

Wangaratta Food Security Report 2014

Scoping Healthy Food Access in Wangaratta



Foreword

This Wangaratta Food Security Report (2014) was completed collaboratively by Northeast Health Wangaratta and Ovens and King Community Health Service in consultation with the Rural City of Wangaratta and other community organisations.

As health service providers in the Rural City of Wangaratta we acknowledge that food security is an issue that impacts on the health and well being of people living in our community. The ability to eat a wide variety of healthy food and make healthy food choices is dependent on a variety of environmental and social factors. These include:

- healthy food production and distribution
- access and transport
- affordability
- knowledge and skills identifying and preparing healthy food

This report provides data and recommendations for food system change designed to create supportive environments for healthy eating and recognise that it is an issue for a whole of community approach rather than only an individual concern. We believe that taking a preventative approach to food security will have a positive impact on future health outcomes for our local residents.

We look forward to seeing this report used by community partnerships to inform local solutions to improve food security in the Rural City of Wangaratta – from grass root initiatives to organisational policy level changes.

We would like to congratulate our Health Promotion Team for their excellent work in improving healthy eating in the Rural City of Wangaratta.



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Acknowledgements

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Key Informant Interviews

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North East Support and Action for Youth (NESAY)	Open Door Neighbourhood house
Pangerang Neighbourhood house	Rural Housing Network
Carevan	Borinya
NEMA	King Valley Learning Exchange
ATSI front line service providers	Community Inclusion Program
Women's Health Goulburn North East	

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The results of the food security scan will inform healthy eating interventions over the next 4 years in the Rural City of Wangaratta.

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Executive Summary

Background: Healthy eating choices are strongly impacted by the economic, natural, socio-cultural and built environments. The Central Hume Primary Care Partnership Healthy Eating Plan 2012-2017 aims to create supportive environments which increase the awareness of, and access to, culturally valued healthy food in the Rural City of Wangaratta (RCoW).

Aim: To develop an understanding of local food security issues, including barriers to healthy food access in the municipality. The report identifies potential interventions to improve healthy food access.

Methods: The Victorian Local Government Association (VLGA) Municipal Food Security Scanning tool was used to collect data in the built, economic, natural and socio-cultural environments. Other methods included the Victorian Healthy Food Basket survey, Geographic Information Systems (GIS) for food outlet mapping to identify “food deserts,” community consultation with key stakeholders and a food outlets audit.

Results: Wangaratta has a high number of people at risk of food insecurity (socio-economically disadvantaged, unemployed and low income/welfare dependant households). Key barriers to healthy food access include low income, high costs of healthy food, and lack of public and private transport. Majority of the RCoW is in a “food desert”, with low socio-economic neighbourhoods and rural townships experiencing poor access to fruit and vegetables. There is also a disproportionate ratio of non essential food outlets to fruit and vegetable outlets (1:4 ratio essential to non-essential).

Potential interventions include the formation of a food security network to coordinate community led interventions e.g. harvesting excess locally grown produce, increasing links between primary producers and food outlet businesses, community capacity building to increase healthy eating skills and knowledge, increasing healthy food options available in food outlets through regulatory change, and advocacy for improved transport options.

Outcomes:

- A food security network has been initiated in the RCoW and is known as the ‘Community Food for All Network’.
- Member organisations of the network have submitted grant applications to support food security in RCoW
- Two parent feed/change facilities are now available in the CBD area.

Conclusion: The findings from the report have identified key recommendations for action, which include increasing connectivity between residents and food, increasing fruit and vegetables in food deserts and increasing partnerships between local council, agencies, businesses and communities, to deliver healthy eating interventions.

Context and Background



The Rural City of Wangaratta (RCoW) is located in North-Eastern Victoria, about 235 kilometres north-east of Melbourne. Prominent townships and villages include Boorhaman, Cheshunt, Eldorado, Everton, Glenrowan, Oxley, Milawa, Moyhu, Peechelba, Springhurst, Tarrowingee, Whitfield and Whorouly.

The local government area is 3,644 km² with an estimated resident population of 26,816 people (Profile ID) (ABS A. B., 2011).

One of Victoria's most geographically diverse and scenic regions, the Rural City of Wangaratta offers a blend of city life and welcoming villages, native bushland, pastoral landscapes and snow capped peaks. The rich agricultural land surrounding Wangaratta yields gourmet produce and world-class wines, making this region a paradise for food and wine lovers (Rural City of Wangaratta, 2013)

Population growth has been minimal since 2001, and below average growth is projected to 2021.

Population aged 15 to 44 years is slightly underrepresented and 45 years plus slightly overrepresented (Department of Health, 2012). The highest proportion of the population is aged 45-64 years. 44% of the population is aged over 45 years and 18.9% aged over 65 years (Department of Health, 2012). It is projected that people aged 65 years and over will increase from 18.9% in 2011 to 22.7% in 2021, compared to the Victorian increase from 13.7% to 20.2% (Department of Health, Hume Region Healthy Eating Profile 2012, 2013).

Food Security

Food security can be defined as "...the availability of and assured access to sufficient food that is nutritionally adequate, culturally acceptable, safe, and which is obtained in socially acceptable ways" (Gorton, Bullen, & Mhurchu, 2009). Food insecurity has the ability to affect an individual's physical, mental and social wellbeing (Innes-Hughes, Bowers, King, Chapman, & Eden, 2010). Those facing food security issues in the long term are more likely to be overweight, obese or underweight (Burns C., 2004). Food insecurity is a determinant of dietary quality and consequently a determinant of a person's overall health (Hughes, Serebryanikova, Donaldson, & Leveritt, 2011). Food security does not just affect the individual, but is a matter of concern for the whole community.

