

Store Nutrition Report and Market Basket Survey

April 2014

Nganampa Health Council

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April 2014

Executive Summary

The report provides Market Basket pricing and data analysis of Mai Wiru compliance with standardised food and nutrition checklists from stores on the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in South Australia collected in April 2014. The report focuses on the Mai Wiru group stores (Pipalyatjara, Kanpi, Amata, Fregon and Pukatja). Pricing data was also collected from Mimili (Outback Stores), Indulkana (independent) and Coles and IGA Foodlands supermarkets in Alice Springs.

The purpose of this report is to provide key recommendations for Mai Wiru store councils to aid decision-making regarding food and nutrition issues. Data was collected in-store from 7-11 April 2014. Information was collected on the price, availability and promotion of foods, as well as Mai Wiru store achievement of the Remote Indigenous Stores and Takeaways (RIST) checklist benchmarks and implementation of nutrition recommendations from the previous Market Basket report (September, 2013).

Nutrition promotion activities were also performed in all the Mai Wiru stores, including one pot cooking demonstrations and installation of sugar-in-food displays and posters.

Results show that, in April 2014, Mai Wiru stores:

- Are clean, functional and well stocked;
- Provide a wide range of healthy foods and beverages; and
- Price healthy foods at a competitive rate for remote areas.

In April 2014 the average price of the Market Basket in the Mai Wiru stores was \$734 dollars and had increased only 0.3% since September 2014. In comparison to the other stores monitored during the same period the Mai Wiru store prices were 4.3% less than Mimili, 1.0% more than Indulkana, only 13.0% more than Alice Springs IGA Foodlands and 34.4% more than Coles. Amata was the cheapest Mai Wiru store in the APY Lands, despite being one of the remotest stores surveyed. Pukatja, the largest of the Mai Wiru stores, was the most expensive but only 0.5% more than Pipalyatjara. The price of the Market Basket at the Outback Store at Mimili was similar to that of Pukatja. The differential between the average Mai Wiru Market Basket price and Coles Alice Springs had decreased eight percentage points from 42% to 34% since September 2013 (a relative improvement of 20% of this differential). During this same six month time period the price of the Market Basket increased at Mimili by 7.2% and at Coles Alice Springs by 6.0%, whilst decreasing

by 2.6% in Indulkana and 3.9% at Foodlands IGA Alice Springs (where many fruit and vegetables were on sale at the time of data collection).

Since September 2013 the average price of the food groups has increased by 8.4 % for fruits and vegetables while decreases occurred for breads and cereals (1.4%), dairy (7%) and extras (25%), and meat prices did not change. The average price of fruit and vegetables, across the Mai Wiru stores, increased more in relation to that of other food groups since September 2013. The cost of dried milk powder remains high in most stores.

Recommendations

1. That the Mai Wiru Nutrition Policy and Mai Wiru Store Food and Nutrition handbook are updated.
2. That, consistent with the Mai Wiru Nutrition Policy, the following items be removed immediately from relevant Mai Wiru stores:
 - Golden Circle pineapple in syrup;
 - Confectionary (e.g. lollies, chocolate);
 - Fruit juice drinks (e.g. 25% juice: Golden Circle and Fruit Box); and
 - Sport drinks.
3. That, if they have not already done so, Store Councils consider removal from relevant Mai Wiru stores of:
 - Sweetened soft drink and beverages, especially sizes >375mL, (such as Schweppes flavoured mineral water, Pepsi Next, Lipton Iced Tea, Real Iced Tea, Smart Water) and replace with artificially sweetened alternatives or water;
 - Large and multiple varieties of fruit juice, from 300mL up to 2L (but continue to stock sizes of 250mL or less);
 - SPC fruit crush up varieties;
 - Multiple brands, sizes and flavours of unhealthy foods and drinks (e.g. sweet biscuits, chips, packaged burgers, pies).
4. That the following foods be stocked at all time in all Mai Wiru stores:
 - At least three healthy varieties of low sugar cereals (e.g. weetbix, rolled oats, sultana bran)
 - Lean meats including: lean chicken pieces, such as diced chicken, skinless chicken breast and thighs; and low fat sausages; Two or more varieties of low fat/ salt dry biscuits (e.g. water crackers, vitaweat, and ryvita);
 - Low fat dairy options (e.g. yoghurts, flavoured milk, cheese); and low fat evaporated milk and low fat coconut milk;
 - Plain unsalted nut varieties and unsweetened dried fruit;
 - Low- salt canned vegetable varieties;
 - S26 infant feeding formula ONLY;
 - Variety of baby food for 6 months and over (tinned, screw top, snack pack); and

- Iron fortified infant cereal (from 6 months e.g. Farex).
5. That cool water chillers outside each Mai Wiru store be fixed and regularly maintained and promoted.
 6. That supply of only one popular (generic) brand may be preferable for some items (e.g. Black and Gold sugar, flour, powdered milk and evaporated milk).
 7. That the following practices be continued in all Mai Wiru stores. Continue to:
 - Provide healthy ready-to-eat meals and snacks such as sandwiches, salads, casseroles, soups;
 - Provide a wide range of cooking equipment and baby feeding equipment (e.g. bowls, unbreakable spoons, and feeding cups);
 - Promote healthy foods for diabetes and infants;
 - Provide a wide variety of healthy foods including fruit, vegetables, lean meat, fish, milk, cheese, yoghurt, eggs and alternatives such as lentils, beans and whole grain cereal foods such as wholemeal bread, weetbix, rolled oats;
 - Display healthy food prominently in store (e.g. on shelving at eye-level, at end shelves and at checkouts);
 - Provide no promotion of lollies, chocolate or crisps;
 - Ensure good range and variety of infant snacks rusk, yoghurts, cheese sticks; and
 - Provide healthier snack pack alternatives (unflavoured milk, sultanas, cheese, and fruit).
 8. That store councils consider:
 - Developing and installing shelf talkers on healthy options; and
 - Increasing availability and promotion of unpackaged fruit and vegetables in relevant stores;

The Mai Wiru stores are doing well with lots of improvements in the availability of healthy foods at very competitive prices. However the relatively low levels of implementation of previous recommendations could be improved in some stores. To help make it easier for store managers to comply with the Mai Wiru Nutrition Policy, the Mai Wiru Store Food and Nutrition handbook may need to be updated and simplified. Store councils may need to do more to ensure that the Mai Wiru Nutrition Policy is implemented in some stores.

Introduction

Regular consumption of a variety of nutritious foods and water is essential for normal growth, development, health and wellbeing (NHRMC, 2013). Good nutrition will substantially reduce the risk of developing diet-related chronic diseases including heart disease, stroke, type 2 diabetes, and several cancers and assist treatment and

management of these conditions (NHRMC, 2013). The risk of diet-related chronic disease in Aboriginal communities is at least twice that of non-Indigenous Australians.

In many remote communities the local store is the only source of food (Lee et al, 1995), so in order to promote health and wellbeing it is critical that healthy foods and drinks are available, accessible and affordable all year round (Lee, 2013). Community dietary patterns have been found to respond directly to improved stock management and food supply (Lee et al, 2009).

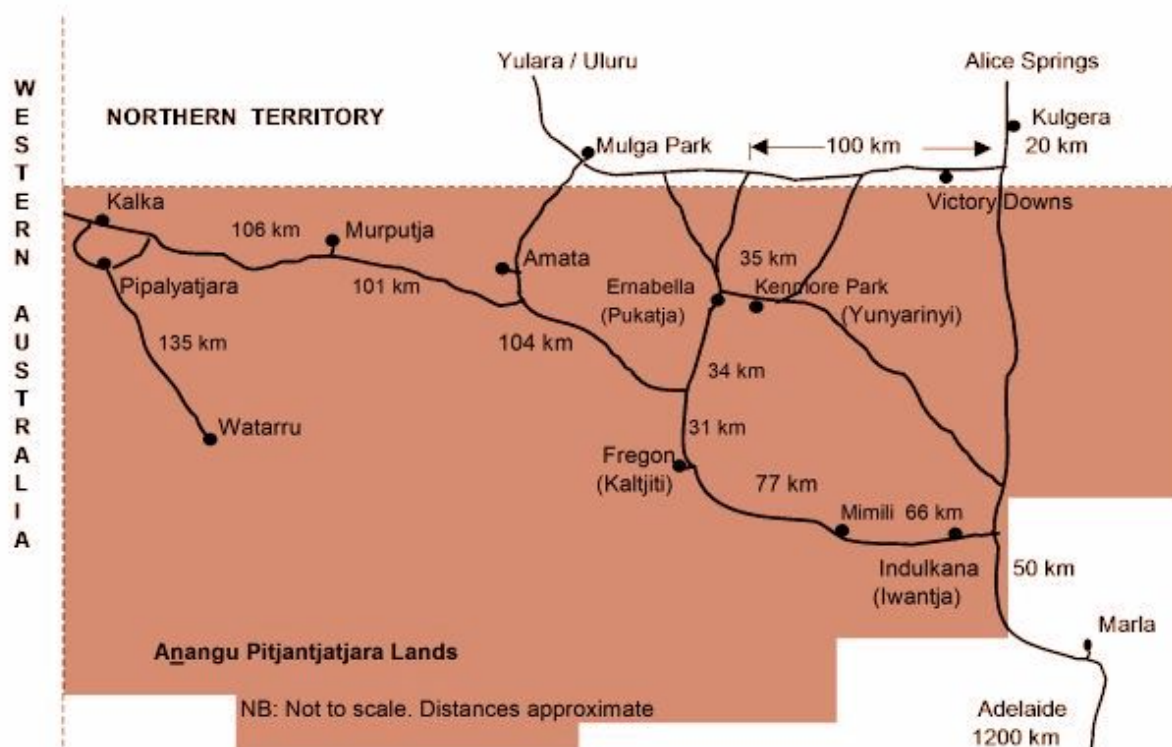
The extremely high prevalence of nutrition-related health problems and premature death amongst the APY Lands communities is a major health issue (Lee, 2013); therefore the improving dietary intake should be of the highest priority (Brimblecombe et al, 2013). In this regard the store managers are major 'gatekeepers' to the health of the communities.

