

## DEPARTMENT OF HEALTH AND COMMUNITY SERVICES

www.nt.gov.au

Health Services Division
AANT,
79-81 Smith Street, Darwin
Postal address PO Box 40596
Casuarina NT 0811
Tel 08 8985 8052
Fax 08 8985 8054
jenny.cleary@nt.gov.au

Our ref DD2008/1883

Mr Graham Samuel Australian Competition and Consumer Commission PO Box 1199 DICKSON ACT, 2602

#### Dear Mr Samuel

The Northern Territory (NT) Department of Health and Community Services (DHCS) welcomes the ACCC inquiry into grocery prices and would like to encourage the ACCC to ensure that the enquiry encompasses remote and rural areas.

The DHCS conducts an annual survey of remote community stores in the Northern Territory to monitor food cost, availability, variety and quality. The survey was first conducted in 1998 and a major component of the survey involves costing a basket of foods that meets the average energy and recommended nutrient needs of a hypothetical family of six people for a fortnight. Similar surveys have also been conducted by state health departments in Queensland and South Australia, and in 2007 the Cancer Council of New South Wales surveyed 150 stores throughout NSW.

#### The 2007 NT Market Basket Survey found that:

- the average cost of the basket of goods was \$642 in remote community stores and \$534 in major district centre supermarkets
- since the survey was first conducted in 1998 the cost of the basket has risen in line with the Consumer Price Index (CPI) in remote stores
- the cost of the basket of foods was 17% higher in remote stores than in a Darwin supermarket, this differential was markedly lower than in previous years, when the difference ranged from 27% to 41%
- on average eight varieties of fresh fruit and fifteen varieties of fresh vegetables were available in remote stores.

It is well recognised that Aboriginal people living in remote areas suffer from high rates of chronic, lifestyle related diseases and that poor nutrition is a major contributor to this ill health. It is therefore of great concern that Aboriginal people living in remote areas, who are mostly of low socioeconomic status, are paying more for basic food items to feed their families and don't have equal access to the variety of fruit and vegetables that is available to people living in urban areas.

Attached is a copy of the 2007 Northern Territory Market Basket Survey. Should you wish to discuss the findings from the survey please contact Carrie Turner, Nutrition Project Officer on (08) 8985 8021 (email carrie.turner@nt.gov.au).

Yours sincerely

**JENNY CLEARY** 

Assistant Secretary, Health Services

**S** March 2008



**Nutrition and Physical Activity** 



NORTHERN TERRITORY Market Basket Survey 2007

DEPARTMENT OF HEALTH AND COMMUNITY SERVICES

# NT Market Basket Survey 2007

#### **ACKNOWLEDGEMENTS**

Without the assistance of Community Councils and Store Managers, Managers of supermarkets and local corner stores, the Market Basket Survey could not have been undertaken. We thank you for your cooperation and assistance.

We would also like to thank the Nutritionists, Aboriginal Nutrition Workers, Aboriginal Health Workers, and other community members involved for their assistance in surveying stores.

#### **Disclaimer**

ISBN 9780 646 48284

This is general information, correct at the time of publication to the best of our knowledge.

© November 2007 - Department of Health and Community Services, Northern Territory Government

This work is copyright. It may be re-produced in whole or part subject to inclusion of an acknowledgment of the source and on the condition it is not used for commercial purposes or offered for sale. Reproduction for purposes other than those indicated above require the written permission of the Northern Territory Government through Department of Health and Community Services. Inquiries should be addressed to the Director, Department of Health and Community Services, Legal Branch, PO Box 40596, Casuarina NT 0811

## CONTENTS

EXECUTIVE SUMMARY	1
1. BACKGROUND	2
2. RESULTS	4
2.1. 2007 Survey	4
2.2. Cost compared to last year's survey	10
2.3. Comparison of surveys 1998 - 2007	11
3. DISCUSSION	16
4. SUMMARY	18
5. REFERENCES	19
APPENDICES	20
Appendix A: Foods in the Market Basket Survey	21
Appendix B: Fortnightly Income for Hypothetical Family of Six – 2007*	22
Appendix C: Survey results of the 2007 Market Basket Survey by district and community	23
LIST OF TABLES	
Table 1: Ownership/Management characteristics in remote stores	4
Table 2: Employment characteristics of community stores	4
Table 3: Comparison of the range of fresh fruit and vegetables available in remote stores	5
Table 4: Comparison of the quality of fresh fruit available in remote stores	5
Table 5:         Comparison of the quality of fresh vegetables available in remote stores	5
Table 6: Availability of items in the food basket in remote stores	6
Table 7: Average cost of food basket in remote stores	6
Table 8: Cost of food basket in district centre supermarkets and corner stores	7
Table 9: Comparison (in percent) of the cost of the food basket in remote stores	
(averaged) with a Darwin supermarket and Darwin corner store	8
Table 10: Changes (in percent) in food prices in remote stores from 2004 - 2007	10
Table 11: Changes (in percent) in food prices in district centre supermarkets from 2004 - 2007	10

#### LIST OF FIGURES

Figure 1:	Location of stores surveyed and cost of food basket in each district	. 3
Figure 2:	Average cost of the food basket and population of community	. 9
Figure 3:	Relationship between cost of food basket and income in remote communities compared to Darwin	. 9
Figure 4:	Average number of varieties of fresh fruit and vegetable in remote stores 1998-2007	11
Figure 5:	Average cost of food basket in remote stores 1998 – 2007	12
Figure 6:	Cost of food basket in district centre supermarkets 1998 – 2007	13
Figure 7:	Cost of basket of foods in remote stores and Darwin supermarket 1998-2007	14
Figure 8:	Percent of income needed to buy the food basket for family at Darwin supermarket and remote store	14
Figure 9:	Cost of basket of foods in remote stores and Darwin supermarket compared to  Consumer Price Index (CPI)	15

#### EXECUTIVE SUMMARY

- Sixty-seven rural and remote stores in the Northern Territory (NT) were surveyed between April
  and June 2007.
- A standard basket of foods was priced in each of the stores. This basket is sufficient to provide foods for a hypothetical family of six for a fortnight. A major supermarket and corner store in each of the district centres were surveyed for comparison of prices.
- In addition to price, information was also collected on availability and variety of selected healthy
  food items, quality of fresh fruit and vegetables, store ownership, employment characteristics and
  other store management practices.
- The average cost of foods was \$642 in remote stores, \$578 in district centre corner stores and \$534 in district centre supermarkets.
- Barkly remote was the most expensive district (\$758) and Alice Springs remote the least expensive district (\$614).
- On average, the cost of the food basket in remote stores was 17 per cent more expensive than the Darwin supermarket, and 20 per cent more expensive than the Darwin corner store.
- The cost of the food basket increased by 2 per cent in remote stores and increased by 2 per cent in district centre supermarkets compared to the same period last year.
- The percent of family income required to purchase the basket of foods was 30 percent in a Darwin supermarket, this was an increase from the 2006 survey were the percent of income was 28 per cent.
- The percent of family income required to purchase the basket of foods was 35 per cent in remote stores, this was a decrease from the 2006 survey were the percent of income was 36 per cent.
- 64 percent of people employed in remote community stores were Aboriginal.
- The average number of fresh fruit choices available in remote stores was 8 compared to 7 in 2006.
- The average number of fresh vegetable choices available in remote stores was 15 compared to 14 in 2006.
- On average 96 per cent of items in the food basket were available, or usually available, in the remote stores surveyed.

