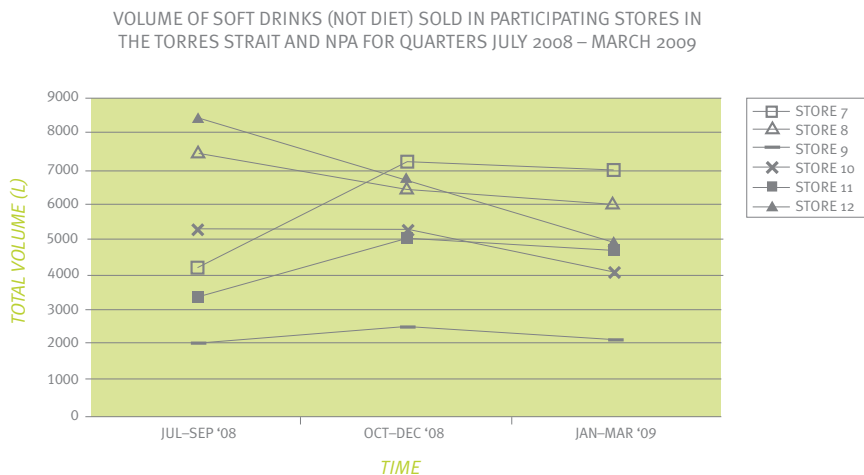


Store 13: no promotion activities

Store 1: promotion of sugar-free drinks by store manager and nutritionist

Stores 4, 5: promotion of sugar-free drinks by nutritionist

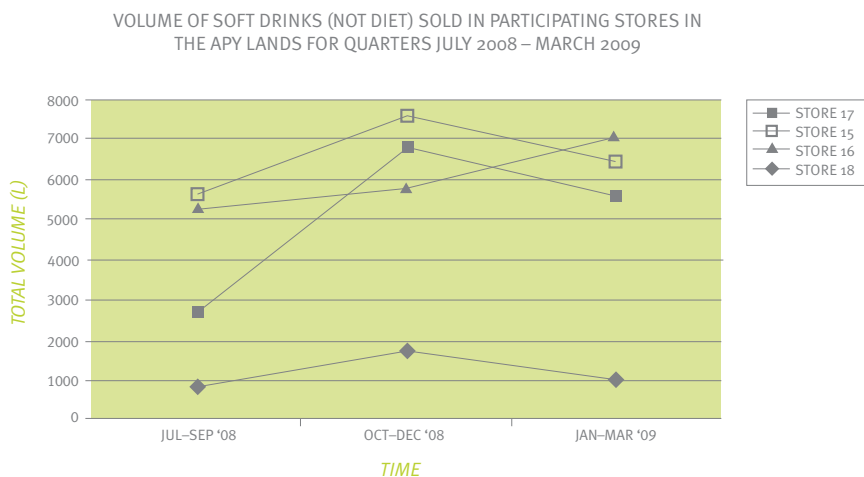
Soft drinks (not diet) (litres) sold in participating stores in the Torres Strait and NPA area



Stores 7, 8: promotion of sugar-free drinks by store managers

Stores 1, 2, 9, 10: no promotion activities

Soft drinks (not diet) (litres) sold in participating stores in the APY Lands of South Australia



Stores 15, 16, 17: promotion of sugar-free drinks by nutritionist

Store 18: no promotion activity

Appendix Q: Indicator foods for RIST tool, Keeping track of healthy food

Indicator food	Sub-group
Fruit	Fresh, canned, dried, frozen
Vegetables	Fresh, canned, dried, frozen
Bread	Wholegrain (wholemeal, rye, seed), white high-fibre
Red meat, poultry and meat products	Canned meat (Spam, hamper, corned beef cereal, etc), fresh cuts (not lean), fresh lean cuts, all others
Fish and seafood	Frozen or fresh (not battered or deep-fried) and canned fish
Fats and oils	Recommended: canola margarine, polyunsaturated margarine, and canola, olive, peanut, sunflower and sunola oils
Fats and oils	Regular
Milk and milk products	Reduced-fat, flavoured reduced-fat, full-cream, flavoured full-cream
Cheese	Reduced-fat, regular
Sugar	Raw, white, castor, icing
Confectionery	Gums, lollies and chocolate (not including sugar-free)
Drinks	Soft drinks (not diet), sports drinks, flavoured mineral waters, cordial (not diet), water and all other drinks (juice, fruit drinks and diet drinks)
Hot takeaway food (not recommended)	Pies and sausage rolls; hot potato chips (frozen and takeaway)
Crisps	Packet chips

Appendix R: Core, non-core and other foods

Core vs non-core vs other foods	Main food group	Sub-food group
Non-core	All sugars	Total
Other	Antipasto	Total
Other	Artificial sweetener	Total
Non-core	Biscuits	Savoury – other
Core	Biscuits	Savoury – recommended
Non-core	Biscuits	Sweet – other
Other	Biscuits	Sweet – recommended
Core	Bread	Total
Core	Bread	Fruit
Core	Bread	Other
Core	Bread	White high-fibre
Core	Bread	Wholegrain
Non-core	Cake/ice-cream topping	Total
Non-core	Cakes	Total
Non-core	Cakes	Cake mix
Non-core	Cakes	Ready-to-eat
Core	Cereal	B and g toasted muesli
Non-core	Cereal	Other
Core	Cereal	Wholegrain
Core	Cheese	Total
Core	Cheese	Reduced-fat
Core	Cheese	Regular
Other	Coconut	Total
Non-core	Coconut cream	Total
Non-core	Coconut cream	Reduced-fat
Non-core	Coconut cream	Regular
Core	Coconut milk	Low-fat
Non-core	Coconut milk	Powder
Other	Coconut milk	Reduced-fat
Non-core	Coconut milk	Regular
Other	Coffee	Total
Non-core	Condensed milk	Total
Other	Confectionery	Diet
Non-core	Confectionery	Regular
Non-core	Cream	Total
Non-core	Crisps	Total
Core	Crumb/batter	Total
Other	Custard	Total
Other	Custard	Dried