Purpose of this Report

This report provides analysis of Market Basket prices and other data collected from stores on the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in South Australia in April 2014. The report focuses on the Mai Wiru group stores (Pipalyatjara, Kanpi, Amata, Fregon (Kaltjiti) and Pukatja (Ernabella)). Pricing data was also collected from the store at Mimili (Outback Stores), the independent store at Indulkana (Iwantja) and both Coles and IGA in Alice Springs. The map below shows locations of communities.

The report firstly compares the food prices between the stores and over time (from November 2009). Secondly, data are presented on the availability, placement and promotion of healthy and unhealthy foods and general nutrition store management indicators consistent with the Mai Wiru Nutrition Policy where relevant. Key recommendations are also outlined for Mai Wiru store councils in order to aid their decision making on key food and nutrition issues and ensure healthy foods are available, accessible and affordable in the APY communities.

Map: APY Communities in North West South Australia



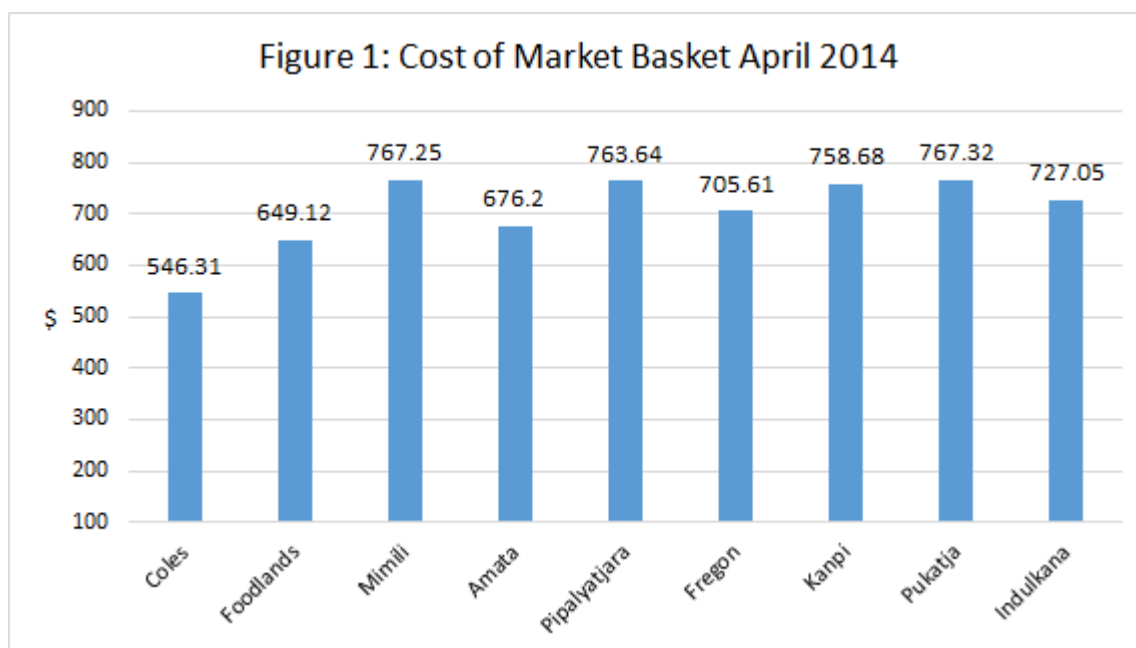
Methods

Please see Appendix 1 for detailed method description.

Results and Discussion

1) Market Basket Survey April 2014

The cost of the Market Basket at the Mai Wiru Stores at Pipalyatjara, Kanpi, Amata, Pukatja and Fregon, the independent store at Indulkana, the Outback store in Mimili and the two large retail outlets in Alice Springs (Coles and IGA) in April 2014 are presented in Figure One.



In April 2014, the average price of the Market Basket in the Mai Wiru stores was \$734. This was 4.3% less than Mimili, 1% more than Indulkana, 13% more than IGA Foodlands and 34% more than Coles supermarket in Alice Springs.

Amata was the cheapest Mai Wiru store in the APY Lands in April 2014, despite being one of the remotest stores surveyed. Pukatja the largest of the Mai Wiru store was the most expensive, but was only 0.5% more than Pipalyatjara. The price of the Market Basket at the Outback Store at Mimili was similar to that of Pukatja. The prices of the Market Basket in all community stores remains much lower than the prices recorded in three convenience stores (Watinuma, Pukatja Garage and Marla) in September 2013.

Theoretically, due to the Mai Wiru store group policy and practices, the prices of food, drinks and goods should be the same in all Mai Wiru stores. However price variations may occur due to differences in stock orders and rotations. The rotation of stock can influence prices over time and through temporary wholesale 'specials'. Community purchasing habits may also influence stock rotation and prices in the Mai Wiru stores, as the popularity of different products, brands and sizes varies from one community to another.

Individual store policy set by local store councils as an extension of the Mai Wiru Nutrition Policy can also influence the products ordered and sold in the stores. For example, some store councils have introduced restrictions on supply of sweetened soft drinks or certain discretionary foods (lollies, chips, fatty takeaway foods) beyond minimum requirements under the Mai Wiru store policy. The choice to sell fruit and vegetables in relatively more expensive pre-packaged trays or loose by the kilo is an important variation that can also influence prices.

Although store councils are responsible for setting the overall store policy, the store managers and staff are the ones that carry out stock ordering, pricing and stock rotation on a daily basis. Hence it is vital that the store managers and all store staff are aware of the relevant Mai Wiru policies. This will help to reduce the influence of

personal preferences and beliefs that may be contributing to differences in the Mai Wiru stores, including pricing.

