

KATOOMBA FOOD RETAIL PRICE MAPPING PROJECT REPORT

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Anneliese Davidson
Population Health Nutritionist
Wentworth Area Health Service

The food retail mapping undertaken for this project was conducted by Kelly Excell and Gloria Cabrera, Masters of Nutrition & Dietetics Students, University of Sydney, during community nutrition placement at Blue Mountains District Anzac Memorial Hospital, under the supervision of Anneliese Davidson, Population Health Nutritionist, Wentworth Area Health Service.

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INTRODUCTION AND BACKGROUND

The World Health Organisation recognises food as a key social determinant of health (Wilkinson R and Marmot, 2003). In Australia, reducing food insecurity is a national and state nutrition priority, identified by Eat Well Australia (Strategic Inter Governmental Nutrition Alliance (SIGNAL₁, (2001) and Eat Well NSW (SIGNAL₂, 2001).

Food security is defined as a state in which there is adequate supply of nutritious food available locally and where individuals possess the financial and personal skills and resources required to obtain and use that food (Booth and Smith, 2001). Food *security* has been defined within food *supply* and *access* domains. The adequacy of a food supply is indicated by location of retailers, price, quality, variety and promotion. Food access is determined by an individual's financial resources, nutrition knowledge and food preparation skills, food preferences, storage, food preparation and cooking facilities, time, mobility, social support, and the distance and availability of transport to the food stores (Centre for Public Health Nutrition, 2003 (CPHN)).

Food *insecurity* is characterised by through insufficient, low quality, or an unreliable food sources on a chronic or occasional basis. Dietary assessments in low-income groups have indicated significant levels of nutrient inadequacy, sub-optimal nutrient intakes and limited food selection (Kirkpatrick and Tarasuk, 2003). Food choices in those who report food insecurity are typically higher in fat and lower in vitamins and minerals, dietary fibre than higher income groups. Food insecurity has been linked to higher rates of obesity, Type 2 Diabetes Mellitus, heart disease, stroke, hypertension, dental caries, cancer and lowered immunity to disease (Booth and Smith, 2001). Many of these health concerns are more prevalent in low socio-economic populations

Food insecurity is present in many developed nations including US, Canada, UK and Australia. Food insecurity is more common in socioeconomically or geographically disadvantaged groups. High-risk groups for food insecurity include homeless, single mothers, disabled and culturally and linguistically diverse communities. The 1995 National Nutrition Survey found across all population groups 5.2% of the population reporting food insecurity within a 12 month period of the survey as defined by "running out of food at any time". This rate was higher in certain risk groups including the unemployed (11.3%) and those paying rent or board (15.8%) (Booth and Smith, 2001). These figures are thought to be underreported within certain groups of the population, particularly the disadvantaged. Further this single question asked in the survey did not determine the severity of frequency of food insecurity (Booth and Smith, 2001).

A number of population characteristics have been identified in Katoomba that represent risk factors or risk groups for food insecurity including poverty and low income levels (22.7% of households have incomes below \$500/week (NSW state average 18.1%), and 13.1% of households have incomes below \$300/week (NSW state average 11%). Rental stress in Katoomba is the highest in Wentworth Area Health Service at 60.9% (Dwyer, 2001).

Local action to address food insecurity has focussed upon the financial assistance, vouchers, food parcels or meals, which address the issue “at the level of breakdown” within a welfare context.

AIM & RATIONALE

This project was undertaken to determine the “affordability” of a healthy diet as defined by the *“Australian Guide to Healthy Eating”* in the context of a “welfare budget”. The context of affordability within “welfare” was important given that a local level 50% of the population receive some form of Centrelink benefit, and food prices have been identified as an issue affecting food security in Katoomba through action research consultations being undertaken as part of the Katoomba Programme.

METHODOLOGY

This project collected prices on ~200 different food products, with prices where available collected for generic, specials and cheapest available brand line products collected for small, standard and bulk sizes. Prices were collected over a period of 2 ½ weeks from a total of seven sites across Katoomba including two major supermarkets, two fruit and vegetable retailers, one butcher, one bakery and a community store.