Groups at risk of food insecurity include:

- Single parent families
- People who are unemployed or people on a low income
- Aboriginal and Torres Strait Islander
- People with disabilities
- People from culturally and linguistically diverse backgrounds
- Younger people
- People with poor transport options
- Households experiencing rental stress

(Burns C., 2004) (Australian Institute of Family Studies, 2011)

Food insecurity issues can be categorised into three broad categories;

- Food availability
- Food access and

- Food utilisation

(Innes-Hughes, Bowers, King, Chapman, & Eden, 2010) (Deakin University, 2009)

Food availability or supply refers to the physical access to nutritious foods which include location, food outlets, price, quality and variety (Innes-Hughes, Bowers, King, Chapman, & Eden, 2010). Food access includes the safety of foods, money available, cultural acceptability and physical access such as distance, mobility and transport (Innes-Hughes, Bowers, King, Chapman, & Eden, 2010). Food utilisation refers to people's ability to use food once they have accessed it and encompasses food preparation, cooking and storage facilities and food preferences, which may be influenced by socio-cultural habits and tradition as, well as nutritional knowledge (Innes-Hughes, Bowers, King, Chapman, & Eden, 2010).

As people who are at risk of food insecurity are more likely to consume a poorer quality diet in terms of fruit and vegetables, it is essential to understand the barriers to food availability, access and utilisation impacting their dietary choices.

Health Promotion to address Food Security

All health agencies in the Hume region with State Government health promotion funding are working together to improve healthy eating. The Hume region healthy eating goal is "All people in the Hume Region are able to have access to food that is safe, nutritious and culturally valued."

Benalla Health, Northeast Health Wangaratta, Ovens and King Community Health Service and Alpine Health are all members of the Central Hume Primary Care Partnership (CHPCP). The CHPCP Healthy Eating Plan 2012-2017 was developed by the member agencies as a guiding document for health promotion work (Central Hume Primary Care Partnership, 2012). This collaborative plan aims to improve healthy eating in children aged 0-12 years old who live in the local government areas of Benalla, Wangaratta, Mansfield and Alpine.

The plan includes working with local government to identify potential healthy eating initiatives which can improve healthy food access. Healthy Food Connect is one strategy being undertaken by Northeast Health Wangaratta and Ovens and King Community Health (detailed page 7) as part of Objective 1 of the plan.

Figure 1: Central Hume Healthy Eating Plan

Central Hume Healthy Eating Plan 2012-2017

Hume Region Goal:

All people in the Hume Region are able to have access to food that is safe, nutritious and culturally valued

Objective 1: Working with community and organisations to create supportive environments that increase the awareness of and access to culturally valued healthy food across the CHPCP by 2017

Objective 2: Increase opportunities for our target group to access a diet that meets the Australian Dietary Guidelines by June 2017

Objective 3: Increase the breastfeeding rates in CHPCP catchment area at three months observations by 10% by June 2017.

Local Government and Food Security

Local government have an increasing role in health promotion. One function of local council is to ensure the health and wellbeing of residents are attended to under the **Public Health and Wellbeing Act 2008**. The Act details how councils can prevent disease, reduce inequalities of health and promote environment which support health. Under the Act, councils have the power to influence the natural, built, economic and social environments in a municipality. Councils can influence infrastructure and other systemic barriers, which affect the ability of community members to achieve food security. Local government has a role in supporting local food chain systems through land use planning, support for urban gardening, built and environmental planning, and advocacy for integrated local public transport.

The RCoW has acknowledged their role in influencing residents' health and wellbeing in the **new Municipal Public Health and Wellbeing Plan 2013-2017**. The Municipal Public Health and Wellbeing Plan details how council will improve the public health and wellbeing of residents. As food insecurity and a lack of healthy food access can impact upon the health of residents, 'supporting and advocating for affordable access to healthy food' has been included as a strategy within the plan (Central Hume Primary Care Partnership, 2012).

Figure 2: RCoW Municipal Public Health and Wellbeing Plan

RCoW Municipal Public Health and Wellbeing Plan 2013-2017

Healthy Lifestyles goal:

An environment where our community is encouraged to be informed and have an active role in healthy living, and make choices for themselves that supports positive health outcomes.

Strategy 4.5.3: Support and advocate for affordable access to healthy food.

Action 4.5.3.1: Support home gardening, urban agriculture, neighbourhood orchards and community gardens in specific communities.

Action 4.5.3.2: Integrate action on healthy eating by developing activities across business development, infrastructure, land use planning, environmental sustainability and human services.

Action 4.5.3.3: Support new and existing community fresh food initiatives particularly in identified food dessert locations.

Action 4.5.3.4: Include provision of fresh nutritious food in community and Council event guidelines.

Action 4.5.3.5: Support programs that encourage the sharing of knowledge about growing food across generations and cultural groups.

Action 4.5.3.6: Continue to build on the emerging community food forum network to support local food systems.