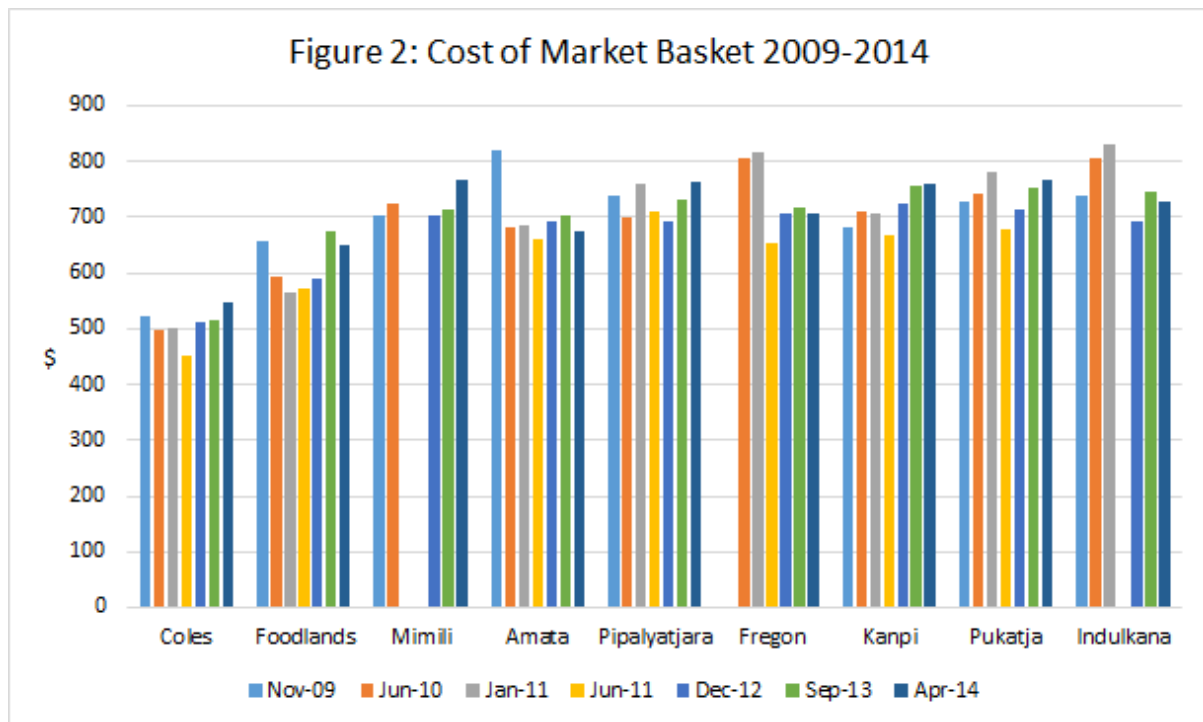
Dried milk powder, in particular the branded products such as Sunshine and Diplomat, still remains expensive with a 900g tin costing approximately \$18 in all remote stores. The consistently high prices of dried milk powder may relate to strong international demand from China due to adverse weather conditions, disease outbreaks affecting their cattle and chemical contamination of infant formula, milk and milk products (ADPI, 2013; WHO, 2008). This demand has a significant impact on wholesale prices, and forecasts predict even further increases in China's demand in 2014 (USDA, 2013). This continuing high price of dry milk powder influenced the overall Market Basket prices for April 2014. Although Amata and Fregon had the lowest Market Basket prices, they were also the two stores which stocked generic 'Black and Gold' dry milk powder exclusively. A 900g bag of Black and Gold milk powder cost \$13.38 and this relatively lower price contributed greatly to the price differentiations seen between the Mai Wiru stores. Similarly in some of the stores on the APY Lands, only generic products such as 'Black and Gold' sugar, flour and margarine were available.

In some stores the Market Basket item wasn't available, as a result it was necessary to use prices listed in point of sale or a substitute item was selected. For example in Kanpi and Mimili Edgell's Mixed Vegetables was priced instead of Edgell's Tinned Beans which were unavailable and in Amata Edgell's Tinned Peas and Carrots was used as Edgell's Tinned Peas were not available. At the time of data collection Fregon store was located in a smaller temporary facility set up in a converted house after the original store was burnt down. Understandably at Fregon not all prices were displayed and not all the specific items were available; hence at Mimili the tinned fruit and 100% orange juice item prices were set as the average price calculated from the other Mai Wiru stores.

In all other Mai Wiru stores prices were well displayed. In all stores it was necessary to inquire about pricing of certain fruit and vegetables in order to complete the data collection. At Pukatja and Indulkana produce prices were displayed at the entrance to the cool room or display fridges. The remainder of the stores had prices displayed immediately in front of the corresponding produce.

2) Market Basket Survey Price Changes over Time

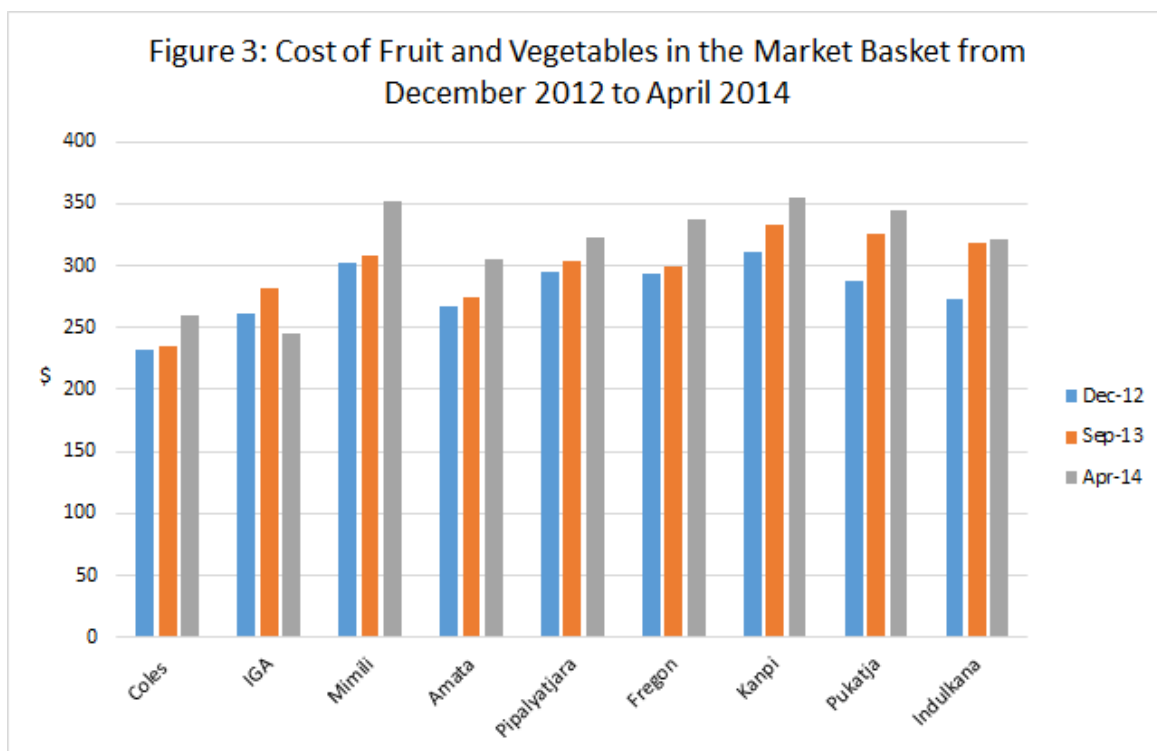
The costs of the Market Basket since 2009, where available, are presented in Figure 2. The average cost of the Market Basket in Mai Wiru stores increased by only 0.3% from September 2013 to April 2014, although there was substantial variation with prices falling in Amata and Fregon and increasing in Pipalyatjara and Pukatja. The greatest price increase was observed at Mimili, run by Outback Stores, and the Market Basket is now more expensive at Mimili than any other community store on the APY Lands. The corresponding figure shows that food prices at Mimili increased by 7.2% and at Coles in Alice Springs by 6.0%, whilst decreases occurred by 2.6% in Indulkana and 3.9% in Alice Springs Foodlands IGA. The Market Basket prices in the Mai Wiru stores have only marginally increased and in most stores the prices are still lower now than they have been during the last five years.



The prices of the fruit and vegetables in the Market Basket in key stores in April 2014, September 2013 and December 2012 are presented in Figure 3. Compared with September 2013 price of fruits and vegetables in the Mai Wiru stores had increased by 8.4%. Comparatively, since September 2013, prices in Coles had increased by 10%, in Mimili by 14% and in Indulkana by only 1%, whilst fruit and vegetable prices in IGA Foodlands decreased by 13%. It should be noted that a third of the fruits and vegetables available at the IGA Foodlands were on sale which helped explain these latter results.

By far the cheapest store for fruit and vegetables on the APY Lands during April 2014 was Amata, even though it was one of the remotest stores surveyed. Amata has a very high turnover of fresh produce and sells fruits and vegetables per kg whilst most of the other Mai Wiru stores sell pre-packaged trays; this is likely to have contributed to the results. The smallest Mai Wiru store Kanpi had the highest fruit and vegetable prices for this reason.

Since September 2013, the prices of fruits and vegetables on the APY Lands have increased by 6 to 14 %. Pipalyatjara, Kanpi and Pukatja were at the lower end of this range whilst Mimili (14%), Amata (11%) and Fregon (13%) were at the higher end of the percentage increase (Figure 3). Comparatively Coles fruit and vegetable prices increased by 10% and decreased by 13% in IGA Foodlands. The increased prices of fruit and vegetables in all Mai Wiru stores contributed more to the increasing cost of the Market Basket than any other food group since September 2013.



Details of the prices of the different food group components of the Market Basket in September 2013 and April 2014 are shown in Table 1. Green shading indicates that the price of the food group components that have stayed the same or reduced since September 2013; pink shading indicates that the price of the food group component has increased since September 2013. Yellow shading was used to indicate undesirable pricing decreases in the discretionary food group since September 2013.

In comparison with September 2013 data, in April 2014 the average price across Mai Wiru stores for fruits and vegetables increased by 8.4% whilst decreases occurred for breads and cereals (1.4%), dairy (7%) and extras (25%) and meat product pricing did not differ. It should be noted that a majority of the 'Discretionary' food (margarine) items were generic 'Black & Gold' varieties, which would explain the reduced prices for this food group.