#### 1. BACKGROUND

Poor nutrition is a major contributor to the ill health of Aboriginal people living in remote communities. It has been estimated that approximately 95 per cent of the foods eaten in remote Aboriginal communities are purchased from the community store<sup>1</sup>. Community stores are therefore key players in eliciting and sustaining improvements in the health of Aboriginal people living in remote areas.

In 1995 the NT Department of Health and Community Services developed the NT Food and Nutrition Policy. One of the strategies identified in this policy was to develop a tool (the "Market Basket Survey") to monitor food cost, availability, variety and quality in remote community stores. The Market Basket Survey also enables information to be collected on: store management, employment of Aboriginal people, existence of a store nutrition policy, community development initiatives by the store such as sponsorship and donations, nutrition promotions and store worker training. The first Territory wide survey of remote stores was carried out in 1998 when 45 stores were surveyed<sup>2</sup>.

The survey includes a basket of foods which meets the average energy and recommended nutrient needs of a hypothetical family of six people for a fortnight. The family was chosen to represent a cross-section of people who had important nutrient requirements because of their age and sex. The family consists of:

- a grandmother aged 60 years
- a man aged 35 years
- a woman aged 33 years
- a male aged 14 years
- a girl aged 8 years
- a boy aged 4 years.

The foods that make up the basket to feed this family are shown in *Appendix A*. Model C from the Core Food Groups<sup>3</sup> was used to determine the quantities of each food required to provide 100 per cent of the family's nutrient requirements and 95 per cent of the family's energy requirements for a fortnight.

The actual selection of brands and sizes was made by consultation with the leading grocery suppliers in the Northern Territory and with input from nutritionists regarding their observations in communities. The most commonly sold items were ones included in the 'basket'.

As part of the survey, a major supermarket and corner store in each of the district centres is also surveyed for comparison of prices. The corner store is a small suburban supermarket that provides a benchmark store with a more similar buying power to the remote stores.

The income for the hypothetical family was determined by obtaining Centrelink and Family Assistance figures from the Centrelink website. Details of the family's income are shown in *Appendix B*.

Supermarket \$600 Corner Store N/A Supermarket \$5 Nhulunbuy Corner Store \$53 Darwin Darwin ast Arnhem District Average ct Average \$662 Supermarket \$518 Corner Store \$537 Katherine District Average \$629 Barkly District Average \$758 Supermarket \$512 Tennant Corner Store \$645 Creek Alice Springs District Average \$614 Alice Supermarket \$488 Corner Store \$541 Legend District CentreCommunity Surveyed Major Road

NT remote community store average \$642

Figure 1: Location of stores surveyed and cost of food basket in each district.

#### 2. RESULTS

#### 2.1 2007 Survey

Sixty seven remote stores were surveyed between April and June 2007. *Figure 1* on the previous page illustrates the locations of the stores surveyed and the average cost of the basket of foods in each district.

**Table 1:** Ownership/Management characteristics in remote stores.

	Darwin District	Katherine District	East Arnhem District	Alice Springs District	Barkly District	Total all Districts					
*Ownership											
Community owned	10	8	4	17	1	40					
Privately owned	1	8	1	3	5	18					
Aboriginal Corporation eg ALPA	1	1	4	0	0	6					
Leased from community	1	0	0	0	1	2					
Not recorded	1	0	0	0	0	1					
Total Stores Surveyed	14	17	9	20	7	67					
*Management Charact	*Management Characteristics										
Store Committee	8	9	6	12	2	37					
Nutrition Policy	2	5	7	4	1	19					

- 60 per cent of stores surveyed were owned and operated by the community.
- There was little change in ownership/management characteristics compared to last year's survey.
- 28 per cent of stores stated that they had a Nutrition Policy although these were not cited for confirmation.
- 55 per cent of stores surveyed had a Store Committee.

**Table 2:** Employment characteristics in remote stores

	1	I		ı		
	Darwin	Katherine	East	Alice Springs	Barkly	Total all
	District	District	Arnhem	District	District	Districts
			District			
Stores with Aboriginal	13	10	8	16	4	51
employees						
Number of Aboriginal	105	65	127	46	8	351
employees						
Total employees	161	108	154	104	24	551
Percent Aboriginal employees	65%	60%	82%	44%	33%	64%
Total Stores Surveyed	14	17	9	20	7	67

- 64 per cent of employees in the remote stores surveyed were Aboriginal.
- The proportion of Aboriginal employees was lowest in the Alice Springs and Barkly districts.
- The proportion of Aboriginal employees was greatest in East Arnhem stores where Aboriginal people made up
   82 per cent of the workforce in stores.

\*Note: Store Managers were asked about ownership of the store, and if they had a Nutrition Policy, and / or Store Committee. At the time the surveys were undertaken it was not stipulated what constituted a 'policy', a 'committee', or exactly how 'ownership' was to be defined. Therefore, in reading this report the information about Nutrition Policy, Store Committee and ownership are based on the information supplied. Further work needs to be done to define these terms to avoid misinterpretation

#### Variety and quality of fruit and vegetables

**Table 3:** Comparison of the range of fresh fruit and vegetables available in remote stores.

	Darwin District	Katherine District	East Arnhem District	Alice Springs District	Barkly District	A <b>ll</b> Districts
Average number fresh fruit choices	9	8	10	8	5	8
Range (Lowest - Highest)	3 – 17	1 – 16	2 – 16	0 – 17	1 – 12	0 – 17
Average number of fresh vegetable choices	18	15	15	13	11	15
Range (Lowest - Highest)	11 – 25	7 – 21	2 – 22	3–31	3 – 19	1 – 31
Total stores surveyed	14	17	9	20	7	67

- On average there were 8 different choices of fresh fruit and 15 different choices of fresh vegetables in remote stores.
- Information was not collected on the quantities of fruit and vegetables available.
- All stores had fresh vegetables available on the day of survey; one store had no fresh fruit available on the day of survey.