The cost of “food baskets” to meet nutritional needs as defined by the Australian Guide to Healthy Eating (Appendix 3) was determined for three hypothetical families (Appendix 1). Foods were included in basket based upon being “best value” for that particular food, within food groups and in form. Fresh, frozen and canned foods were included as considered appropriate. “Healthier options” were included where available, including low salt, low fat and high fibre options to reflect wider nutrition recommendations. Foods included in the baskets are identified Appendix 2.

Additional information was collected about availability of sizes, store trading hours and food access issues including the availability and cost of home delivery services and proximity to other outlets was also collected. Further details of about methods used are available upon request.

RESULTS

Cost of the Hypothetical Family Food Baskets

For each “food basket” and “food group” costs were calculated for each site and across all sites surveyed. Total “food basket” costs were calculated as a proportion of estimated welfare income (Appendix 1).

Key findings were:

- The “best value” cost of the food basket at all sites was 20.7-23.9% of income.
- Bought within a single store or complex, food baskets cost 22.3-26.3% of income.
- Including delivery costs in expenditure increased total expenditure to 26.3% to 29.8%, about 2% more than food basket cost.
- Actual cost of the food basket between sites varied by up to \$2.90 between major supermarket complexes (supermarket 2 combined with fruit and butcher store), (0.5% of income).
- Actual cost of the “best value basket” was \$16.97 cheaper than comparative cost at Supermarket 1 (2.9% income).

Hypothetical Families

Hypothetical families were devised based upon discussion with local Centrelink personnel about common payments in Katoomba. These were:

- **Family 1** – 2 adults (1 man, 1 woman), 2 children (9yrs and 4 years)
- **Family 2** – 1 adult (1 woman), 2 children (4yrs, 7 years)
- **Family 3** – 1 adult, (1 man) (70years)

Table 1

Lowest Possible Cost of Food Basket Meeting Requirements Defined by the Australian Guide to Healthy Eating (Maximum Range of Recommended Serves) for Three Hypothetical Families.

FOOD GROUP	Family 1	Family 2	Family 3
Breads and Cereals	\$32.63	\$25.25	\$19.12
Vegetables and Legumes	\$20.69	\$14.19	\$9.60
Fruit	\$9.58	\$5.41	\$3.09
Milks, yoghurt, cheese and alternatives	\$15.08	\$14.10	\$6.24
Meat, fish, poultry and alternatives	\$23.20	\$13.43	\$6.97
Extras	\$13.90	\$9.48	\$3.75
Miscellaneous	\$13.22	\$13.08	\$6.79
Total Basket Cost	\$128.30	\$93.23	\$51.56
Total Income (estimated from welfare)	\$576.64	\$457.64	\$232.10
% Total Income	22.0%	20.7%	23.9%

Table 1 shows Family 3 food basket was the most expensive as proportion of income, while Family 2 food basket was the least expensive as a proportion of income.

Table 2

Range in Cost of Food Basket Meeting Requirements Defined by the Australian Guide to Healthy Eating (Maximum Range of Recommended Serves) for Three Hypothetical Families.

FOOD GROUP	Family 1	Family 2	Family 3
Breads and Cereals	\$36.86 - \$39.10	\$27.78 - \$28.60	\$16.84 - \$19.72
Vegetables and Legumes	\$24.15 - \$32.44	\$17.42 - \$20.19	\$10.63 - \$16.46
Fruit	\$10.39 - \$15.96	\$6.19 - \$10.48	\$3.76 - \$7.07
Milks, yoghurt, cheese and alternatives	\$15.16 - \$15.80	\$14.18 - \$14.82	\$6.60 - \$6.91
Meat, fish, poultry and alternatives	\$24.91 - \$27.75	\$13.41 - \$14.29	\$7.34 - \$7.71
Extras	\$13.90 - \$15.68	\$3.03 - \$3.42	\$1.53 - \$1.54
Miscellaneous	\$13.78 - \$13.94	\$13.78 - \$13.94	\$7.24 - \$7.47
Total Basket Cost	\$139.15 - \$168.67	\$102.27 - \$111.83	\$57.03 - \$66.88
Total Income (est. from welfare)	\$576.64	\$457.64	\$232.10
% Total Income	24.1 - 27.9%	22.4 - 24.4%	24.6 - 28.8%
<i>Total Cost inc. max delivery</i>	\$8	\$8	\$8
<i>% of Total income inc. delivery</i>	<i>25.5 - 29.3%</i>	<i>24.1 - 25.3%</i>	<i>28.0 - 32.3%</i>