A decrease in the price for fruit only occurred in one store (Pipalyatjara). Breads and Cereal prices decreased in three Mai Wiru stores (Pipalyatjara, Amata and Pukatja). The 'Milk, Cheese and Yoghurt' items decreased in price in four out of five of the Mai Wiru stores whilst 'Discretionary' food decreased in all stores (cheap prices in this category are not desirable).

The Market Basket Report from September 2013 stated that all Mai Wiru stores had the lowest ratios of price of fruit and vegetables to price of 'Discretionary' food for all stores on the APY Lands. Results from the April 2014 data collection indicate that this is still the case for Pipalyatjara, Amata and Pukatja only. The increased prices of fruit and vegetables in all Mai Wiru stores contributed more to the increasing cost of the Market Basket than any other food group since September 2013 (Table 1).

Table 1: Price of each food group component of the market basket, April 2014

| Market Basket Component | Mimili | Fregon | Pukatja | Amata | Kanpi | Pipalyatjara | Indulkana | Coles Alice Springs | IGA Foodlands Alice Springs |
|--------------------------|--------|--------|---------|--------|--------|--------------|-----------|---------------------|-----------------------------|
| | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Total basket cost | 767.25 | 705.61 | 767.32 | 676.20 | 758.68 | 763.64 | 727.05 | 546.31 | 649.12 |
| Fruit & veg combined | 351.59 | 336.84 | 345.38 | 304.73 | 354.93 | 322.78 | 321.88 | 259.38 | 244.65 |
| Bread & cereals | 108.80 | 108.40 | 108.00 | 111.16 | 112.11 | 107.45 | 105.80 | 96.06 | 107.05 |
| Fruit | 188.80 | 169.99 | 187.77 | 170.66 | 171.36 | 167.77 | 180.42 | 155.65 | 140.11 |
| Vegetables | 162.79 | 166.85 | 157.61 | 134.07 | 183.57 | 155.01 | 141.46 | 103.73 | 104.54 |
| Meat & alternatives | 133.68 | 126.95 | 119.72 | 119.00 | 118.67 | 119.72 | 125.36 | 100.80 | 111.54 |
| Milk, Cheese and Yoghurt | 145.24 | 104.37 | 162.47 | 112.95 | 144.66 | 189.33 | 138.94 | 65.64 | 163.25 |
| Discretionary foods [1] | 28.65 | 29.05 | 31.74 | 28.37 | 28.30 | 29.76 | 30.00 | 24.42 | 22.54 |

[1] Note discretionary foods includes sugar as well as margarine, so unlike other food groups, cheap prices in this category are not necessarily desirable

Table 1: Legend

- = Price increase
- = Price decrease
- = Undesirable price decrease

3) Store Implementation of

i) ***Previous Nutrition Recommendations made by the Nganampa Health nutritionist consistent with Mai Wiru Nutrition Policy***

The Compliance checklist was a tool developed for this report to monitor whether the Mai Wiru stores had implemented recommendations consistent with the Mai Wiru Nutrition Policy that were made specifically in the previous Market Basket Report (September 2013). Monitoring implementation in the Mai Wiru stores indicated whether the food stocked in the stores aligned with the Mai Wiru Nutrition Policy. The 'recommendation checklist' included benchmarks related to the removal of specific products known to be associated with poor health outcomes and ensuring healthy products were regularly stocked. Other items on the checklist related to the promotion of healthy foods and types of sugar sweetened beverages.

The percentage implementation in each store is presented in Figure 4. Compliance was calculated as a percentage of 'yes' scores for implementation of the thirty-seven benchmarks in the checklist. Details of the Compliance checklist are provided in Appendix 1. The results show good improvement. The highest score was 64% in Pukatja (Figure 4) where the majority of the 'not recommended' items had been removed, many healthier choices were available, and appropriate and adequate infant products and cooking equipment are stocked. However Pukatja take-away is external to the store and is still working to increase the proportion of healthy items supplied through that outlet (see below).

Results could be improved further in most Mai Wiru stores by removing more 'not recommended' products, stocking healthier options and increasing the proportion and variety of diet soft drinks.

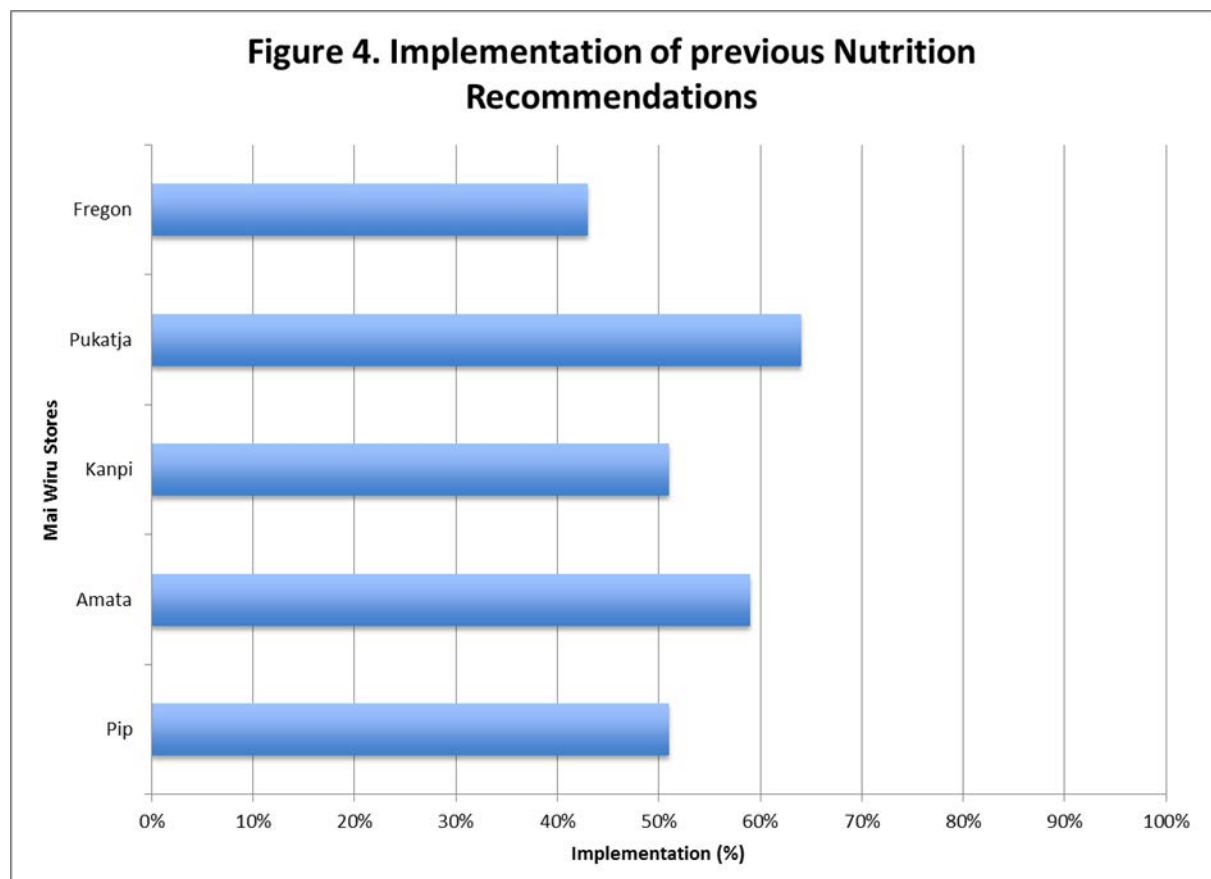


Figure 5 and Figure 6 show implementation of 'recommended' and 'not recommended' benchmarks in Mai Wiru stores. Most stores now have a good supply of baby foods and specialised feeding equipment sets, drinking cups, non-breakable spoons, bottles and teats. However, due to delayed truck delivery due to bad weather, some items were in low supply. Most of the stores stocked Farex iron fortified cereal (from 4 months of age) but none stocked Farex cereal (from six months of age). The stores also stocked varieties of tinned and screw top lids of 'from 4 month' baby foods; however it is recommended to provide a wider variety of the 6-month options, in addition to the 4-month varieties. All, but one, of the stores stocked S26 infant formula, but other varieties (such as Nurture) which have different dilution rates and may lead to confusion and incorrect preparation of formula with serious health consequences as cautioned by Nganampa Health clinical staff, are still being stocked. Also displays relating to infant feeding in some stores were small and difficult to notice.

Good healthy food for diabetics displays were present in Amata, Pukatja, Fregon and also in Mimili. Some inappropriate foods, e.g. dried fruit and yoghurt coated nuts, were displayed elsewhere. Efforts to improve the accuracy of the displays were not well received by all store staff in one community.