**Table 4:** Comparison of the quality of fresh fruit available in remote stores.

	Darwin	Katherine	East Arnhem	Alice Springs	Barkly District	All Districts
	District	District	District	District	-	
Good	83%	89%	96%	91%	97%	90%
Fair	14%	7%	2%	8%	3%	8%
Poor	2%	3%	_	-	-	1%
Rotten	1%	-	_	-	-	<1%
Not recorded	-	-	2%	<1%	-	<1%

**Table 5:** Comparison of the quality of fresh vegetables available in remote stores.

	Darwin District	Katherine District	East Arnhem District	Alice Springs District	Barkly District	All Districts
Good	86%	87%	96%	85%	96%	88%
Fair	14%	11%	3%	14%	3%	10%
Poor	<1%	2%	-	1%	1%	1%
Rotten	-	-	-	<1%	-	<1%
Not recorded	-	-	1%	<1%	_	<1%

- Overall 90 per cent of fresh fruit and 88 per cent of fresh vegetables were 'good' on the day of survey.
- East Arnhem and Barkly districts had the highest proportion of 'good' fresh fruit on the day of survey.
- East Arnhem and Barkly districts had the highest proportion of 'good' fresh vegetables on the day of survey.

Due to the rounding of numbers, percentages shown in the tables 4 and 5 do not total 100% in some instances.

NB. Rating quality of fresh food is difficult and very much dependent on the opinion of those undertaking the survey. Descriptive tables were included on the survey sheets to help reduce the variance amongst those undertaking the survey.

#### District centre costs compared with remote store costs

Comparison of the cost of the food basket in different communities needs to be done carefully. It must be noted that in order to estimate the cost of a similar basket of goods for all communities it was necessary to 'cost' items even when they were not available in the community store. In cases when an item was not available in the remote store, the price of that item at the district supermarket was used. Consequently, stores that have a higher proportion of "missing" or unavailable items are likely to have a cheaper total basket of goods because the supermarket cost is used. If an item was out of stock but was usually carried by the store, the store price of that item was included in the survey. Thus the term 'availability' in the table below refers to the availability of a *price* from the store, not necessarily the availability of the item on the day of the survey.

**Table 6:** Availability of items in the food basket in remote stores.

	Darwin District	Katherine District	East Arnhem District	Alice Springs District	Barkly District	NT Average
Average availability of items in the food basket	95%	95%	97%	96%	94%	96%
Range (lowest - highest)	88 - 100%	83 - 100%	80 - 100%	90 - 100%	78 - 100%	78 - 100%
Number of stores with 100% of items	2	7	6	5	2	21
Total stores surveyed	14	17	9	20	7	67

- On average 96 per cent of items listed in the basket were available, or usually available, in the remote stores.
- 31 per cent (21) of the 66 remote stores surveyed had, or usually had, all the listed items on their shelves at the time of the survey.

**Table 7:** Average cost of food basket in remote stores.

	Darwin	Katherine	East Arnhem	Alice Springs	Barkly	NT Remote
	District	District	District	District	District	Store
						Average
Bread & Cereals	\$103	\$102	\$107	\$96	\$114	\$103
Fruit	\$163	\$158	\$168	\$157	\$205	\$165
Vegetables	\$139	\$134	\$145	\$139	\$157	\$140
Meat & alternative	\$95	\$99	\$106	\$99	\$112	\$100
Dairy	\$100	\$106	\$108	\$98	\$139	\$106
Other foods	\$28	\$29	\$29	\$26	\$31	\$28
Total Basket	\$628	\$629	\$662	\$614	\$758	\$642
Number of Stores	14	17	9	20	7	67

- The average cost of the basket of foods ranged from \$614 in the Alice Springs district to \$758 in the Barkly district.
- The average cost of the basket of foods in all remote stores surveyed was \$642.

NB Due to rounding of numbers the sum of food groups does not equal the total basket cost in some instances in *table 7*.

**Table 8:** Cost of food basket in district centre supermarkets and corner stores.

	Darwin	Katherine	East	Alice	Barkly	NT
			Arnhem	Springs		Average
Bread & Cereals						
Supermarket	\$91	\$90	\$88	\$84	\$72	\$85
Corner store	\$92	\$100	-	\$84	\$96	\$93
Fruit	,			,	,	
Supermarket	\$158	\$138	\$175	\$130	\$162	\$153
Corner store	\$134	\$154	ψ17 G	\$154	\$220	\$166
Vegetables	Ψ.σ.	Ψίσι		Ψίσι	Ψ	<b>4.00</b>
Supermarket	\$110	\$104	\$121	\$100	\$108	\$109
Corner store	\$137	\$124	Ψ121	\$110	\$127	\$125
Meat & alternative	Ψ137	Ψ124	_	ΨΠΟ	Ψ121	Ψ123
	<b>Ф</b> 70	Ф <b>7</b> 4	<b>ФО</b> 7	<b>#</b> CO	<u></u>	¢76
Supermarket	\$78	\$71	\$87	\$68	\$75	\$76
Corner store	\$67	\$86	-	\$75	\$94	\$81
Dairy						
Supermarket	\$95	\$95	\$106	\$88	\$74	\$92
Corner store	\$83	\$99	-	\$96	\$92	\$93
Other foods						
Supermarket	\$19	\$19	\$22	\$18	\$22	\$20
Corner store	\$23	\$27	- -	\$22	\$17	\$22
Total Basket	<del>-</del> -	7		Ţ	т : :	·
Supermarket	\$550	\$518	\$600	\$488	\$512	\$534
-	•	,	ΨΟΟΟ		•	
Corner store	<b>\$537</b>	\$589	•	\$541	\$645	\$578

#### **Supermarket**

- The average cost of the basket in the supermarkets was \$534.
- East Arnhem had the most expensive supermarket food basket (\$600) and Alice Springs had the cheapest (\$488).

#### **Corner store**

- The average cost of the basket in the corner stores was 8 per cent higher in the corner stores than the district centre Supermarkets (\$578 compared to \$534).
- Barkly had the most expensive corner store food basket (\$645) and Darwin had the cheapest (\$537).
- The corner store in East Arnhem was not surveyed as the manager declined to participate in the survey.

NB. Due to rounding of numbers the sum of food groups does not equal the total basket cost in some instances in *table 8*.

**Table 9:** Percentage increase or decrease in cost of the food basket in remote stores (averaged) compared with a Darwin supermarket and Darwin corner store.