Table 2 shows that failure to shop around can result in ~ 4 % increase in costs on even this basic healthy diet.

Availability of Home Delivery Services

There are currently limited home delivery services for people in Katoomba. The cost of home delivery ranges from free to \$8 from Supermarket 1. These services are available from one to 6 days per week depending upon site.

Availability of Public Transport

Public transport in Katoomba is very limited with 9 services daily between Katoomba North Katoomba return every 1½ hours between 8am and 6pm and 8am to 4pm on weekends.

DISCUSSION

Food prices have been investigated by others in rural and urban settings. Food price mapping in a rural setting is typically undertaken with a focus upon availability and price of fresh food due to isolation. In urban settings food price mapping has been undertaken in new urban developments where infrastructure for local population to access food can be poor (CPHN, 2003)

This project found that at best, food expenditure was 20.7-23.9% of total income. For food baskets, priced across all sites expenditure ranged from 22.4-28.8% of income. Inclusion of delivery costs increased costs up to 32.3% of income for Family 3. The assumptions made in this project are for the extreme, and in reality costs are likely to be closer to ranges quoted in the literature.

Low-income groups spend a greater proportion of total budget on food due to reduced money available, while food expenditure is relatively “flexible” compared with other necessities such as rent and heating. One rural study found that total income spent on food was 27-35% (Territory Government Department of Health and Community Services) while a South Australian study found that 20-38% of social security income was spent upon food (SIGNAL, 2001). Higher income groups spend just 13.6% of money on food.

Other previous retail price mapping projects have not used generic options in calculating price (Lowry, 2003). This project used generic options where these were identified as the cheapest. This was considered necessary to overcome any potential argument from retailers that generic options are available to those on a limited income. This mapping project found that some of the products are up to half the price of certain brands, which indicates food prices would be increased significantly when non-generic lines are bought. A greater difference between retailers may also have been identified if generic lines were excluded, as generic prices appear to be quite competitive in the foods included in the baskets.

The “*Australian Guide to Healthy Eating*” is a nutrition education tool, consistent with the recommendations of the *Dietary Guidelines for Australians* and *Dietary Guidelines for Children and Adolescents*. Dietary guidelines in a range of countries encourage a diet to prevent chronic diseases through eating more fresh vegetables, fruits and legumes and more minimally processed starchy foods. A reduced intake of animal fats refined sugars and salt is also recommended. These guidelines are consistent across some 100 countries (Wilkinson R and Marmot, 2003).

Low-income groups have been identified as good at budgeting to obtain adequate protein and energy, with reliance upon energy dense, high fat foods. Foods high in

vitamins and minerals, such as fruit and vegetables are generally more expensive than energy dense foods on a calorie basis.

The need to increase fruit and vegetable consumption in vulnerable groups has been identified. Fruit and vegetable intakes are consistently poorer in lower socio-economic groups. Central to health promotion theory is making “healthy choices easier”. At a national level this may require major retailers to encourage consumption of more fruit and vegetables through pricing strategies to encourage consumption. Despite a larger buying power, one supermarket was less competitive than relatively smaller fruit and vegetable retailers on fruit and vegetables. Supermarket 1 appears to be cheaper on dairy and bread than the other supermarket by ~ 6-15% for the foods mapped for breads and cereals and 4% cheaper for milk products.