A minimum of two healthy ready-made meals were not consistently available in all Mai Wiru stores. Healthy items that were available in some of the stores included sandwiches, stews, salads, sushi, curries, boiled eggs and, at Amata, cooked pumpkin for infants. All Mai Wiru stores sold pies and other high saturated fat items. Two of the Mai Wiru stores (Amata and Pukatja) still sold "discretionary" unhealthy fried take away options such as Pluto Pups, hot chips and Dim Sims, but also provided some healthier choices. No healthy options were available at Pipalyatjara, where high saturated fat ("discretionary") microwavable burgers and pizzas were the only choices available. Most Mai Wiru stores have facilities to provide healthy ready-made meals as required according to the 'Mai Wiru: Stores Handbook 2005'. Combi ovens were being used fully in Amata and Pukatja, but Pipalyatjara has no access to kitchen facilities at all.

Figure 5. Mai Wiru store implementation of previous recommendations (not recommended items) since September 2013

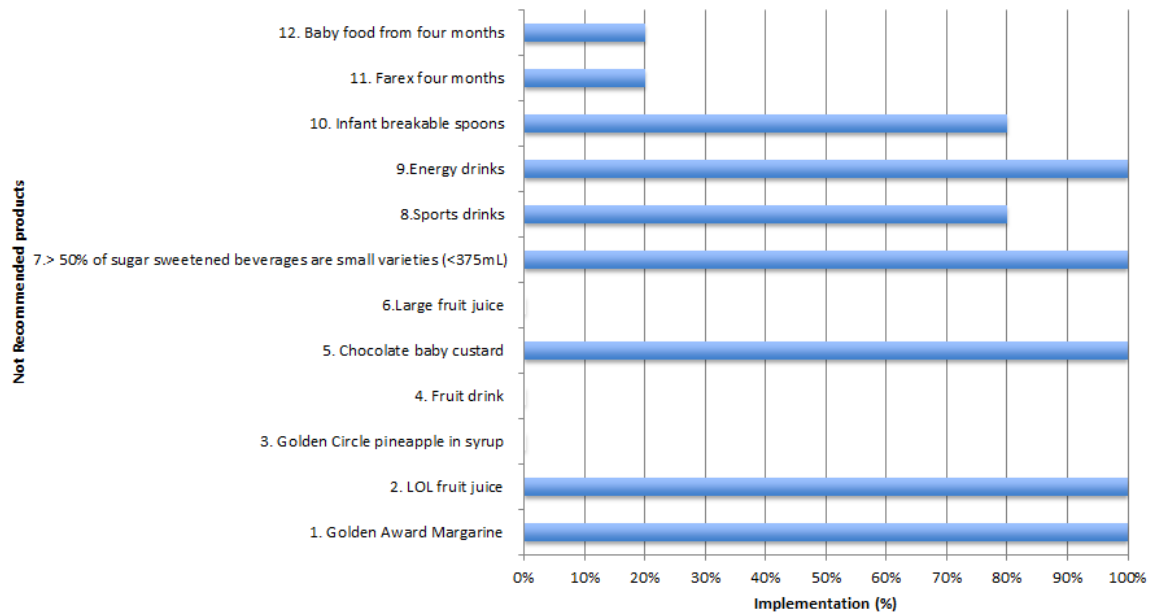
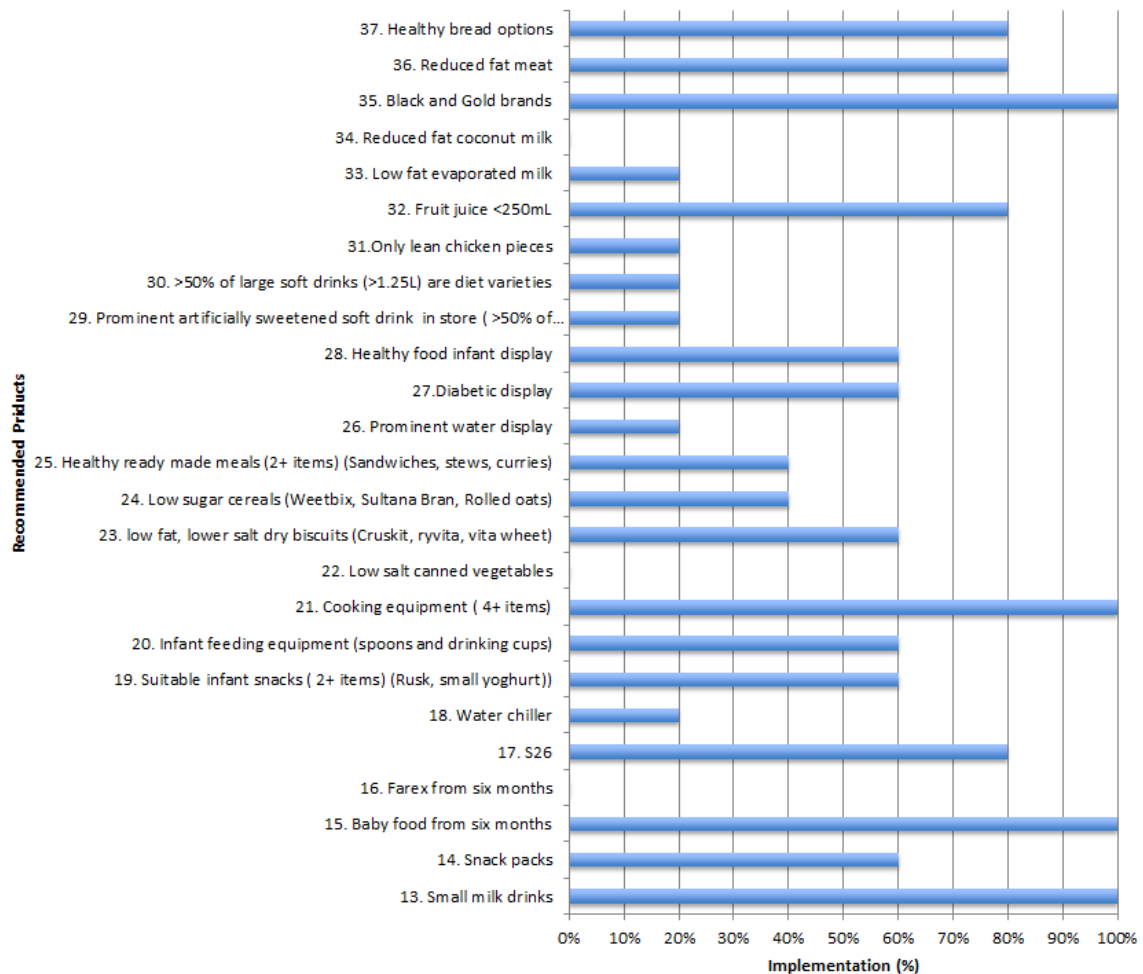


Figure 6. Mai Wiru store implementation of previous recommendations (recommended items) since September 2013



Unhealthy items removed successfully from Mai Wiru stores include:

- Golden Award margarine;
- LOL fruit juice;
- Chocolate baby custard;
- Energy drinks;
- Sports drinks (except Pukatja); and
- Some large sizes of sugar-sweetened beverages.

Unhealthy items still present in Mai Wiru stores include:

- Golden circle pineapple in syrup;
- Fruit juice drinks (such as Fruit Box and Golden Circle fruit juice drinks);
- Large varieties of fruit juices (>375mL); and
- Butter.

The recommendations that had been implemented successful in all stores (100% compliance) include provision of:

- Small milk drinks;
- Baby food suitable from 6 months;
- Cooking equipment (>4 items); and
- Generic (e.g. 'Black and Gold' brands of common items such as margarine and flour.