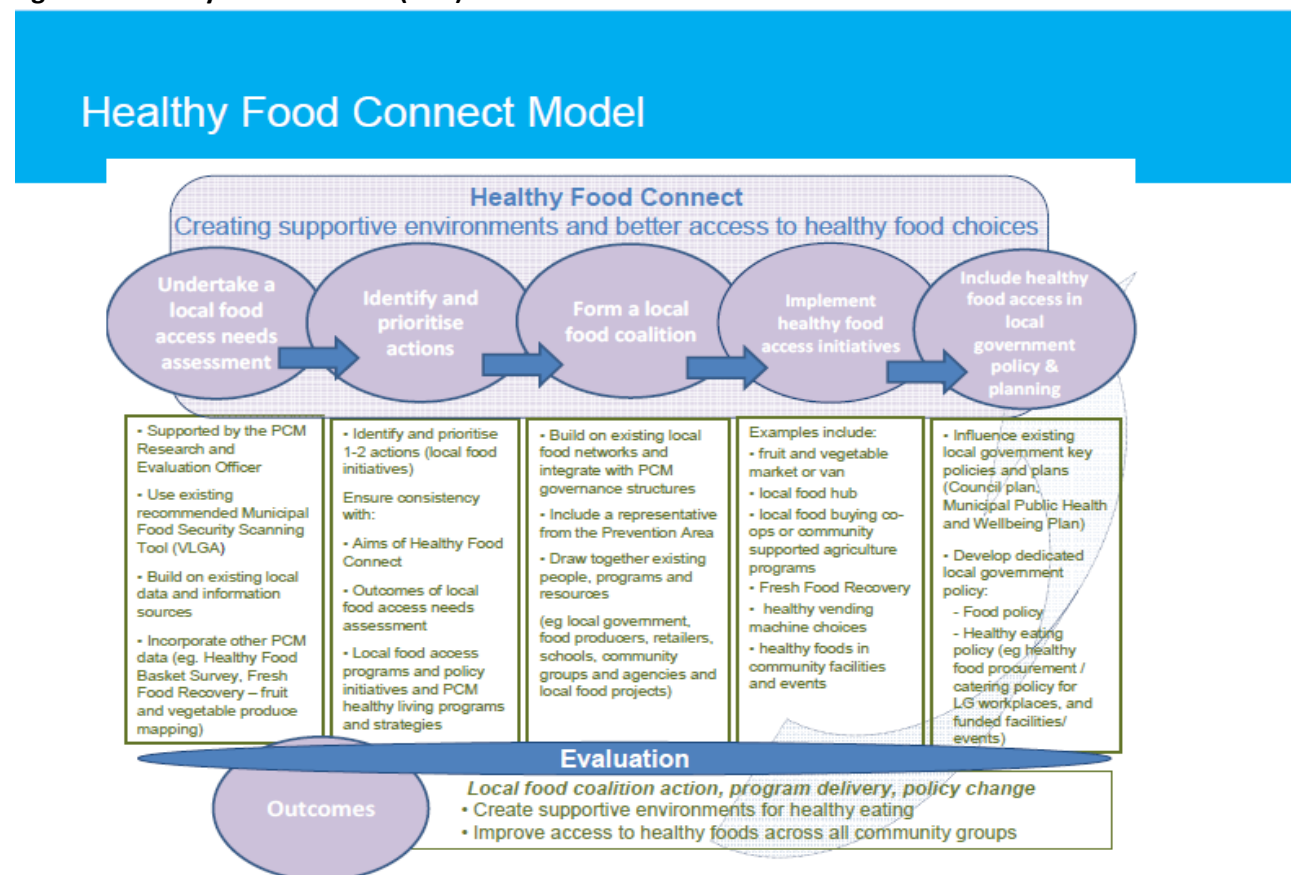
(Municipal Public Health and Wellbeing Plan, 2013-2017)

Healthy Food Connect

Healthy Food Connect is an ideal model to support the council's role in implementing the Act above (Department of Health, Prevention Community Model, Healthy Food Connect- A support resource DRAFT

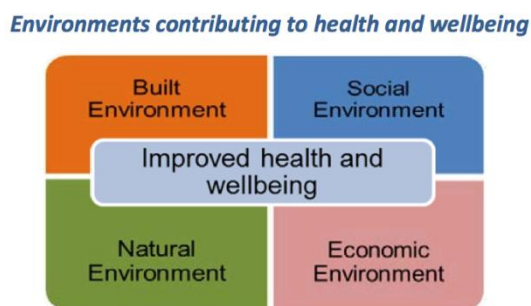
not for distribution , 2012). It is a model to address local food system change and create environments which help make the “healthy choice the easy choice” and meets the objectives of the Victorian Public Health and Wellbeing Plan 2011-2015 (Department of Health, Victorian Public Health and Wellbeing Plan 2011-2015, 2011). It details a process of how council and agencies can work together to identify opportunities in the form of activities, strategies and policies which can improve healthy food access. It focuses on improving supply of fruit and vegetables by drawing together producers, residents, agencies and government to form partnerships, projects and policies (Department of Health, Prevention Community Model, Healthy Food Connect- A support resource DRAFT not for distribution , 2012).

Figure 3: Healthy Food Connect (HFC)



The first step in the HFC model was to conduct a local food needs assessment. This step was crucial in understanding how the environment impacts upon food choices of residents in Wangaratta. The Victorian Local Government Association (VLGA) Municipal Scanning Tool (see figure 4) was used to conduct this assessment (Victorian Local Governance Association, 2010). The tool is based upon the Victorian **“Environments for Health Municipal Public Health Planning Framework”** (Health, Guide to Municipal Public Health and Wellbeing Planning, 2013).

Figure 4: Environments for Health: Municipal Public Health Planning Framework



The VLGA scanning tool involved collecting local data on the natural, built, economic, and social environments to identify barriers and opportunities to improve food security in the municipality. The purpose of this report is to describe how the first steps of the HFC model were undertaken. This process included the VLGA municipal scanning tool, healthy food basket audit, food outlet location mapping and a food outlet audit of existing healthy menu options. The results are then discussed.

Aims and Objectives

This report aims to:

- Develop an understanding of local food security issues, including barriers to healthy food access in the municipality
- Identify opportunities for integrated planning and collaboration to deliver appropriate healthy eating interventions (as part of the CHPCP Integrated Health Promotion Healthy Eating plan 2012-2017)
- Inform decision making processes about policies and programs that impact upon the community's food security

Local evidence from the report can be used as a baseline to monitor food security, as well as to advocate for policies and interventions to enhance physical access to food.

Methods to Assess Food Security

VLGA Municipal Food Security Scanning Tool

The VLGA Municipal Food Security Scanning Tool was used to collect environmental data. The Health Promotion Team met with the RCoW Community Engagement Planner (CEP) who drove council involvement in this food security audit strategy. A presentation was held with relevant council staff to discuss why we had chosen this tool and how to complete the rapid assessment process workbooks. The CEP spoke personally with each staff member and emailed them the workbook section each was to complete.

The council staff members assisted in collecting food security data. Several other methods were used to collect data within each dimension.