Healthier options of foods that are lower in fat, salt and sugar, less processed or higher in fibre were found to be more expensive than their higher fat or more refined versions. Wholegrain bread was found to be 36% more expensive than white bread. The availability of healthier options in generic brand is limited with respect to some low salt and low fat products. Other issues which had been identified in prior action research consultations relevant to price included the relative cheapness of “junk” food. As these foods were largely excluded from the baskets an analysis of this observation has not been undertaken.

Access to the food supply is a determinant of food security defined by the Centre for Public Health Nutrition (2003). This includes availability of private or public transport at a reasonable cost. Non- car ownership in Katoomba is higher than other areas in the area health service at 21.4% (NSW states average 13.5%). Considering the layout of the local area, reliance upon either public transport or taxi is likely for some. For those who rely upon active transport (walking) it is likely to determine the frequency with which food is bought, as there is limited ability to carry larger sizes. Smaller sizes were found to be more expensive. This is illustrated by the single pensioner spending consistently a greater proportion of income on food than larger families in this project.

LIMITATIONS

A number of assumptions were made in the methodology that have been identified as “unrealistic” by the subsequent consultation process which occurred (see Consultation). The assumptions below were somewhat deliberate in order to obtain a genuine baseline indication of the minimum cost of a “healthy diet”.

Assumptions that were made related to the foods included in the baskets include:

- All foods were to be eaten or prepared at home
- Convenience and pre-prepared foods were limited to keep costs minimal
- Generic options were included when available and the cheapest option identified
- Food products bought by weight (such as meat, fruit and vegetables) could be bought in exact amounts required, these are typically also expensive items
- Foods were bought in a single “weekly shop”
- The best value option was able to be identified using calculators
- Maximum ranges were calculated for breads and cereals from minimum range, which may not be an appropriate representation of cost or actual food products.

- Prices were collected across period of 2½ weeks. Prices may have varied for sites across this period, meaning that best possible prices are less accurate.
- This study did not take into account certain food preferences or foods required for certain food intolerances or food allergies.

Additional limitations inherent to the project methodology include:

- The framing of a “healthy diet” in the context of the AGTHE is “scientific” in that in general people do not think in “serves” when buying food or eating food.
- The “serve” sizes suggested by the AGTHE may not be well known outside of nutrition profession and in many cases differ significantly from “serve sizes” used in the food industry.
- A “weekly shop” that provides complete needs is not consistent with the typical buying of “what is missing from the cupboard”.
- The list of “miscellaneous” items may not reflect the types or amounts of additional food items bought in reality

Issues that were unable to be factored in this project, but would influence food costs included variations in food buying habits such as

- The frequency of shopping and influence upon size bought
- The product size bought and affect upon consumption
- The breakdown in where certain foods are bought, particularly fresh foods
- The proportion of money spent upon prepared food outside the home.
- The cost of finding the best value items in terms of time and effort.

CONSULTATION PROCESS

The results of this pilot food mapping project were presented for discussion to a number of stakeholders including welfare agencies, community health workers, nutrition and health professionals, associates of the Katoomba Programme, people involved in food security initiatives.

This project stimulated a discussion about the “real life” pressures faced by people that limit their ability to make “healthy choices”. Much of this conversation focussed upon the assumptions made in methodology making the food baskets quite unrealistic to achieve. In addition, the reliance upon generic brands and limited extra foods was considered unappealing to most. This was discussed in light of food being an accessible source of pleasure and reward for people on low incomes.

Additional issues raised included:

- Foods included in baskets were largely GST free.
- Food shopping habits are highly variable between people
- Shopping habits are strongly influenced by children and teenagers

The consultation process confirmed the need to determine buying habits in the “real world” with a range of families to potentially address some of the limitations described above. Further investigation is needed to determine whether the choices of low income families’ are making food effectively “unaffordable” and the reasons why they may not be choosing “healthier options.” Local agencies would be involved in these investigations.

CONCLUSION AND RECOMMENDATIONS

This project forms part of other work currently being undertaken in Katoomba to investigate the issue of food insecurity in disadvantaged groups, within the framework of the Katoomba Programme.

This was a short-term project undertaken by students over a period of 6 weeks and it is therefore of necessity very basic in what it sought to achieve and the methods employed.