Healthy foods and drinks recommended but still not available consistently in all Mai Wiru stores include:

- Healthy ready-made meals (sandwiches, curries and stir fries etc.);
- Water chillers;
- Low salt canned vegetables (only one pureed tomato variety available);
- Range of low sugar cereals (> 3 varieties) (e.g. weetbix, rolled oats, unsweetened muesli);
- Low fat, lower salt dry biscuits (e.g. water crackers, vitaweat, and ryvita);
- Majority of artificially sweetened beverages displayed;
- Large sizes of diet soft drinks (most large sizes in all stores were still sugar sweetened varieties);
- Low saturated fat options such as: lean chicken pieces (skinned chicken breast or leg meat) and low fat evaporated milk and reduced fat coconut milk;
- Farex (from 6 months of age) (not available in any stores);

Some new lines that are not recommended but are now available in some Mai Wiru stores include:

- Iced tea varieties (Real iced tea, Lipton iced tea)
- Smart Water
- Schweppes mineral waters
- SPC Fruit Crush Ups
- Gluten free products (e.g. pasta)
- Low GI products (e.g. Basmati)



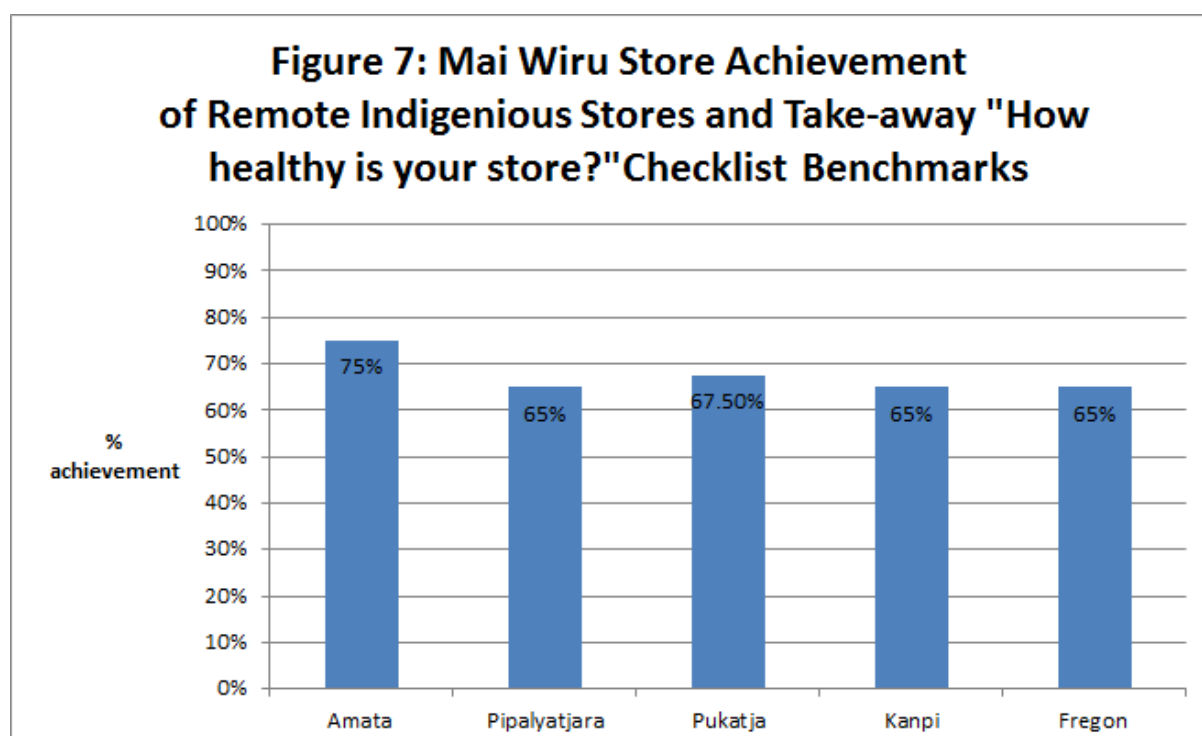
Gluten free items are not necessary and tend to be very expensive.

Low GI products may be useful for type 2 diabetics ONLY if all other dietary improvements have been made but high blood sugar persists. Until then low GI items such as Basmati Rice are more than 3 times the price of other healthy rice options and are not necessary. It is better to stick more affordable 'normal' foods such as other rice varieties.

ii) Remote Indigenous Stores and Takeaways "How Healthy Is Your Store" Checklist

The Remote Indigenous Stores and Takeaways (RIST) "How Healthy Is Your Store" Checklist is used nationally to assess food supply in Aboriginal and Torres Strait Islander communities throughout Australia. It includes 40 items in a number of areas including: nutrition, store management and promotion of healthy foods.

The % achievement against the RIST tool in the Mai Wiru Stores in Amata, Pipalyatjara, Pukatja, Kanpi and Fregon are shown in Figure 7 below. The Mai Wiru store with the highest percentage compliance in April 2014 was Amata with 75%.



All Mai Wiru stores were clean, well set out, and all staff complied with tobacco control legislation. None of the stores were selling to children during school hours but one store had dogs inside the store at the time of data collection. Free water chillers were only operating at Pukatja store.

There was a good range of fruit and vegetables available in all Mai Wiru stores. Heavy rain and subsequent flooding prevented the weekly delivery in the western stores, which did impact on stocks to some degree. Only three of the Mai Wiru stores (Amata, Fregon and Kanpi) achieved the national benchmark for vegetable variety and only two of the Mai Wiru stores achieved the national benchmark for fruit variety (Amata and Fregon). The independent store at Indulkana and the Outback store at Mimili both received their weekly food deliveries prior to store assessment, and this is likely to have contributed to Mimili's high (77.5%) RIST checklist score. Indulkana's score was lower at 65%.

Only one store (Pukatja) met the RIST variety benchmark for lean cut meat options (six or more). However all Mai Wiru stores offered lean mince and lean cuts of chicken (for example: diced chicken or skinless chicken breasts). All Mai Wiru stores also stocked tinned fish, low fat tinned stews, low fat dry biscuits and a wide range of tinned and frozen vegetables. None of the stores stocked low-fat sausages.

Healthy foods such as fruit were displayed in baskets at point of sale in Kanpi. The other four Mai Wiru stores all had fruit for sale on shelving located close to the registers. Fregon also offered boiled eggs. All Mai Wiru stores stocked high fibre white bread, however not all stocked wholemeal and/or multigrain bread at the time of data collection.

The proportion of diet drinks to sweetened drinks remains quite low in the Mai Wiru Stores. The proportion was highest in Pipalyatjara at approximately 60% (a dramatic improvement since September 2013) with all other Mai Wiru stores falling below the 50% benchmark. These results are similar to those in September 2013, when only Amata met this benchmark. However, the proportion of diet drinks to sweetened drinks displayed at Mimili (Outback Stores) has now increased to 78%, demonstrating that this benchmark can be achieved in remote stores.

Figure 8 details all the items included on the RIST checklist and shows the corresponding percentage achievement amongst the Mai Wiru Stores.

Figure 8: Mai Wiru Store Achievement of Remote Indigenous Stores and Take-away "How healthy is your store?" Checklist Benchmarks



4) In-store activities

Cooking demonstrations were held in Pipalyatjara and Amata. Unfortunately due to heavy rain, flooding and subsequent delays, cooking demonstrations could not be conducted in Kanpi, Fregon and Pukatja. Community members appeared to enjoy the sessions with oral feedback including:

- They enjoyed the tuna mornay and chicken curry dishes (see Appendix 1.4 for recipes).
- They felt the recipes were easy to understand and liked the pictures of each ingredient.
- They stated they felt they could make the dishes at home as they were easy and inexpensive.



This feedback demonstrates successful tailoring of food literacy principles and will hopefully lead to more meals being cooked at home. (This will be evaluated by subsequent store turnover surveys). In Pipalyatjara, approximately 40 people attended with many of the school children coming over in their lunch break. People were happy to wait in line to try the tuna mornay and chicken curry and 25 sets of recipes were handed out. In Amata approximately 40 serves of each dish were tried and 20 copies of the recipes were requested by some of the women while their children sat and ate.

Displays demonstrating high added sugar items and healthier alternatives were set up in each Mai Wiru store. Installation of displays was well supported by all store managers and staff, despite initial resistance in one store where it was believed they would be ineffective and it was stated that the shelf would be better used to sell potato crisps (!).



At Kanpi the store manager assisted in setting up new shelving for the display. The displays were placed in high traffic areas, prominent upon entry to the store usually near the diabetic displays.



In order to increase sustainability, the displays were placed up high where possible. Community members were very responsive to the nutritional promotion message embedded in the display, indicated by participation of children in setting up the displays in some communities. There was much conversation about “Mai Wiru” and “Mai Kura” food items and requests for further information about other specific items in the store.

Some examples:

- In Amata, one family returned a box of Nutri Grain for refund after seeing the sugar content in the display.
- In Pipalyatjara, children showed genuine interest in counting the sugar sachets on the soft drinks and in particular wanted to know healthier alternatives.



Posters visually representing (using teaspoons) the amount of sugar and fat in popular takeaway, snack, breakfast and dinner options were placed in each of the Mai Wiru stores as well as provided to Mimili and Indulkana stores and the Nganampa Health clinics at Pipalyatjara, Amata, Pukatja, Fregon and Indulkana.

Posters were placed in high visibility positions around the stores to maximise interest, where possible around the ATM, noticeboards and fridges. Community members showed interest in the posters and commented that they were easy to understand.

- In Fregon particularly while the posters were being placed near the store entrance, people stopped to look and discuss the healthier options.