	Darwin Remote	Katherine Remote	East Arnhem Remote	Alice Springs Remote	Barkly Remote	Average- NT Remote Stores
Bread & Cereals						
Supermarket	14%	12%	17%	6%	26%	13%
Corner store	12%	11%	16%	5%	24%	12%
Fruit						
Supermarket	3%	0%	6%	-1%	30%	4%
Corner store	21%	18%	25%	17%	53%	23%
Vegetables						
Supermarket	26%	22%	32%	26%	43%	28%
Corner store	1%	-2%	6%	1%	15%	2%
Meat & alternative						
Supermarket	21%	27%	35%	27%	43%	29%
Corner store	41%	48%	58%	48%	67%	50%
Dairy						
Supermarket	6%	11%	14%	3%	47%	12%
Corner store	21%	28%	30%	18%	68%	28%
Other foods						
Supermarket	50%	50%	54%	36%	62%	47%
Corner store	24%	24%	28%	12%	34%	22%
Total Basket						
Supermarket	14%	14%	20%	12%	38%	17%
Corner Store	17%	17%	23%	14%	41%	20%

- Overall the prices in remote stores were 17 per cent higher than the same basket of goods bought in a Darwin supermarket, and 20 per cent higher than in a Darwin corner store.
- Barkly remote stores were the most expensive, being 38 per cent and 41 per cent higher than the Darwin supermarket and corner store respectively.
- Alice Springs remote stores were the least expensive, being 12 per cent and 14 per cent higher than the Darwin supermarket and corner store respectively.

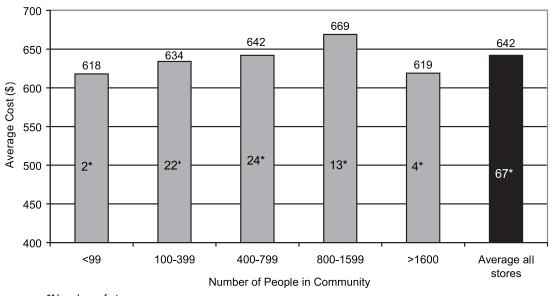
#### Remoteness

The stores surveyed were classified using the ARIA remoteness index<sup>4</sup> to determine the remoteness of the community. The average cost of the food basket in the stores classified as 'very remote' was \$649 (60 stores) and the average cost of the food basket in stores classified as 'remote' was \$568 (5 stores). The remaining two stores were in the 'moderately accessible' category and the average cost at these stores was \$619.

<sup>\*</sup>Please note: the cost of the basket of foods is higher in the Darwin corner store than the Darwin supermarket, refer to table 8 for details.

#### **Population**

Figure 2: Average cost of the food basket and population of community.



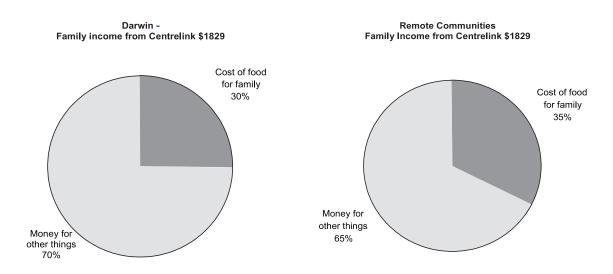
\*Number of stores

Population unknown in some commuities

There was little variation in the cost of the food basket with community size.

#### Relation between family income and the cost of the food basket

**Figure 3:** Relationship between cost of food basket and income in remote communities compared to Darwin.



The above graphs show the amount of money a family of 6 needs to spend on the food basket for two weeks. The family's income has been determined as outlined in *Appendix B*. For every \$100 of income, a family in Darwin spends \$30 on the food basket, whereas a family in a remote community will spend approximately \$35 on the same basket of food.

#### 2.2. Cost compared to last year's survey

**Table 10:** Changes (in percent) in food prices in remote stores from 2006 - 2007.

	Darwin Remote	Katherine Remote	East Arnhem Remote	Alice Springs Remote	Barkly Remote	NT Average
Bread & Cereals	8%	8%	11%	6%	14%	9%
Fruit	-5%	-4%	6%	-12%	-14%	-6%
Vegetables	7%	12%	12%	-2%	-4%	4%
Meat & alternative	2%	5%	-2%	1%	4%	2%
Dairy	0%	-1%	5%	5%	17%	5%
Other foods	5%	14%	5%	-4%	-9%	4%
Total Basket	2%	4%	6%	-2%	-1%	2%

- Overall prices in the remote stores were 2 per cent higher than last year.
- Katherine remote stores had the biggest (4 per cent) price rise of all the districts and the average price decreased by 2 per cent in Alice Springs and Barkly remote stores.
- The fruit portion of the basket decreased by 6 per cent compared to last year.
- The bread and cereal portion of the basket had the greatest increase from last year (9 per cent).

Table 11: Changes (in percent) in food prices in district centre supermarkets from 2006 - 2007.

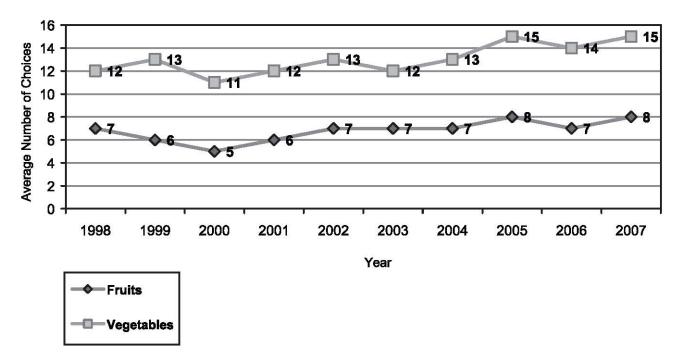
	Darwin	Katherine	East Arnhem	Alice	Barkly	NT Super-
	Supermarket	Supermarket	Supermarket	Springs	Supermarket	markets
				Supermarket		Average
Bread & Cereals	21%	20%	-1%	40%	13%	17%
Fruit	24%	-11%	7%	-24%	9%	0%
Vegetables	12%	5%	10%	-17%	-1%	1%
Meat &	4%	-7%	5%	10%	0%	2%
alternative						
Dairy	-2%	0%	-1%	4%	-24%	-5%
Other foods	19%	12%	10%	6%	10%	11%
Total Basket	12%	0%	5%	-5%	-1%	2%

- The average price of the food basket in district centre supermarkets has increased by 2 per cent from last year.
- The largest increase was in the Darwin Supermarket (12 per cent) and the cost of the basket of goods fell by 5 per cent in the Alice Springs supermarket.
- The increase was greatest in the bread and cereal portion of the basket (17 per cent) and there was a decrease in the dairy portion (-5 per cent).

#### 2.3. Comparison of surveys 1998 - 2007

#### Changes in variety of fresh fruit and vegetables

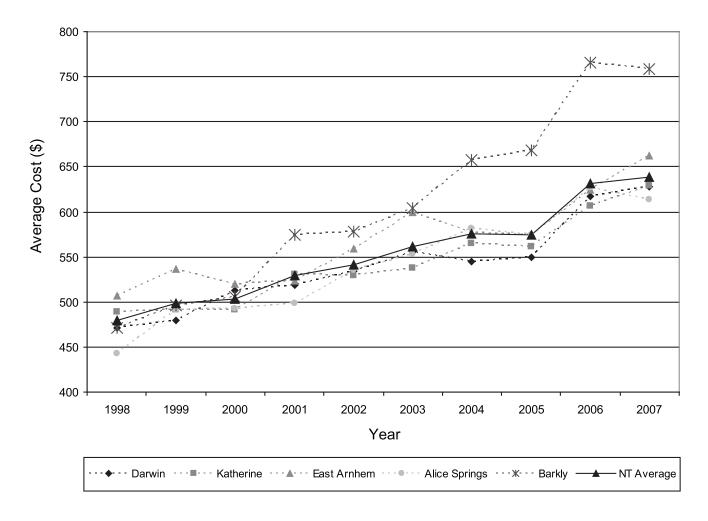
Figure 4: Average number of varieties of fresh fruit and vegetable in remote stores 1998 - 2007.