The findings of this project and subsequent discussion of results with stakeholders highlighted the limitations inherent within the assumptions about “healthy food choices”. These assumptions are commonly made by statutory and voluntary agencies when assessing what welfare families “ought to be able to achieve on a welfare budget. This pilot project thus provides a baseline – a foundation for further investigation of low-income families’ buying habits. Such work would aim to determine whether the choices these families are making are “unaffordable” and or unhealthy and the reasons why they may not be choosing health options. There is also potential to examine how low-income families respond to targeted nutrition information about food and health.

In addition, comparative data will be sought from St Mary’s as an area of similar socio-economic disadvantage within WAHS. This will provide a basis upon which the appropriateness of pricing locally can be judged. Additional price comparisons could be made with studies by the Australian Consumers Association.

REFERENCES

Australian Bureau of Statistics and Department of Health and Family Services, (1998), National Nutrition Survey, Australia, 1995: selected highlights. ABS Cat No. 4802.0. Canberra: ABS and DFHS.

Booth S and Smith A (2001); *Food Security and poverty in Australia- Challenges for Dietitians*; Australian Journal of Nutrition and Dietetics 58 (3) 150-156.

Commonwealth of Australia (1998); *The Australian Guide to Healthy Eating*; Australian Government Department of Health and Aging, Childrens Health Development Foundation, Women's and Children's Hospital (South Australia) and the Faculty of Health and Behavioural Sciences, Deakin University (Victoria).

Dwyer C (2001); *Socio-economic Status Indicators*, Epidemiological Unit, Population Health, Wentworth Area Health Service, (unpublished).

Kirkpatrick S and Tarasuk (2003); *The Relationship between low income and household food expenditure patterns in Canada*; Public Health Nutrition 6(6): 589-597.

Lowry, K; (2003); *Market Basket Survey Report South Western Sydney Area Health Service* (unpublished).

National Health and Medical Research Council (2003); *Food for Health: Dietary Guidelines Adults*; AGPS, Canberra.

National Health and Medical Research Council (2003); *"Food for Health: Dietary Guidelines for Children and Adolescents in Australia: A guide to Healthy Eating"*; GPS, Canberra.

NSW Centre for Public Health Nutrition (2003), *Food Security Options Paper: A planning framework and menu of options for policy and practice interventions*, Better Health Centre, Sydney.

Strategic Intergovernmental Nutrition Alliance of the National Public Health Partnership (SIGNAL) (2001), *Eat Well Australia: An Agenda for Public Health Nutrition 2000-2010*. National Public Health Partnership.

Strategic Intergovernmental Nutrition Alliance of the National Public Health Partnership (SIGNAL) (2001), *Eat Well NSW: An Agenda for Public Health Nutrition 2000-2010*. National Public Health Partnership.

Strategic Intergovernmental Nutrition Alliance of the National Public Health Partnership (SIGNAL) (2001), *Food Chain*, No 5, April, 2001.

Territory Government Department of Health and Community Services (2001), *Market Basket Survey of Remote Community Stores in the Northern Territory April-June 2001*, Territory Health Services, Casuarina.

Wilkinson R and Marmot M (eds) (2003); Social Determinants of Health: The Solid Facts (2nd Edn); Copenhagen, World Health Organisation.

APPENDIX 1
HYPOTHETICAL FAMILIES AND ESTIMATED WELFARE INCOMES

Estimated Income from Welfare for Hypothetical Families

Family 1: 2 Parents + 2 Children (age 4 & 9 years)

	Payment Type	Amount per week
Male, 30 years	Newstart payment	\$175.55
Female, 28 years	Parenting Allowance	\$175.55
	Family tax allowance A	\$130.48
	Family tax allowance B	\$95.06
	Total Benefit:	\$576.64

Family 2: 1 Parent + 2 Children (aged 4 & 7 years)

	Payment Type	Amount per week
Female, 25 years	Single parent allowance	\$232.10
	Family tax benefit A	\$130.48
	Family tax benefit B	\$95.06
	Total Benefit:	\$457.64