Recommendations and Conclusion

Recommendations

1. That the Mai Wiru Nutrition Policy and Mai Wiru Store Food and Nutrition handbook are updated.
2. That, consistent with the Mai Wiru Nutrition Policy, the following items be removed immediately from relevant Mai Wiru stores:
 - Golden Circle pineapple in syrup;
 - Confectionary (e.g. lollies, chocolate);
 - Fruit juice drinks (e.g. 25% juice: Golden Circle and Fruit Box); and
 - Sport drinks.
3. That, if they have not already done so, Store Councils consider removal from relevant Mai Wiru stores of:
 - Sweetened soft drink and beverages, especially sizes >375mL, (such as Schweppes flavoured mineral water, Pepsi Next, Lipton Iced Tea, Real Iced Tea, Smart Water) and replace with artificially sweetened alternatives or water;
 - Large and multiple varieties of fruit juice, from 300mL up to 2L (but continue to stock sizes of 250mL or less);
 - SPC fruit crush up varieties;
 - Multiple brands, sizes and flavours of unhealthy foods and drinks (e.g. sweet biscuits, chips, packaged burgers, pies).
4. That the following foods be stocked at all time in all Mai Wiru stores:
 - At least three healthy varieties of low sugar cereals (e.g. weetbix, rolled oats, sultana bran)
 - Lean meats including: lean chicken pieces, such as diced chicken, skinless chicken breast and thighs; and low fat sausages; Two or more varieties of low fat/ salt dry biscuits (e.g. water crackers, vitaweat, and ryvita);
 - Low fat dairy options (e.g. yoghurts, flavoured milk, cheese); and low fat evaporated milk and low fat coconut milk;
 - Plain unsalted nut varieties and unsweetened dried fruit;
 - Low- salt canned vegetable varieties;
 - S26 infant feeding formula ONLY;
 - Variety of baby food for 6 months and over (tinned, screw top, snack pack); and
 - Iron fortified infant cereal (from 6 months e.g. Farex).
5. That the water chillers outside each Mai Wiru store be fixed and regularly maintained and promoted.
6. That supply of only one popular (generic) brand may be preferable for some items (e.g. Black and Gold sugar, flour, powdered milk and evaporated milk).

7. That the following practices be continued in all Mai Wiru stores. Continue to:
 - Provide healthy ready-to-eat meals and snacks such as sandwiches, salads, casseroles, soups;
 - Provide a wide range of cooking equipment and baby feeding equipment (e.g. bowls, unbreakable spoons, and feeding cups);
 - Promote healthy foods for diabetes and infants;
 - Provide a wide variety of healthy foods including fruit, vegetables, lean meat, fish, milk, cheese, yoghurt, eggs and alternatives such as lentils, beans and whole grain cereal foods such as wholemeal bread, weetbix, rolled oats;
 - Display healthy food prominently in store (e.g. on shelving at eye-level, at end shelves and at checkouts);
 - Provide no promotion of lollies, chocolate or crisps;
 - Ensure good range and variety of infant snacks rusk, yoghurts, cheese sticks; and
 - Provide healthier snack pack alternatives (unflavoured milk, sultanas, cheese, and fruit).
8. That store councils consider:
 - Developing and installing shelf talkers on healthy options; and
 - Increasing availability and promotion of unpackaged fruit and vegetables in relevant stores;

Conclusion

The Mai Wiru stores are doing well with lots of improvements in the availability of healthy foods at very competitive prices. However the relatively low levels of implementation of previous recommendations could be improved in some stores. To help make it easier for store managers to comply with the Mai Wiru Nutrition Policy, the Mai Wiru Store Food and Nutrition handbook may need to be updated and simplified. Store councils may need to do more to ensure that the Mai Wiru Nutrition Policy is implemented in some stores.

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Appendices

Appendix 1: Methods

1.1 Market Basket Price

Food prices were collected manually in each store during the first week of April 2014 using the standard Food Alliance For Remote Australia data collection form. The online Market Basket Price Calculator was then used to tally the costs per food group and total overall cost. Available at:

http://members.ozemail.com.au/~dietinfo/fara/Food_Affordability_Calculator.htm

Composition of the Market Basket:

The items and quantities in the Market Basket were chosen because they meet the recommendations in the Dietary Guidelines for Australians and provide the basic nutrient and energy requirements for a hypothetical family of six for two weeks. The same basket has been used since 1998 to monitor the price of foods in some locations in Australia, including the Northern Territory.

The hypothetical family consists of;

- a grandmother aged 60
- a man aged 35
- a woman aged 33
- a male aged 14
- a girl aged 9
- a boy aged 4

The size (kg) and cost (\$) information of the goods was then calculated accordingly to determine the total cost of the market basket to feed the hypothetical family for 14 days.

The 14 DAY FAMILY FOOD SELECTION contains:

Breads and Cereals

Flour - 4 x 1 kgs packets

Bread - 14 loaves

Weetbix - 1 kg packet

Rolled Oats - 1 kg packet

Long Grain Rice - 1 kg packet

Canned Spaghetti - 7 x 425g cans

Fruit

Apples - 50 apples

Oranges - 55 oranges

Bananas - 55 bananas

Orange Juice - 7 litres

Canned Fruit - 7 x 440g cans

Vegetables

Potatoes - 8 kilograms
Onions - 3 kilograms
Carrots - 4 kilograms
Cabbage - 3 kilograms (1 large)
Pumpkin - 3 kilograms
Fresh Tomatoes - 2 kilograms
Canned Tomatoes - 6 x 420g tomatoes
Canned Peas - 6 x 420g peas
Canned Beans - 7 x 440g beans
Baked Beans - 7 x 425g baked beans

Meat & Alternatives

Corned Beef - 7 x 340g cans
Meat and Vegetables - 7 x 450g cans
Fresh/Frozen meat - 1.5 kgs
Fresh/Frozen Chicken - 1 kg
Eggs, 55's - 1 dozen

Dairy

Powdered Milk - 7 x 1 kgs tins
Cheese - 3 x 250g packet

Discretionary Foods

Margarine - 4 x 500g packets
Sugar - 4 x 1kg packets
Sugar - 1 x 500g packet

1.2 Remote Indigenous Stores and Takeaways (RIST) “How healthy is your store?” Checklist

The Remote Indigenous Stores and Takeaways (RIST) “How healthy is your store?” checklist was developed in 2005 by the SA, WA, NT, QLD, NSW and Australian Government Health Departments and is used to assess a store’s ability to support the supply of healthy foods and also assesses overall store management, promotion and marketing of healthy and unhealthy foods.

While sections of the Mai Wiru policy are similar to that of the RIST checklist, it is important to note that the checklist is used as a National Benchmark for food supply in remote Aboriginal and Torres Strait Islander communities.

The RIST checklist has a total of 40 items, categorized into: Nutrition, Management and Promotion and Marketing. The RIST checklist is available at: <http://www.healthinonet.ecu.edu.au/health-risks/nutrition/resources/rist>.

1.3 Nutrition Recommendation Checklist for Mai Wiru stores

The recommendation checklist was created specifically in order to assess the level of implementation of previous recommendations made by Nganampa Health nutritionist since December 2012 to assist Mai Wiru stores to comply with the Mai Wiru Nutrition Policy. A copy of the checklist has been provided below.

| Items to check: | Y | N | Comments |
|--|---|---|--|
| Not recommended | | | |
| 1. Golden Award margarine stocked? (yes/no) | | | |
| 2. LOL carbonated fruit juice stocked? (yes/no) | | | |
| 3. Golden Circle pineapple in syrup stocked? (either/both) | | | <input type="checkbox"/> Pieces <input type="checkbox"/> Slices |
| 4. Fruit juice drinks stocked? (yes/no) | | | <input type="checkbox"/> Fruit Box <input type="checkbox"/> Golden Circle |
| 5. Chocolate baby custard stocked? (yes/ no) | | | |
| 6. Large sizes of 99% fruit juice stocked? (yes/ no) | | | <input type="checkbox"/> 250mL <input type="checkbox"/> 500mL <input type="checkbox"/> 1L <input type="checkbox"/> 2L |
| 7. Sweetened soft drink/mineral water stocked? (yes / no) → provide percentage of proportion of large to small varieties | | | <input type="checkbox"/> 375mL <input type="checkbox"/> 600mL <input type="checkbox"/> 1.25L <input type="checkbox"/> 2L <input type="checkbox"/> Other |
| | | | <input type="checkbox"/> Coke |
| | | | <input type="checkbox"/> Sprite |
| | | | <input type="checkbox"/> Fanta |
| | | | <input type="checkbox"/> Lift |
| | | | <input type="checkbox"/> |
| | | | <input type="checkbox"/> |
| | | | <input type="checkbox"/> |
| | | | <input type="checkbox"/> |
| 8. Sports drinks stocked? (yes/no) | | | <input type="checkbox"/> Gatorade <input type="checkbox"/> Powerade <input type="checkbox"/> Other: |
| 9. Energy drinks stocked? (yes/ no) | | | <input type="checkbox"/> Redbull <input type="checkbox"/> <input type="checkbox"/> Other <input type="checkbox"/> Other: |
| 10. Infant feeding equipment stocked? (yes/ no) | | | <input type="checkbox"/> Breakable spoons |
| 11. Farex stocked? (yes/ no) | | | <input type="checkbox"/> From 4 months |
| 12. Baby foods stocked? (yes/ no) | | | <input type="checkbox"/> Tinned puréed from 4 months <input type="checkbox"/> Screw top puréed from 4 months <input type="checkbox"/> Meat <input type="checkbox"/> Vegetable <input type="checkbox"/> Fruit |