Figure 5: VLGA Food Security Scan (Wood & Ray, 2011)

Municipal food security dimensions and opportunities

HEALTH AND WELLBEING				
<ul style="list-style-type: none"> •What are the demographic factors? What are the indices of disadvantage? •Are there any infants, children, youth and women of child bearing age who are at risk of food security problems? •What are the food and nutrition risk factors for the population? Who are considered to be the most vulnerable? 				
LOCAL FOOD CHAIN SYSTEM	NATURAL	BUILT	ECONOMIC	SOCIO-CULTURAL
Food produced	<ul style="list-style-type: none"> •Are there any food growers (primary producers)? •Are there any community gardens used for growing local food? •Are any programs encouraging edible planting in public areas? 	<ul style="list-style-type: none"> •Are there any local food factories/processors/distributors? •Are there any local supermarket food outlets? •Are there any other local retail food outlets? •Are there any local retail food markets? •Are there any retail local dining and meal outlets? •Are there any local liquor outlets? 	<ul style="list-style-type: none"> •Are there any characteristics of retail food outlets that are economic barriers to food access? •Does the cost of transport affect ability of residents to access food? 	<ul style="list-style-type: none"> •Are there any emerging cultural groups who require access to culturally appropriate food? •Are there infant, child, youth, and aged support and activities for social and food connectedness?
Food available for distribution	<ul style="list-style-type: none"> •Are any programs supporting growing & sharing of food from home gardens? •Are local water restrictions in place? •What are the effects of water restrictions on growing food in these gardens? 	<ul style="list-style-type: none"> •Are daily basic food needs (milk, bread, fruit) within reasonable distance for all residents? •What amenities are provided for bicycle transport? •Does public transport connect households to retail food supplies, dining and meal outlets? 	<ul style="list-style-type: none"> •Are there any local retail food outlets that provide home food deliveries? •Are there any local retail food outlets that provide online food shopping with delivery? 	<ul style="list-style-type: none"> •Are there any "breast feeding welcome here" locations? •Are there community programs and activities for social and food connectedness?
Food available for purchase	<ul style="list-style-type: none"> •Is any assistance available for water conservation and recycling? •How is food and water safety, food waste and packaging waste addressed? 	<ul style="list-style-type: none"> •Are there essential (maintained) amenities on walking routes and in public spaces? •How many households have cars? •Are Baby Change Room facilities readily available? •Is there any community transport connecting households to food supplies, dining and meal outlets? 	<ul style="list-style-type: none"> •Are there any community dining and meal outlets? •Do any community food outlets provide take-home or home food delivery? •Are there any community kitchens? 	<ul style="list-style-type: none"> •Are there any barriers (natural, built, economic) to food access for cultural groups and at-risk groups? •Are there any barriers (natural, built, economic) to physical activity for cultural groups and at-risk groups?
Food purchased				
Food eaten				
Social benefit Health status outcomes	<ul style="list-style-type: none"> •Are there any local environmental initiatives? 	<ul style="list-style-type: none"> •Are there minimum standards for food storage and preparation in community housing? 	<ul style="list-style-type: none"> •Are there any emergency relief food outlets? 	<ul style="list-style-type: none"> •Are there any identified community resilience factors that can be built on to improve food security?

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Connecting Communities
Strengthening Democracies



Health and Wellbeing Dimension: Community Health and Wellbeing Profile

Key documents were sourced to obtain demographic data for the Wangaratta Local Government Area using the Department of Health Hume Region Health Planning Toolkit. Key demographic data was sourced from the Australian Bureau of Statistics (ABS) and the Wangaratta Community Profile website which summarises ABS data from the Census of Population and Housing 2011 (Profile ID). Other sources included population surveys, such as the Community Indicators Victoria data and Victorian Population Health Survey (Department of Health, Victorian Population Health Survey 2008, 2009) (Community Indicators Victoria, 2013).

Economic Dimension: Victorian Healthy Food Basket Survey

The Victorian Healthy Food Basket (VHFB) Survey is a tool to monitor the cost, availability and access to nutritious foods in Victoria (Palmero & Wilson, 2007). The VHFB was developed by Monash University in 2007 and is composed of 44 core food items and 10 energy dense nutrient poor foods. The VHFB contains all foods required to meet the nutritional guidelines for four different family types over the course of 2 weeks. These food items meet greater than 80% of Nutrient Reference Values (NRVs) for individuals and at least 95% of energy requirements for the family.

The four family types include:

- Typical family- 2 adults and 2 children (44 yr old male, 44 yr old female, 18 yr old female & 8 yr old male)
- Single parent family (44 yr old female, 18 yr old female & 8 yr old male)
- Elderly pensioner (71 yr old female)
- Single adult (male over 31 yrs old)

A student at the CHPCP conducted VHFB Surveys in all supermarkets in November 2012 over the whole CHPCP catchment including Benalla, Wangaratta, Alpine and Mansfield Shires.

The student used the VHFB instructions and templates developed by Monash University to collect data on the 44 core food items (**see Appendix 1**). The prices of each of the 44 food items from each supermarket were entered into an excel template developed by Monash University. The total cost of the VHFB was calculated for each family type in each supermarket.

Built Dimension: Food Outlet Mapping

Geographical Information System (GIS) mapping was completed by a volunteer who is studying a Masters of GIS and Remote Sensing. Food outlets were mapped to examine physical access to fresh fruit and vegetables for residents. A list of food outlets on the public Food Act Register was provided by the RCoW Environmental Health Officer. This list was then cross referenced with food outlets listed on “Yellow Pages” and internet searches.

The food outlets were then categorised into the following:

- **Essential food outlets;**
 - Supermarkets
 - Fruit and vegetable retailers (green grocers)
 - Butchers, fish and poultry
 - Farm gate sales
 - Bakeries
- **Non-essential food outlets**
 - Fast food and takeaway
 - Restaurants and takeaway
 - Restaurants and cafés
 - Convenience stores and petrol stations
 - Liquor outlets

(See Appendix 2)

The address, property number and category of each food outlet were placed into an excel spreadsheet. The GIS volunteer then plotted the food outlet types onto a map. Food deserts are land areas which are not within a 500m walking distance to food or public transport to get to food. A 500m buffer zone was drawn around each food outlet (1km diameter circle). Any area outside this circle is considered to be a food desert.

Food Outlet Audit

Two Deakin University students conducted surveys with food outlets over the CHPCP to assess if the food outlets were selling healthy food options or fresh fruit and vegetables.