Family 3: Single Aged Pensioner

	Payment Type	Amount
Male, 70 years	Aged Pension	\$232.10/week
	Total Benefit:	\$232.10

Source: Centre Link, Blue Mountains

APPENDIX 2
SHOPPING BASKETS FOR HYPOTHETICAL FAMILIES 1, 2 & 3

Family 1 Food Basket

Wholegrain Bread, 5 loaves
Pasta, 1 x 500g packet
Basmati Rice, 1 x 1kg packet
Tinned Spaghetti (salt reduced), 3 x 425g tins
Weet-Bix, 1 x 750 g packet
Rolled oats, 1 x 750 g packet
Vita Wheats, 2 x 250g
Oranges, 10 (1.5kg)
Apples, 8 (1.2 kg)
Bananas, 8 (1.2 kg)
100% Fruit Juice, 2L
Sweet Potato, 2 large (1kg)
Potatoes, 7 medium (1kg)
Tinned corn, 1 x 420g tin
Cabbage, ½ (500g)
Silverbeet, 1 bunch (700g)
Onions, 5 (1 kg)
Butternut Pumpkin, ½ (750g)
Tomatoes, 5 (750g)
Lettuce, 1
Green beans, 360g
Tinned tomatoes, 1 x 410g tin
Frozen peas, 1kg
Broccoli, 2 bunches
Carrots, 4 med carrots
Mushrooms, 10
UHT skim milk, 7 x 1L cartons
Low Fat Cheese Singles, 1 x 500g packet
Ready Made Low Fat Custard, 2 x 1L
Trim Mince, 440g
Rump steak, 440g
Chicken breast, 440g
Tinned salmon, 450g tin
Eggs, 1 dozen
Baked beans salt reduced, 1 x 425g tin
Potato Crisps, 250g packet
Sweet biscuits, 250 g packet
Miscellaneous items (cost considered over a month)
Vegemite, 910g jar
Margarine (polyunsaturated), 2 x 500g containers
Mayonnaise, Low fat, 1 x 500g jar
Tomato sauce, salt reduced, 1 x 600ml 1 bottle
Sugar, 1 x 2kg packet
Wholemeal flour, 1 x 1kg packet
Canola oil, 1 x 750 ml bottle
Tomato paste, salt reduced, 1 x 500g jar
Tea bags, 200 bag box
Soup salt reduced, 1 x 500g tin
Gravy salt reduced & Low fat, 1 x 425 g packet
Diet Cordial, 1 x 2L Bottle
Milo, 1 x 450g tin
Coffee, 1 x 500 g 1 jar
Minced Garlic, 1 x 250g

Family 2 Food Basket

Wholegrain Bread, 3 loaves
Pasta, 1 x 500g packet
Basmati rice, 1 x 1kg packet
Tinned Spaghetti (salt reduced), 3 x 425g tins
Weet-Bix, 1 x 750g packet
Rolled oats, 1 x 750g packet
Vita Wheats, 1 x 250g packet
Oranges, 6
Bananas, 6
100% fruit juice, 1 x 2L
Sweet potato, 2 large
Potatoes, 4 medium
Cabbage, ¼
Silverbeet, 1 bunch
Onions, 3 onions
Butternut Pumpkin ½
Tomatoes, 3
Lettuce, 1
Tinned tomatoes, 1 x 410g tin
Frozen peas, 1 x 1kg packet
Broccoli, 1 bunch
Carrots, 2 medium
Mushrooms, 10
UHT skim milk, 6 x 1L
Low Fat Cheese Singles, 1 x 500g packet
Ready made Low Fat Custard, 2 x 1L bottles
Trim mince, 250g
Rump steak, 250g
Chicken breast, 250g
Tinned salmon, 1 x 450g tin
Baked beans salt reduced, 1 x 425g tin
Potato crisps, 1 x 250g packet
Sweet biscuits, 1 x 250g packet
Miscellaneous items (cost considered over a month)
Vegemite, 1 x 910g jar
Margarine (polyunsaturated), 2 x 500g containers
Mayonnaise Low fat, 1 x 500g jar
Tomato sauce salt reduced, 1 x 600ml bottle
Sugar, 1 x 2kg packet
Wholemeal flour, 1 x 1kg packet
Canola oil, 1 x 750ml bottle
Tomato paste salt reduced, 1 x 500g jar
Tea bags, 200 bag box
Soup salt reduced, 1 x 500g tin
Gravy salt reduced & Low fat, 1 x 425g packet
Diet Cordial, 1 x 2L Bottle
Milo, 1 x 450g tin
Coffee, 1 x 500g jar
Minced Garlic, 1 x 250g jar