The average number of varieties of fresh fruit and vegetables available in remote stores was highest in 2005 and 2007 when there were of 15 varieties of vegetables and 8 varieties of fruit available.

#### **Price comparisons**

Figure 5: Average cost of food basket in remote stores 1998 - 2007.



- East Arnhem remote stores were the most expensive from 1998 to 2000. From 2001 through to 2007, Barkly was the most expensive district with a marked increase in 2001, 2004 and 2006.
- The average cost of the basket of foods in remote stores has increased each year except 2005 when there was a small decrease (-1 per cent) compared to the previous survey.
- Overall the cost of the basket of foods increased by 33 per cent (\$479 to \$638) between 1998 and 2007.

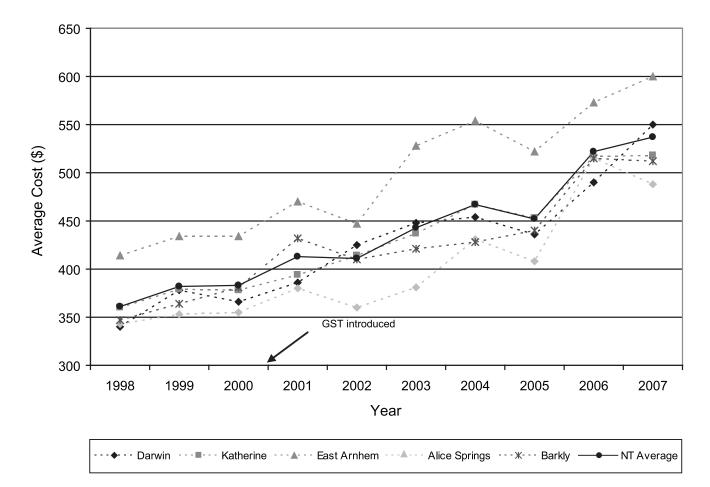


Figure 6: Cost of food basket in district centre supermarkets 1998 - 2007.

- The supermarket surveyed in East Arnhem has been the most expensive supermarket each year.
- 2006 is the only year Darwin had the least expensive supermarket.
- The average cost of the basket in NT supermarkets has risen by 48 per cent (\$361 to \$534) from 1998 to 2007.

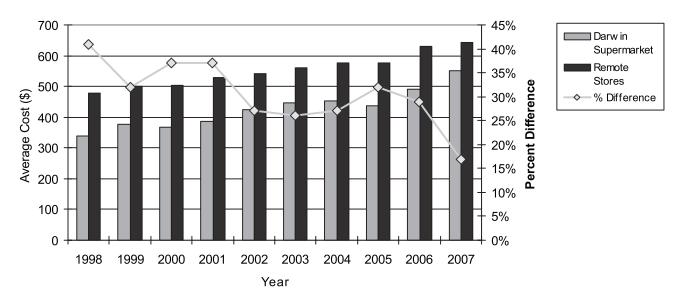
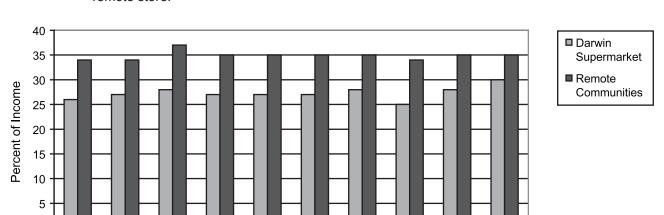


Figure 7: Cost of basket of foods in remote stores compared with Darwin supermarket 1998 - 2006.

- The relative cost of the basket in the remote stores was greatest in 1998 when it was 41 per cent more than the Darwin supermarket.
- In this year's survey the basket was 17 per cent more expensive in remote stores compared with the Darwin supermarket. This is the smallest difference in any of the years surveyed.



**Figure 8:** Percent of income needed to purchase the food basket at Darwin supermarket compared to remote store.

• The proportion of income required to purchase the food basket from a Darwin supermarket was the lowest in 2005 (25 per cent) and highest in 2007 (30 per cent).

2004

2005

2006

2007

2003

Year

• The proportion of income required to purchase the food basket from remote community stores was highest in 2000 (37 per cent) and lowest in 1998, 1999 and 2005 (34 per cent).

0

1998

1999

2000

2001

2002

Average Cost (\$) Year

**Figure 9:** Cost of basket of foods in remote stores and Darwin supermarket compared to Consumer Price Index (CPI).

The cost of the basket of foods is higher in both remote stores and a Darwin supermarket compared to the calculated cost of the basket using annual CPI<sup>5</sup> figures. The difference is small for remote stores and is quite marked for the Darwin supermarket in 2006 and 2007.

Remote Stores Average

Darw in Supermarket

-- Remote Stores +CPI

Darw in Supermarket +CPI

#### 3. DISCUSSION

#### Store characteristics

Community stores provide an important source of employment for people living in remote communities. This survey collects information on the number of people employed only; it does not collect information on the type of employment (eg full time, part time or casual). Community Development and Employment Program (CDEP) or 'top up' money is also utilised in many remote communities to provide employment for Aboriginal people, this survey does not collect information on the number of Aboriginal employees who are employed under this scheme.

The proportion of Aboriginal employees in stores was greatest in the East Arnhem district (82 per cent), where there are a large number of stores owned or managed by Arnhem Land Progress Association (ALPA). ALPA has a policy of employing local Aboriginal people to work in their stores. The proportion of Aboriginal people employed in community stores was lowest in the districts where there are a greater proportion of privately owned/leased stores.

The East Arnhem district also had a high proportion of stores with a nutrition policy and store committees. This is also due to the number of ALPA stores in the region.

#### Fruit and vegetables

There is strong evidence that an adequate intake of fruits and vegetables is protective against diseases such as coronary heart disease, hypertension, type 2 diabetes, stroke and some cancers. Results from national surveys have shown that Australians do not consume the recommended amounts of fruit and vegetables. People living in remote communities in the Northern Territory are faced with higher prices and limited availability of fruits and vegetables that may further compromise intake. For these reasons improving the availability, variety, quality and affordability of fruits and vegetables is a priority identified in both Territory and national nutrition policies and additional data regarding fruit and vegetables is collected in this survey.