| Items to check: | Y | N | Comments |
|---|---|---|----------|
| Recommended | | | |
| 13/Small milk drinks stocked? (yes/ no) – | | | |
| 14. Snack packs stocked? | | | |

| | | | |
|---|--|--|---|
| (yes/ no) | | | |
| 15. Baby foods stocked? (yes/ no) | | | <input type="checkbox"/> Tinned puréed from 6 months <input type="checkbox"/> Screw top puréed from 6 months <input type="checkbox"/> Meat <input type="checkbox"/> Vegetable <input type="checkbox"/> Fruit |
| 16. Farex stocked? (yes/ no) | | | <input type="checkbox"/> From 6 months |
| 17. Infant formula stocked? (yes/ no) (only S26 stocked) | | | <input type="checkbox"/> S26 (60 ml :1 scoop) |
| 18. Access to water chiller? (yes/ no) | | | <input type="checkbox"/> Water chiller broken <input type="checkbox"/> None present |
| 19. Are snacks suitable for infants stocked? (yes/ no) Yes = 2 + items No = <2 items | | | <input type="checkbox"/> Cheese sticks <input type="checkbox"/> Rusks <input type="checkbox"/> Low-salt crackers <input type="checkbox"/> Small yoghurt <input type="checkbox"/> Other |
| 20. Infant feeding equipment stocked? (yes/ no) yes = spoons and drinking cups | | | <input type="checkbox"/> Drinking cups <input type="checkbox"/> Bowls <input type="checkbox"/> Non-breakable spoons <input type="checkbox"/> Other |
| 21. Cooking equipment being stocked? (yes/ no) yes = 4+ items | | | <input type="checkbox"/> Pots <input type="checkbox"/> Vegetable peeler <input type="checkbox"/> Pans <input type="checkbox"/> Mixing spoon <input type="checkbox"/> Cutting knives <input type="checkbox"/> Whisk <input type="checkbox"/> Tongs <input type="checkbox"/> Cutlery <input type="checkbox"/> Other |
| 22. Low-salt/no salt canned vegetables stocked? (yes/ no) Yes = 120mg/ 100g | | | |
| 23. Low fat, lower salt dry biscuits stocked? (yes/ no) yes = 2 +varieties | | | <input type="checkbox"/> Water crackers Cruskt, ryvita, vita wheat (option to stock) |
| 24. Are there low sugar cereal options? (yes/ no) yes = 3+ varieties | | | <input type="checkbox"/> Weetbix <input type="checkbox"/> Rolled oats <input type="checkbox"/> Sultana Bran <input type="checkbox"/> Unsweetened muesli <input type="checkbox"/> Oatmeal porridge <input type="checkbox"/> All Bran |
| 25. Presence of healthy ready-to-eat snacks/meals (yes/ no) yes = 2+ varieties | | | <input type="checkbox"/> Lean roasted meat <input type="checkbox"/> Sandwiches <input type="checkbox"/> Lean roasted poultry <input type="checkbox"/> Stews <input type="checkbox"/> Curries <input type="checkbox"/> Soups <input type="checkbox"/> Salads <input type="checkbox"/> Other |
| 26. Water displayed prominently in store? (yes/ no) yes = out of all cabinets water is very visual | | | |
| 27. Healthy foods for diabetics displayed in store? (yes/ no) yes = visual display, comment if poster was present | | | |
| 28. Healthy foods for infants displayed in store? (yes / no) yes = poster → comment on location | | | |

| | | | | | | | |
|--|--|--|---|-------|-------|----|-------|
| 29. Artificially sweetened soft drinks displayed prominently in store? (>50% AS soft drinks in cabinets) | | | | | | | |
| 30. Large sizes of diet soft drinks and water stocked? Yes/no Calculate the proportion of large diet soft drink to large soft drink (>50%) | | | | 600mL | 1.25L | 2L | Other |
| | | | Water | | | | |
| | | | Coke | | | | |
| | | | Sprite | | | | |
| | | | Fanta | | | | |
| | | | Lift | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 31. Only lean chicken pieces stocked? | | | <input type="checkbox"/> Skinned breast <input type="checkbox"/> Skinned leg <input type="checkbox"/> Other | | | | |
| 32. Fruit juices (<250mL) stocked? | | | <input type="checkbox"/> 200mL <input type="checkbox"/> 125mL <input type="checkbox"/> 100mL | | | | |
| 33. Low fat evaporated milk stocked? (yes/no) | | | | | | | |
| 34. Reduced fat coconut milk stocked? (yes/no) | | | | | | | |
| 35. Supply of 'Black and Gold' brands? (yes/no) Comment on staple items | | | <input type="checkbox"/> Sugar <input type="checkbox"/> Flour <input type="checkbox"/> Sweet biscuits <input type="checkbox"/> Other | | | | |
| 36. Reduced fat meat options stocked? (yes/no) | | | <input type="checkbox"/> Sausages <input type="checkbox"/> Tinned meat stews <input type="checkbox"/> Other | | | | |
| 37. Healthy bread options stocked? Yes/ no | | | <input type="checkbox"/> Wholegrain <input type="checkbox"/> Wholemeal | | | | |

1.4 One Pot Recipe Cooking Demonstrations

For ease and appropriateness one pot recipes were selected to prepare on the APY Lands. Two recipes were chosen: Tomato chicken curry with rice and vegetables and Creamy Tuna Mornay with pasta and vegetables. The recipes follow on separate pages.



One Pot Tuna Mornay



| You need: |  Canned tuna (425g) |  Onion |  Mixed frozen veg (500g) |  Vegetable Oil |  Chicken Stock |  Milk Powder |  Garlic |
|-----------|--|---|--|---|---|---|--|
| 5 people | 1 tin | 2 | 1 bag | 1 table spoons | 1 cup | 1 | 2 cloves |
| 10 people | 2 tins | 4 | 2 bags | 2 table spoons | 2 cup | 2 | 4 cloves |
| 15 people | 3 tins | 6 | 3 bags | 3 table spoons | 3 cup | 3 | 6 cloves |

Steps:



1 Heat oil in pot.
Add chopped
onions and garlic



3 Add the vegetables and
chicken stock



2 Add tuna and stir-fry,
breaking up the tuna until
beginning to brown



4 Add the milk powder
and continue to stir until
the mixture thickens.
Serve with boiled pasta

Tips

- ✓ Use fresh, tinned or frozen vegetables.



One Pot Chicken Curry



| You need: |  |  |  |  |  |  |  |
|------------------|--|--|---|--|--|--|--|
| 5 people | 1 pack | 2 | 1 bag | 1 table spoons | 2 | 1 | 2 cloves |
| 10 people | 2 packs | 4 | 2 bags | 2 table spoons | 4 | 2 | 4 cloves |
| 15 people | 3 packs | 6 | 3 bags | 3 table spoons | 6 | 3 | 6 cloves |

Steps:



1
Cut the chicken into small pieces. Peel and chop apples, onions and garlic.



2
Put chicken into your pot and cook until browned.



3
Place apples, onions, mixed veggies, tomatoes, curry powder and garlic into a large saucepan. Sprinkle with pepper.



4
Bring to the boil slowly and cook over a low heat. Serve with rice.

Tips

- ✓ Use fresh, tinned or frozen vegetables.
- ✓ Add some sultanas for extra flavour.

1.5 Nutrition Displays

The previous Store Turnover by the Nganampa Health Nutritionist was used to help identify the nutrient poor foods sold in the Mai Wiru stores that contributed the most to overall energy intake. Sugar was highest contributor in all five Mai Wiru stores and therefore was selected as the topic of the in-store displays. The displays were very visual and practical in order to help ensure they were easily understood by the entire community. High-added sugar products were covered with the relevant number of sugar sachets. For example Nutri Grain had 19 sachets stuck to it to represent the 99 grams of sugar per box.



Items that could be purchased as substitutes for these high added sugar items were also included in the displays. For example sugar sweetened soft drinks and diet soft drinks contained no sugar (suga wiya) which helped demonstrate the large difference in sugar content between these drinks and sweetened varieties.

1.6 Nutrition Posters

Posters visually representing (using teaspoons) the amount of sugar and fat in popular takeaway, snack, breakfast and dinner options were placed in each store visited on the APY Lands.