Family 3 Food Basket

Wholegrain Bread, 2 loaves
Pasta, 1 x 500g packet
Basmati rice, 1 x 500g packet
Tinned Spaghetti (salt reduced), 2 x 425g tins
Weet-Bix, 1 x 375g packet
Oranges, 4
Bananas, 3
100% fruit juice, 1 x 1L bottle
Sweet Potato, 1 large
Potatoes, 3 medium
Cabbage, ½
Silverbeet, 1 bunch
Onions 2
Tinned tomatoes, 1 x 410g tin
Frozen peas, 1 x 500g packet
Broccoli, 1 bunch
Carrots, 2 medium carrots
UHT skim milk, 2 x 1L cartons
Low Fat Cheese Singles, 1 x 250g packet
Ready Made Low Fat Custard, 1 x 1L Bottle
Trim mince, 250g
Chicken breast, 125g
Tinned salmon, 1 x 95g tin
Baked beans salt reduced, 1 x 425g tin
Sweet biscuits, 1 x 250g packet
Miscellaneous items (cost considered over a month)
Vegemite, 1 x 455g jar
Margarine (polyunsaturated), 1 x 500g container
Mayonnaise Low fat, 1 x 275g jar
Tomato sauce salt reduced, 1 x 300ml bottle
Sugar, 1 x 1kg packet
Wholemeal flour, 1 x 1kg packet
Canola oil, 1 x 750ml bottle
Tomato paste salt reduced, 1 x 500g jar
Tea bags (50 bags)
Soup salt reduced, 1 x 500g can
Gravy salt reduced & Low fat, 1 x 200g packet
Milo, 1 x 240g tin
Minced Garlic, 1 x 250g jar

APPENDIX 3
DIETARY REQUIREMENTS FOR FOOD GROUPS AS DEFINED BY
THE AUSTRALIAN GUIDE TO HEALTHY EATING

Recommended Serves For Each food Group, per day, and total per week for three hypothetical families as defined by the Australian Guide to Healthy Eating.

Family 1	Father	Mother	Child1 (9yrs)	Child 2 (4 yrs)	Total/Day	Total/Wk
Breads and Cereals	6	4	6	5	21	259
Vegetables and Legumes	2	2	1	1	7	49
Fruit	5	5	3	2	15	105
Milks, yoghurt, cheese and alternatives	2	2	2	2	8	56
Meat, fish, poultry and alternatives	1	1	1	½	3.5	24 ½
Extras	0	0	1	1	2	66 ½

Family 2	Mother	Child 1 (4yrs)	Child 2 (7yrs)	Total/Day	Total/Wk
Breads and Cereals	4	5	5	14	161
Vegetables and Legumes	2	1	1	4	28
Fruit	5	2	2	9	63
Milks, yoghurt, cheese and alternatives	2	2	2	6	42
Meat, fish, poultry and alternatives	1	½	½	2	14
Extras	0	1	1	2	45 ½

Family 3	Male >60 years	Total/Day	Total/Wk
Breads and Cereals	6	6	12
Vegetables and Legumes	2	2	4
Fruit	5	5	10
Milks, yoghurt, cheese and alternatives	2	2	4
Meat, fish, poultry and alternatives	1	1	2
Extras	0	0	21

Extras

Extras are defined as foods that are considered not “essential” in the diet and often contain high fat, salt or sugar contents. These include biscuits, pastries, soft drinks, crisps, lollies and chocolate. They can be included in healthy diet in small amounts.