Food outlets in Wangaratta were called, visited or researched online by the students. Quantitative data was collected on the number of food outlets which offered healthy options or fruit and vegetables. Qualitative data was collected through a series of questions including:

- Description of fruit and vegetables stocked
- Source of fruit and vegetables
- Barriers to selling fruit and vegetables
- Enablers to selling fruit and vegetables
- Clientele

Existing Nutrition Programs

Northeast Health Wangaratta and Ovens and King Community Health sought to understand what current activities which relate to food were being run in Wangaratta. Information was collected through key informant interviews and discussion with local service providers.

Results: VLGA Scanning Tool

Health and Wellbeing Environment- Community Health Profile

Socio-Economic

- Rated 30th most disadvantaged LGA in Victoria, with a Socio-Economic Index For Areas (SEIFA) of 981.1 (Profile ID).
- High unemployment rate of 7.9% compared to Victoria 5.5% (Department of Education, 2012).
- Low average weekly household income of \$846 compared to \$1,216 for Victoria (ABS, 2011).
- 34.4% of households have an income of <\$600 per week compared to Victorian average 23.8% (ABS, 2011).
- High proportion of low income households compared to Hume and State average (ABS A. B., 2011).
- 35th LGA with the highest number of individual low income earners (out of 79 LGAs) with 42.3% of individuals having a weekly income of <\$400. Of these the majority (49.2%) were female, which is higher than the state average of 47.1% (2012 Local Government Area Profiles: RCoW, 2013).
- Number of low income families (1.5% of all families) compared to Victoria (1.8%) (2012 Local Government Area Profiles: RCoW, 2013).

The **Index of Relative Socio-Economic Disadvantage**, focusing on disadvantage and derived from variables such as low income, low educational achievement, unemployment, and households without motor vehicles (Philanthropy Australia, 2008).

Table 1: Index of relative socio-economic disadvantage.(SEIFA)

Area	2011 index
Wangaratta (South)	868.5
Regional VIC	977.7
Rural City of Wangaratta	981.1
Wangaratta (Central-East)	983.8
Australia	1,002.0
Wangaratta (West)-Waldara	1,003.1
Mohyu and King Valley	1,003.1
Victoria	1,009.6
Springhurst – Eldorado and District	1,017.2
Glenrowan and District	1,038.3
Oxley – Milawa and Ovens Valley	1,043.6
Wangaratta	1,048.4

(Profile ID)

At Risk Groups

- High number of single parent families (19.7% of all families) with 85.6% of these being female parents (ABS, 2011).
- 2,396 people live alone in Wangaratta (34.2%). This is higher than the state average (24.5%) (ABS, 2011).
- 5.7% of the population need assistance for core activity compared to the state average of 5%. 4.5% of the population have a severe and profound disability compared to 305% in Victoria (2012 Local Government Area Profiles: RCoW, 2013).

Health Status

- 22nd highest LGA for self reported fair to poor health. 20.2% of people in Wangaratta report their health as fair or poor compared to the state (18.3%). Wangaratta is ranked highest out of the 79 LGAs for males reporting fair or poor health (28.3%) (2012 Local Government Area Profiles: RCoW, 2013).
- Over half the Wangaratta population is overweight or obese (57.5%). This makes Wangaratta the 12th Highest LGA. It has the 9th highest number of overweight males (67.8%) out of 79 LGAs (2012 Local Government Area Profiles: RCoW, 2013).
- The number of developmentally vulnerable children in Wangaratta has decreased significantly from 2009 to 2012. In 2012, 13.2% of children were classified as developmentally vulnerable in one or more domain, which decreased from 17.9% in 2009. There were 6.4% of children developmentally vulnerable in two or more domains in 2012, which has significantly lowered since 2009 (8.1%) (Australian Early Development Index, 2013).
- 54.0% of infants were fully breastfed at three months compared to Victoria 51.2%. (2012 Local Government Area Profiles: RCoW, 2013)

Table 2: Proportion of overweight/obese individuals

Population	% total persons overweight/obese	% females overweight/obese	% males overweight/obese
Victoria	48.6	40.3	57.2
Hume Region	55.4	47.3	63.8
Wangaratta	57.5	48.4	67.8

(Department of Health, Hume Region Healthy Eating Profile 2012, 2013)

Food and Nutrition

- Ranked 11th highest for food insecurity out of 79 LGAs. 6.4% of the population ran out of food in the past 12 months and could not afford to buy more compared to the state average of 6.0%. This is thought to be underestimated as it does not include youth, dependants, homeless or people of non-english speaking background (Department of Health, Victorian Population Health Survey 2008, 2009).
- 33.2% reported that some foods were too expensive, 20.8% could not get the right quality, 5.8% could not get the right variety, 3.4% could not get culturally appropriate food and 9.0% had inadequate transport (Table 3) (Department of Health, Victorian Population Health Survey 2008, 2009).
- 41.9% of adults do not meet fruit and vegetable guidelines (2012 Local Government Area Profiles: RCoW, 2013).
- In Wangaratta, emergency food relief is available in the form of food packages from St Vincent De Paul and Loaves and Fishes. In 2011-2012 2763 adults and 2610 children accessed Loaves and Fishes. On current monthly trends this year, 1800 adults and 2400 children have accessed instances of emergency food relief at St. Vincent De Paul.

Natural Environment Results

Wangaratta is currently on a Permanent Water Savings Plan by North East water. Many residential and community gardens were not able to be maintained previously during a drought.

Home gardens in outlying townships dependent on rainwater are affected by poor rainfall.

Home gardens on town water are affected by increased water rates and potential water restrictions

The RCoW has developed the Sustainable Water Use Plan to address the current unsustainable use of regional water resources. They are implementing the Sustainable Water Use Plan Program and have developed a drought response plan (Rural City of Wangaratta, 2013). The community are largely unaware of these initiatives.

Built Environment Results

Transport

Access to transport is a key determinant for people's ability to access healthy food, as well as for employment, education and essential services such as health care (Community Indicators Victoria, 2013) (Department of Health, Hume Region Healthy Eating Profile 2012, 2013).