The average number of varieties of fresh fruit and vegetables available in remote stores in this survey was eight and fifteen respectively. This is the same number of varieties that were found in the 2005 survey and is the higher than the number of varieties in other years. Whilst there are no recommendations as to the number of varieties of fruit and vegetables that should be available, the Australian Guide to Healthy Eating<sup>6</sup> lists seven different 'groups' of fruits (citrus, tropical, melons, berries, grapes, stone, apples and pears) and six different 'groups' of vegetables (dark green, orange, cruciferous, starchy, salad and legumes). These different types of vegetables and fruits provide more of some types of nutrients than others such as vitamin A, C and folate. The inclusion of variety within the food groups increases the likelihood that one's diet contains all the nutrients required for good health. Further analysis would be required to determine how many stores had at least one variety of fruit or vegetable available in each of these groups.

#### **Basket Costs**

A marked increase in the cost of the basket of foods was found in the 2006 survey; this increase was evident in both district centre supermarkets and remote stores. The major driver of this was an increase in the fruit portion of the basket; due to the high cost of bananas following the destruction of banana crops in Queensland by Cyclone Larry in early 2006. In 2007 there was only a small increase (2 per cent) in remote stores and the cost of the basket is in line with CPI increases. A large increase in the cost of the basket was evident in the Darwin supermarket compared to last year; the fruit portion of the basket was a major contributor to this accounting for 50 per cent of the increase.

The Darwin supermarket and corner store were used as the benchmark for comparing prices in remote community stores in this report. The Darwin stores were chosen because the Darwin region is where the majority of Territorians live, and other states that conduct similar surveys also compare prices in remote stores to their capital city price. Corner stores are small suburban supermarkets that are thought to have a similar buying power to remote stores.

In this survey the cost of the basket of foods was 17 per cent higher in remote stores compared to the Darwin supermarket. This compares favourably with previous surveys where the cost in remote stores has ranged from 26 per cent to 41 per cent higher than the Darwin supermarket; however it is due largely to a marked increase in Darwin supermarket. The average cost of the basket of foods in remote stores compared to the Darwin corner store was 20 per cent higher.

#### Limitations of the survey

When interpreting the results described in the previous section a number of issues must be considered. Firstly, a letter was sent to each store manager prior to the survey period informing them that their store would be surveyed in the coming months, and in some instances the store manager may have been informed of the exact date of survey. Prior notice may have influenced store prices during the survey period. Secondly, it must be remembered that although this survey measures the variety, quality and availability of some healthy food items, it makes no attempt to measure the quantities of these foods available.

#### Comparisons with other surveys

The Northern Territory Treasury conducts a biannual survey of grocery prices in Darwin, Alice Springs, Katherine and Nhulunbuy supermarkets. The Grocery Price Survey for the June half-year 2007 found that Territory supermarket prices were cheapest in Alice Springs and the most expensive in Yulara, Nhulunbuy (East Arnhem) was the second most expensive supermarket. In this survey the Alice Springs supermarket was also the cheapest and the East Arnhem supermarket the most expensive (Yulara not surveyed).

#### 4. SUMMARY

Sixty-seven rural and remote stores were surveyed in the Northern Territory between April and June 2007. These surveys looked at the cost, availability and quality of a 'healthy family basket' of food as well as collecting information on store ownership and management characteristics. Results from the 2007 survey showed that the cost of the healthy basket of foods was, on average, 17 per cent more expensive in remote stores than in a Darwin supermarket. The proportion of income required to purchase the basket of foods has remained similar from 1998 to 2007. The cost of the basket of foods increased by 2 per cent in remote stores and 2 per cent in NT supermarkets from 2006 to 2007. As in previous surveys the majority of available fresh fruit and vegetables from the remote stores surveyed were of good quality.

#### 5. REFERENCES

- 1. Lee AJ, O'Dea K, Mathews JD. Apparent dietary intake in remote Aboriginal communities. *Aust J Publ Health*, 1994: 18(2).
- McComb J, Price R, Priestly J, Freeman J, Trevaskis G, Rogers O, Lion R, Hobson V, Morley T, Cubillo B. Surveys of Food Availability, Quality and Price in Top End Rural and Remote Communities: The Dry Season (April –July 1998). Food and Nutrition Unit, Territory Health Services, 1988.
- 3. National Health and Medical Research Council. The Core Food Groups: The Scientific Basis for Developing Nutrition Education Tools. 1994.
- 4. Information and Research Branch of the Department of Health and Aged Care, and the National Key Centre for Social Applications of Geographical Information Systems, 'Accessibility/Remoteness Index of Australia (ARIA)', Occasional Papers Series No. 6, Canberra, 1999.
- 5. Australian Bureau of Statistics, Consumer Price Index, Australia (Cat. No. 6401.0) ABS, Canberra.
- 6. National Health and Medical Research Council, 'The Australian Guide to Healthy Eating', 2001
- 7. http://www.nt.gov.au/ntt/economics/publications/gps/gps\_2007jun.pdf- Grocery Price Survey June half-year 2007.

#### **APPENDICES**

Appendix A: Foods in the Market Basket Survey

Appendix B: Fortnightly Income for Hypothetical Family of Six

Appendix C: Survey results of the 2007 Market Basket Survey by district and community

#### **Appendix A:** Foods in the Market Basket Survey

#### **Breads and Cereals**

Flour 4 x 1 kgs packets

Bread 14 loaves

Wheat Biscuit Cereal 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

#### Other Foods

Margarine 4 x 500g packets

Sugar 4 x 1kg packets

Sugar 1 x 500g packet

#### **Appendix B:** Fortnightly Income for Hypothetical Family of Six – 2007\*

#### **Grandmother aged 60**

Pharmaceutical Allowance	\$5.80
Remote Area Allowance	\$18.20
Single rate	\$525.10
Father aged 35	
New Start	\$382.80
Remote Area Allowance (includes the children)	\$37.50
Mother aged 33	
Parenting Payment	\$382.80
Family Tax Benefit A	
for two children under 13yrs	\$281.68
for one child 13-15 yrs	\$179.76
Remote Area Allowance	\$15.60
TOTAL	\$1829.24

<sup>\*</sup>Note: The Remote Area Allowance is based on age and marital status, and does not vary according to area of residence in the NT (eg. eligible persons receive the same amount in a remote community as they would in Darwin).