Other	Custard	Ready-to-eat
Non-core	Dip	Total
Core	Eggs	Total
Core	Evaporated milk	Total
Core	Evaporated milk	Full-cream
Core	Evaporated milk	Reduced-fat
Core	Fish and seafood	Canned
Non-core	Fish and seafood	Crumbed
Core	Fish and seafood	Fresh/frozen fish and seafood
Core	Flour	Total
Core	Flour	Other
Core	Flour	Wholemeal
Core	Fruit	Canned in juice
Other	Fruit	Canned in syrup
Other	Fruit	Dried
Core	Fruit	Fresh
Core	Fruit	Frozen
Non-core	Gravy	Total
Non-core	Gravy	Dried
Non-core	Gravy	Liquid
Core	Herbs and spices	Total
Non-core	Hot potato chips	Total
Non-core	Hot potato chips	Frozen
Non-core	Hot potato chips	Hot
Non-core	Ice-block	Total
Non-core	Ice-cream	Total
Other	Jelly	Diet
Non-core	Jelly	Dried
Non-core	Jelly	Ready-to-eat
Non-core	Liquid drinks	Fruit drink
Other	Liquid drinks	Fruit juice
Non-core	Liquid drinks	Cordial (not diet)
Other	Liquid drinks	Diet drinks
Non-core	Liquid drinks	Soft drinks (not diet)
Core	Liquid drinks	Water
Non-core	Meat	All others
Non-core	Meat	Canned meat
Core	Meat	Fresh cuts (not lean)
Core	Meat	Fresh lean cuts
Core	Milk	Total
Core	Milk	Flavoured full-cream
Core	Milk	Flavoured reduced-fat

Core	Milk	Full-cream
Core	Milk	Reduced-fat
Core	Milk	Soy
Non-core	Muesli bar	Total
Other	Noodles	Lower-fat 2-minute
Core	Noodles	Plain dried
Core	Noodles	Plain wet
Non-core	Noodles	Regular 2-minute
Non-core	Nuts	Salted
Core	Nuts	Unsalted
Other	Oil/margarine/butter	Total
Other	Oil/margarine/butter	Recommended
Other	Oil/margarine/butter	Regular
Core	Pasta	Plain dried
Non-core	Pasta	With sauce
Non-core	Popcorn	Total
Non-core	Powder drinks	Total
Non-core	Powder drinks	Chocolate powder
Non-core	Powder drinks	Powdered high-sugar
Non-core	Prepared meals	Canned – other
Core	Prepared meals	Canned – recommended
Non-core	Prepared meals	Frozen – other
Core	Prepared meals	Frozen – recommended
Core	Rice	Low-GI
Core	Rice	Other
Non-core	Rice	With sauce
Non-core	Salad dressing	Total
Non-core	Salt	Total
Non-core	Salty plum	Total
Non-core	Sauce	Marinade/simmer sauce
Non-core	Sauce	Mayonnaise
No- core	Sauce	Other
Non-core	Sauce	Tomato
Other	Sauce	Soy sauce – recommended
Non-core	Sauce	Soy sauce – regular
Non-core	Soup	Total
Non-core	Soup	Dried
Non-core	Soup	Liquid
Non-core	Spreads	Chocolate spread
Non-core	Spreads	Fish/meat paste
Non-core	Spreads	Jam/honey/syrup
Other	Spreads	Peanut paste

Non-core	Spreads	Vegemite
Non-core	Stock	Total
Non-core	Stock	Belachan
Non-core	Stock	Dried
Non-core	Stock	Liquid
Non-core	Takeaway	Burger
Non-core	Takeaway	Other
Other	Takeaway	Salad/sandwich/wrap
Non-core	Takeaway	Pie/sausage roll/pastie
Non-core	Takeaway	Pizza
Other	Tea	Total
Other	Tinned spaghetti	Total
Other	Tuna/cheese and biscuit kit	Total
Core	Vegetables	Total
Core	Vegetables	Fresh – other
Core	Vegetables	Fresh – potato
Core	Vegetables	Not fresh
Core	Yoghurt	Total
Core	Yoghurt	Low-fat
Core	Yoghurt	Regular

Categories not included in core vs non-core vs other food classification

x	Baby food	Chicken/fish and vegetable
x	Baby food	Custard
x	Baby food	Fruit
x	Baby food	Iron-enriched cereal
x	Baby food	Juice
x	Baby food	Red meat and vegetable
x	Baby food	Vegetable
x	Infant milk formula	Total

Evaluation of the Remote Indigenous
Stores and Takeaways Resources in
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Yankunytjatjara Lands of South Australia.



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