The population living near public transport is low. Only 43.5% of Wangaratta residents are located near public transport compared to the state average of 72.3% (Department of Health, Hume Region Healthy Eating Profile 2012, 2013).

From table 4 and maps 1A and 1B it can be seen that a high number of the population is not near public transport and so people often rely on cars to access food. There are 703 households (6.4%) out of 10,953 households who do not have a car in Wangaratta (Profile ID). This is the same as Regional Victoria.

Different suburbs within Wangaratta have poor access to food outlets due to a lack of public transport and not having a car. Wangaratta South and Wangaratta Central-East have significantly higher numbers of households without cars compared to the Hume and State average (Profile id, 2013). This is in contrast to the very low number of households without a car in Glenrowan and District as well as Springhurst and Eldorado and District (Profile ID).

Table 3: Number of households without a car in Wangaratta

Area	Number of households	Number of households without car	% of households without car
Wangaratta LGA	10,953	703	6.4
Glenrowan and District	1,023	8	0.8
Mohyu and King Valley	763	28	3.7
Oxley – Milawa and Ovens Valley	1,180	19	1.6
Springhurst – Eldorado and District	609	8	1.3
Wangaratta (Central-East)	1,679	189	11.3
Wangaratta (South)	2,345	264	11.2
Wangaratta (West) – Waldara	3,334	215	6.5
Hume	N/A	N/A	5.9
Regional Victoria	N/A	N/A	6.4
Victoria	N/A	N/A	8.3

(Profile ID)

In the 2008 Victorian Population Survey, transport was included as a question on the reasons why people don't always have the quality or variety of food they want and need. In Wangaratta 9.0% of respondents indicated that inadequate or unreliable public transport was the reason why they could not access food (Department of Health, Victorian Population Health Survey 2008, 2009). Another survey conducted in 2012 by VicHealth found that 23.6% of Wangaratta residents had experienced day-to-day travel restrictions or transport limitations over the past 12 months which was higher than both the Hume (22.6%) and state average (23.7%) (VicHealth, 2012).

Table 4: Reasons why people don't get the food they want

Region	I don't always have the type of food I want because...				
	Some foods are too expensive	Can't always get the right quality	Can't always get right variety	Can't always get culturally appropriate food	Inadequate and unreliable public transport
Victoria	28.3	25.5	10.9	6.8	8.0
Hume	32.0	28.5	11.8	5.6	9.3
Wangaratta	33.2	20.8	5.8	3.4	9.0

(Department of Health, Victorian Population Health Survey 2008, 2009)

The Transport Connections project has been running in Wangaratta from 2010 to 2013. Transport Connections is a state funded project which aims to improve transport options and find innovative solutions for disadvantaged residents through partnerships. The Traveller's Aide Project, which has been funded by Transport Connections, will provide a service to help travellers requiring mobility support so that they can become more confident in using local services and facilities. The project targets residents from rural townships near Wodonga and Wangaratta. Currently this is a 12 month pilot.

Internet

The number of households in the RCoW with internet access is 67.0% (ABS A. B., 2011). This is similar to the Hume Region (69.1%), Victoria (74.3%) and regional Victorian (68.4%) averages (ABS A. B., 2011). Wangaratta South, Wangaratta Central-East and Mohyu and King Valley had the poorest internet access, with 34.5%, 29.6% and 28% of dwellings not having internet respectively (Profile ID). There are more households without internet connections when compared to Victoria (19.1%), Hume Region (24.9%) and Regional Victoria (25.3%) (ABS A. B., 2011). This restricts online delivery services in some areas due to poor internet connections.

Food Outlet Mapping

Table 5: RCoW Food Outlet categories*

Food outlet Category	Number of Outlets
Supermarket	4
Green Grocer	2
- Farm gate sales/road side stall	Seasonal stalls not known.
- Fruit and vegetable shop	
Bakery	12
Butcher, poultry, fish	12
Total Essential Food Outlets	30
Convenience Stores and petrol stations	20
Takeaway and fast food	23
Restaurant and café	49
Liquor outlets (takeaway)	3
Culturally specific stores and delicatessen	0
Total Non Essential Food outlets	95
Total food outlets	125

*Every effort was made to look at all outlets but mistakes can occur. We apologise for any unintended omissions.

Wangaratta Township (see Maps 1A and 1B)

There were 204 food outlets listed under the Public Health Act Register for RCoW. Thirty outlets (14.7%) were categorised as “essential” (n=30) which included supermarkets, butchers, fruit and vegetable grocers, bakeries and farm gate sales. The majority of stores (76.4%) were classified as “non-essential” which included convenience stores, petrol stations, takeaway and fast food, restaurants and cafes, and liquor outlets.

The ratio of essential to non essential outlets in the RCoW is approximately 1:4. For the population of RCoW there is:

- 1 supermarket store per 6704 people
- 1 food outlet with fruit and vegetables per 4469 people
- 1 takeaway/convenience store per 623 people
- 1 non essential outlet per 282 people

Only 4 supermarkets, 2 green grocers and 1 convenience store sold a range of fruit and vegetables regularly. There is a 1:15 ratio of food outlets which sell fruit and vegetables to those who do not.

Rural City of Wangaratta (Maps 1C, 1D)

There are 18 food outlets located outside of the Wangaratta urban area in smaller outlying rural communities. The majority of these were classified as non essential food outlets. A number of convenience stores can also be classified as ‘takeaway’.