#### Appendix C: Survey results of the 2007 Market Basket Survey by district and community

### **Darwin**

	Store Ownership*	Nutrition policy	Store committee	Aboriginal / non Aboriginal workers	Training In retail	Training in nutrition	Cost of basket	Availability	Fruit (fresh) variety	Fruit (fresh) quality	Fruit price	Vegetable (fresh) variety	Vegetable (fresh) quality	Vegetable price	Population
1	C	yes	yes	6/6	0	0	\$ 535	100%	15	15 good	\$ 137	25	21 good, 4 fair	\$ 118	1043
2	C	no	yes	14/4	2	0	\$ 568	93%	10	6 good, 4 fair	\$ 132	15	12 good, 3 fair	\$ 124	1450
3	C	no	yes	4/4	-	-	\$ 582	88%	12	12 good	\$ 141	21	21 good	\$ 127	2600
4	Not recorded	no	no	0/8	yes	0	\$ 597	98%	6	5 good, 1 fair	\$ 148	14	14 good	\$ 119	400
5	C	no	no	4/1	. 1	?	\$ 601	90%	9	3 good, 6 fair	\$ 159	11	6 good, 5 fair	\$ 130	500
6	C	no	<b>∞</b> =	3/5	0	0	\$ 602	98%	8	7 good, 1 fair	\$ 177	17	16 good, 1 fair	\$ 120	467
7	C	no	yes	3/2	1	0	\$ 622	95%	3	2 good, 1 rotten	\$ 118	16	10 good, 5 fair, 1 poor	\$ 161	241
8	С	no	yes	10/2	0	0	\$ 623	98%	10	7 good, 2 fair, 1 poor	\$ 179	18	13 good, 5 fair	\$ 132	400
9	C	yes	no	15/2	6		\$ 629	100%	10	9 good, 1 poor	\$ 157	22	22 good	\$ 136	335
10	р	no	no	3/-	-	-	\$ 642	93%	13	12 good, 1 fair	\$ 169	19	17 good, 2 fair	\$ 143	360
11	. a	no	yes	21/8	1	0	\$ 648	85%	9	9 good	\$ 158	19	19 good	\$ 140	2600
12	C	no	yes	2/11	11	0	\$ 663	95%	17	15 good, 2 fair	\$ 123	22	18 good, 4 fair	\$ 136	2300
13	C	no	yes	14/1	0	0	\$ 733	95%	4	3 good, 1 poor	\$ 243	12	9 good, 3 fair	\$ 160	1043
14	ĺ	no	no	6/2	0	0	\$ 748	98%	4	3 good, 1 fair	\$ 235	16	14 good, 2 fair	\$ 194	1043

<sup>\*</sup>p = private, c = community, a = aboriginal corporation, I = leased from community

Number of communities with 100-399 people	3		
Number of communities with 400-799 people	4		
Number of communities with 800-1599 people	4		
Number of communities with more than 1600 people	3		
Aboriginal / non Aboriginal workers	105/56		
Number of stores surveyed this year	14	Number of stores surveyed last year	16
Average availability	95%	\$5.202.0355-04.000.2000. 20.00 Displayer 30.40 2011.2011. Hell \$24.00 Blocks 2011.	
Average price	\$628		
Average fruit price	\$163		
Average vegetable price	\$139		

## Katherine

	Store Ownership*	Nutrition policy	Store committee	Aboriginal / non Aboriginal workers	Training in retail	Training in nutrition	Cost of basket	Availability	Fruit (fresh) variety	Fruit (fresh) quality	Fruit price	Vegetable (fresh) variety	Vegetable (fresh) quality	Vegetable price	Population
1	p	no	no	0/4	0	0	\$ 563	100%	8	8 good	\$ 130	18	17 good, 1 fair	\$ 125	279
2	p	no	_	0/1	-		\$ 579	100%	3	3 fair	\$ 141	14	14 good	\$ 135	130
3	. С	no	no	5/3	3	1	\$ 579	98%	9	8 good, 1 fair	\$ 124	16	14 good,1 fair, 1 poor	\$ 117	550
4	C	no	yes	6/0	2	0	\$ 584	85%	1	1 good	\$ 142	9	7 good, 2 fair	\$ 114	251
5	C	no	yes	6/8	0	0	\$ 584	93%	13	12 good, 1 fair	\$ 179	21	20 good, 1 fair	\$ 112	1940
6	С	yes	yes	6/1	4	0	\$ 593	100%	10	10 good	\$ 153	18	17 good, 1 fair	\$ 118	N/A
7	C	yes	yes	13/2	11	1	\$ 598	95%	10	9 good, 1 poor	\$ 159	21	18 good, 2 fair, 1 poor	\$ 121	400
8	C	yes	yes	11/11	2	2	\$ 600	100%	9	8 good, 1 fair	\$ 151	18	17 good, 1 fair	\$ 121	790
9	p	no	no	0/4	0	0	\$ 603	95%	3	2 good, 1 fair	\$ 154	8	6 good, 2 fair	\$ 141	650
10	a	yes	no	7/1	4	0	\$ 606	100%	14	14 good	\$ 139	21	21 good	\$ 130	150
11	C	no	yes	2/2	0	0	\$ 624	85%	2	1 good, 1 fair	\$ 159	11	2 good, 7 fair, 2 poor	\$ 121	100
12	C	yes	yes	6/1	2	1	\$ 639	95%	8	5 good, 3 poor	\$ 143	13	12 good, 1 fair	\$ 127	450
13	р	no	yes	0/2	<b>=</b> %	₩8	\$ 661	100%	10	9 good, 1 fair	\$ 185	12	12 good	\$ 142	261
14	P	-	-	-	=:	=:	\$ 667	100%	16	16 good	\$ 154	18	16 good, 2 fair	\$ 146	903
15	p	-	-	<u> </u>	<b>3</b> 0	(12.7%) 25.7%	\$ 693	98%	7	6 good, 1 fair	\$ 190	18	12 good, 5 fair, 1 poor	\$ 140	903
16	р	no	no	0/1	0	0	\$ 721	95%	4	4 good	\$ 153	10	9 good, 1 fair	\$ 179	328
17	. о	no	yes	3/2	0	0	\$ 803	83%	6	6 good	\$ 234	7	7 good	\$ 197	231

<sup>\*</sup>p = private, c = community, a = aboriginal corporation, | = leased from community

Number of communities with less than 99 people	0		
Number of communities with 100-399 people	8		
Number of communities with 400-799 people	5		
Number of communities with 800-1599 people	2		
Number of communities with >1600 people	1		
Aboriginal / non Aboriginal workers	65/43		
Number of stores surveyed this year	17	Number of stores surveyed last year	15
Average availability	95%	• Property Control (1997)	
Average price	\$629		
Average fruit price	\$158		
Average vegetable price	\$134		