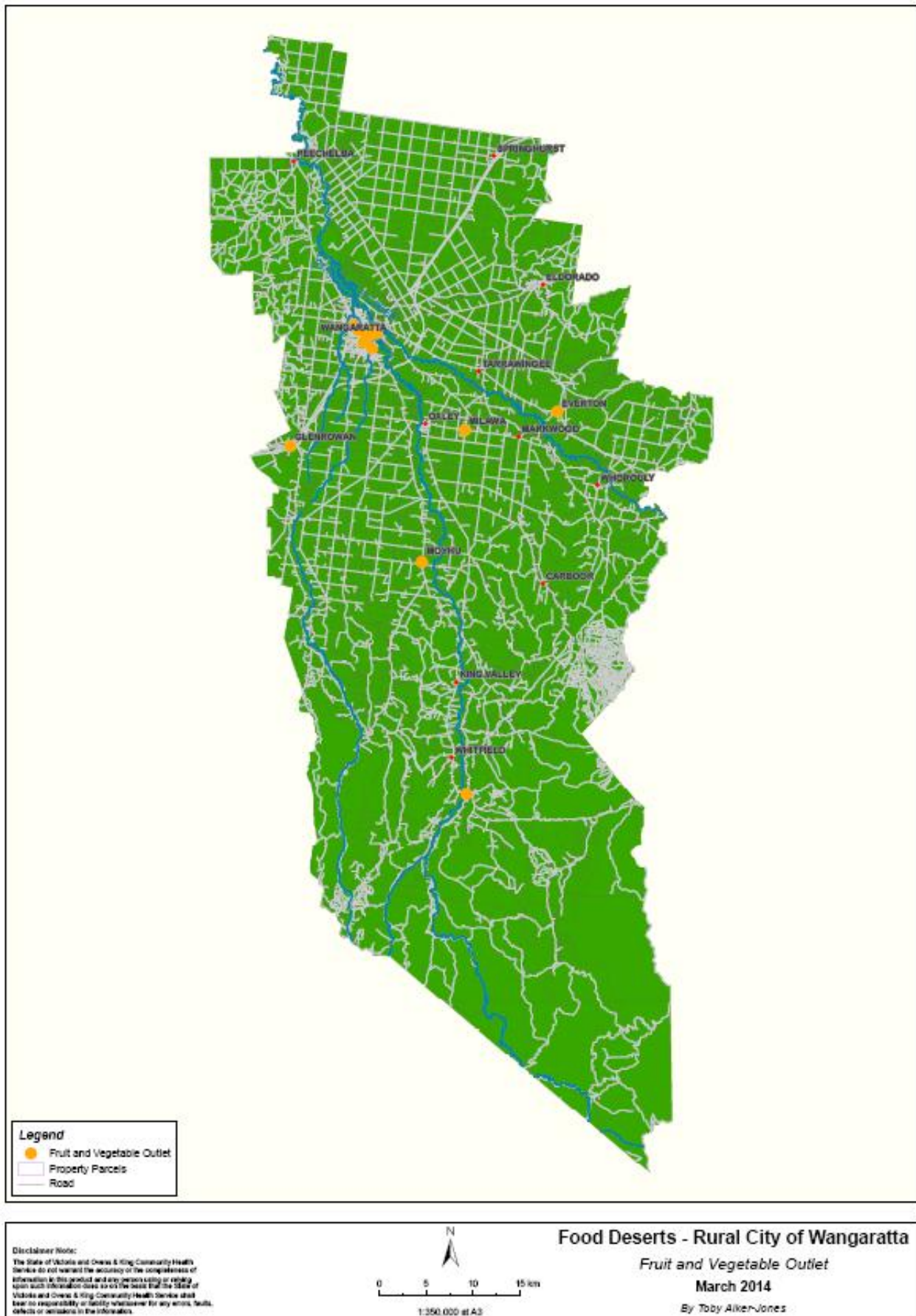
All of the supermarkets are located within the Wangaratta urban area. The majority of food outlets in the Wangaratta area are non essential. All of the supermarkets (n=4) and green grocers (n=2) were located in the urban area.

Summary:

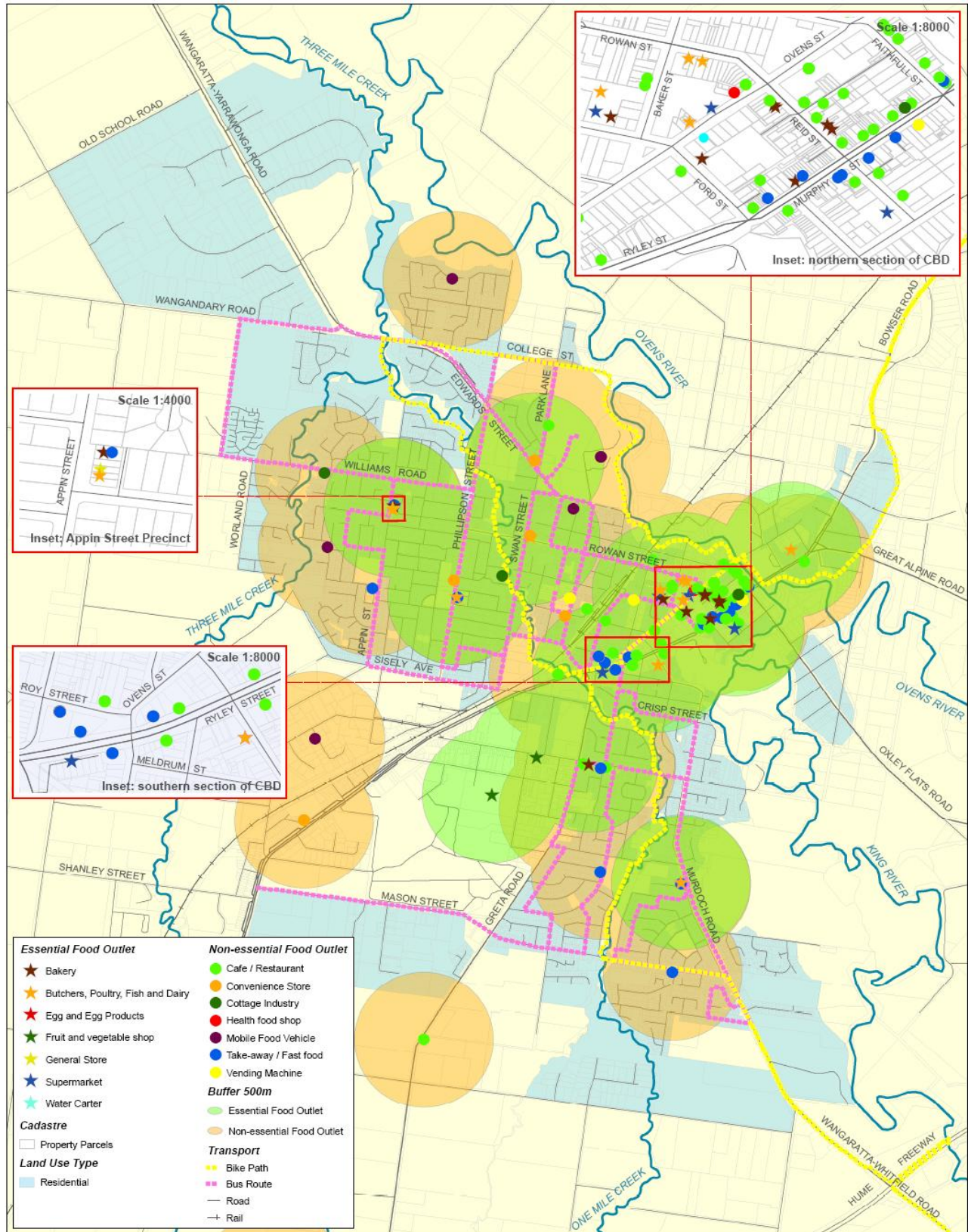
- Majority of Wangaratta is in a fruit and vegetable food desert*
- The food outlets are centralised, with majority being located in the town centre
- There are several food deserts with no access to either essential or non essential outlets
- Majority of the low SEIFA neighbourhoods (most disadvantaged) are located in food deserts and have limited access to fruit and vegetables.