## **East Arnhem**

	Store Ownership*	Nutrition policy	Store committee	Aboriginal / non Aboriginal workers	Training In retail	Training In nutrition	Cost of basket	Availability	Fruit (fresh) variety	Fruit (fresh) quality	Fruit price	Vegetable (fresh) variety	Vegetable (fresh) quality	Vegetable price	Population
1	С	no	yes	3/1	no	no	\$ 562	80%	2	2 not recorded	\$ 129	2	2 not recorded	\$ 124	220
2	а	yes	yes	24/3	yes	yes	\$ 615	100%	15	14 good, 1 fair	\$ 151	21	21 good	\$ 130	1000
3	а	yes	yes	23/2	-		\$ 616	100%	16	15 good, 1 fair	\$ 130	22	22 good	\$ 134	707
4	а	yes	yes	27/2	-		\$ 625	98%	10	10 good	\$ 152	18	15 good, 3 fair	\$ 127	1000
5	а	yes	yes	40/3	yes	yes	\$ 651	100%	15	15 good	\$ 155	20	20 good	\$ 125	450
6	С	yes	yes	6/7	2	0	\$ 663	100%	7	7 good	\$ 200	10	10 good	\$ 127	799
7	С	yes	yes	2/9	5	5	\$ 678	100%	13	13 good	\$ 168	21	21 good	\$ 162	477
8	С	_			-	-	\$ 697	93%	8	8 good	\$ 198	11	10 good, 1 fair	\$ 174	971
9	р	no	no	2/7		-	\$ 850	100%	7	7 good	\$ 226	11	11 good	\$ 204	800

<sup>\*</sup>p = private, c = community, a = aboriginal corporation, I = leased from community

Number of communities with 100-399 people	1		
Number of communities with 400-799 people	4		
Number of communities with 800-1599 people	4		
Number of communities with more than 1600 people	0		
Aboriginal / non Aboriginal workers	127/27		
Number of stores surveyed this year	9	Number of stores surveyed last year	9
Average availability	97%		
Average price	\$662		
Average fruit price	\$168		
Average vegetable price	\$145		

## **Alice Springs**

	Store Ownership*	Nutrition policy	Store committee		Training in retail	Training in nutrition	Cost of basket	Availability	Fruit variety	Fruit (fresh) quality	Fruit price	Vegetable (fresh) variety	Vegetable (fresh) quality	Vegetable price	Population
1	С	no	no	0/8	5	0	\$ 508	98%	7	7 good	\$ 129	14	14 good	\$ 111	500
2	С	yes	yes	2/4	0	0	\$ 548	100%	17	15 good, 2 fair	\$ 130	31	28 good, 3 fair	\$ 119	412
3	С	no	yes	13/2	3	0	\$ 549	95%	8	6 good, 2 fair	\$ 120	19	12 good, 7 fair	\$ 127	410
4	р	no	no	4/7	1	1	\$ 562	98%	5	5 good	\$ 151	14	12 good, 2 fair	\$ 124	500
5	C	no	no	1/2	100 m	( <u>*</u>	\$ 574	98%	8	8 good	\$ 135	19	18 good, 1 fair	\$ 120	325
6	С	no	yes	3/2	2	1	\$ 578	98%	8	8 good	\$ 171	10	10 good	\$ 116	230
7	С	<b>.</b>	yes	0/2	<b>.</b>		\$ 584	100%	6	4 good, 2 fair	\$ 146	14	12 good, 2 fair	\$ 144	450
8	C	yes	yes	1/3	2	0	\$ 588	98%	9	9 good	\$ 134	13	13 good	\$ 144	400
9	С	no	yes	3/1	0	0	\$ 591	98%	0		\$ 135	5	5 good	\$ 133	70
10	С	no	yes	2/2	yes	0	\$ 593	98%	8	2 good, 5 fair, 1 poor	\$ 151	16	7 good, 8 fair, 1 poor	\$118	295
11	С	no	yes	2/6	0	0	\$ 626	100%	2	1 good, 1 not recorded	\$ 166	3	2 good, 1 not recorded	\$ 125	817
12	С	no	no	1/-	=0	=	\$ 630	90%	9	9 good	\$ 152	15	14 good, 1 fair	\$ 131	250
13	р	no	no		1	9	\$ 645	90%	4	4 good	\$ 145	4	4 good	\$ 144	93
14	C	yes	no	2/2	0	0	\$ 648	90%	2	2 good	\$ 182	7	4 good, 3 fair	\$ 152	100
15	С	no	no	4/2	-8		\$ 663	100%	14	14 good	\$ 157	15	15 good	\$ 139	157
16	р	yes	no	0/2	yes	yes	\$ 665	100%	6	6 good	\$ 196	7	7 good	\$ 140	1137
17	C	no	yes	3/1	yes	0	\$ 672	95%	10	10 good	\$ 124	17	16 good, 1 fair	\$ 202	220
18	C	no	yes	1/6	Ō	1	\$ 676	98%	12	11 good, 1 fair	\$ 207	12	11 good, 1 fair	\$ 149	1000
19	С	no	yes	2/3	-	j	\$ 689	95%	11	11 good	\$ 193	13	4 good, 7 fair, 1 poor, 1 rotten	\$ 139	323
20	С	*	yes	2/2	*0	(#1	\$ 695	93%	6	6 good	\$ 187	14	14 good	\$ 148	350

<sup>\*</sup>p = private, c = community, a = aboriginal corporation, l = leased from community

Number of communities with less than 99 people	2		
Number of communities with 100-399 people	9		
Number of communities with 400-799 people	6		
Number of communities with 800-1599 people	3		
Aboriginal / non Aboriginal workers	46/58		
Number of stores surveyed this year	20	Number of stores surveyed last year	28
Average availability	97%		
Average price	\$614		
Average fruit price	\$157		
Average vegetable price	\$139		

## **Barkly District**

	Store Ownership*	Nutrition policy	Store committee	Aboriginal / non Aboriginal workers	Training in retail	Training In nutrition	Cost of basket	Availability	Fruit (fresh) variety	Fruit (fresh) quality	Fruit price	Vegetable (fresh) variety	Vegetable (fresh) quality	Vegetable price	Population
1	T	no	yes	4/1	0	0	\$619	95%	12	12 good	\$ 184	19	19 good	\$ 109	200
2	С	yes	yes	2/2	0	0	\$ 662	100%	8	8 good	\$ 166	17	17 good	\$ 162	500
3	P	no	no	0/3	2	0	\$ 678	98%	1	1 good	\$ 166	9	6 good, 2 fair, 1 poor	\$ 164	N/A
4	р	no	no	1/3	0	0	\$ 779	98%	3	2 good , 1 fair	\$ 191	5	5 good	\$ 150	493
5	p	no	no	0/1	4	1	\$ 823	78%	1	1 good	\$ 210	3	3 good	\$ 161	493
6	p	no	no	1/2	2	2	\$ 860	90%	4	4 good	\$ 283	9	9 good	\$ 182	493
7	р	no	no	0/4	4	1	\$ 888	100%	5	5 good	\$ 234	14	14 good	\$ 172	493

<sup>\*</sup>p = private, c = community, a = aboriginal corporation, I = leased from community

Number of communities with 100-399 people	1	
Number of communities with 400-799 people	5	
Aboriginal / non Aboriginal workers	8/16	
Number of stores surveyed this year	7	Νι
Average availability	94%	
Average price	\$758	
Average fruit price	\$205	
Average vegetable price	\$157	

Number of stores surveyed last year

6