*A food desert is an area where people do not have easy access to healthy, fresh foods. This is a particular issue in low socio-economic status areas and where there are members of the community who have limited mobility (Active Healthy Communities, 2013). For our purposes we have used a 500m radius for our buffer zone, meaning any resident more than 500m away from either an essential food outlet or public transport is considered being in a food desert.

Fruit and Vegetable Outlets Rural City of Wangaratta (Map 1A)

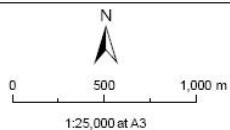


Essential Vs Non Essential Food Outlets with Residential Area Incl 500m buffer zone (Map 1B)



Disclaimer Note:

The State of Victoria and Ovens & King Community Health Service do not warrant the accuracy or the completeness of information in this product and any person using or relying upon such information does so on the basis that the State of Victoria and Ovens & King Community Health Service shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.



Food Deserts - Wangaratta Township

Food Outlet Type & Residential Area

March 2014

By Toby Alker-Jones

Economic Environment Results

Despite 76.6% of rental housing being affordable, Wangaratta has the 17th highest level of rental stress in Victoria, with 28.3% of residents experiencing rental stress compared to the Victorian average of 25.1% (Department of Health, Hume Region Healthy Eating Profile 2012, 2013) (Public Health Information Development Unit, 2012). Wangaratta ranks 20th highest for the number of social housing in the state. Social housing accounts for 4.9% of total dwellings compared to 3.8% state average (2012 Local Government Area Profiles: RCoW, 2013) (Public Health Information Development Unit, 2012).

Median household income was \$656 in 2001 and rose to \$912 in 2011, an increase of 39%. Average weekly rent costs for the same period rose from \$110 to \$175 (59.1%) and monthly mortgages rose from \$661 to \$1300 (96%) (ABS A. B., 2011). These figures would suggest a degree of financial strain on household finances, which may impact on the ability to access quality food (ABS A. B., 2011).

Victorian Healthy Food Basket Survey

Three major supermarkets in Wangaratta were included in this analysis. Aldi is not a comparable store to Coles, Safeway and IGA as it does not contain branded products.

At the time of the survey being completed the average cost for a VHFB for a typical family (2 adults and 2 children) in Wangaratta, was \$404.47 per week. In Wangaratta 18.9% of families with children earn less than \$650/week, suggesting that these families would be spending at least 30% of their total income on the healthy food basket.

From the 2006 census, there were 15.5% of families in Wangaratta headed by one parent. The average cost of the VHFB for single parents in Wangaratta was \$276.66 (excluding Aldi). Using the 2006 census data, single parent families require between 25% and 30% of their total income to purchase the healthy food basket for their family in the Wangaratta area (see Table 6).

Table 6: Healthy food basket cost data for four family types at supermarkets across Wangaratta, November 2012.

SUPERMARKETS	Total Cost: Family (\$)	% Total Income	Total Cost: Single Mum (\$)	% Total Income	Total Cost: Elderly Woman (\$)	% Total Income	Total Cost: Single Man (\$)	% Total Income
Overall Average of all Wangaratta stores n=3	404.47	29.6	276.66	26	96.63	14	127.96	26.3
Overall average supermarkets in Central Hume PCP	415.90	31	286.48	27	100.65	14	132.68	27

Socio-Cultural Environment Results

Centrelink Payment Changes

In 2013 the rules governing single parent payments from Centrelink were changed. Single parents are no longer eligible for the Parenting Payment when the youngest child turns 8 years old. Parents are being encouraged to move onto the Newstart Allowance (Department of Human Services, 2013). The maximum rate per fortnight on the Single Parent Payment is \$683.50. The Newstart allowance for a single parent per fortnight is \$537.80. If a single parent's income is over \$176.90 per fortnight (+\$24.60 for each additional

child) the single parent payment is reduced by 40c for every dollar (Department of Human Services, 2013). In comparison if a single parent has an income greater than \$62 per fortnight on Newstart, the payment then reduces by 40c in the dollar (Department of Human Services, 2013).

Using the VHFB data, single parents on the Single Parent Payment of \$683.50 per fortnight would spend 40.3% of their income on food. The cost of purchasing a healthy food basket each fortnight would increase to 51.2% of income if a single parent was receiving the Newstart allowance of \$537.80 per fortnight.

Cultural Diversity

Only 8.4% of the population were born overseas, with 4.8% of the population from non english speaking countries (ABS, 2011). Only 4.8% of the population speak another language, with the main languages in RCoW being Italian (2.5%), German (<1%), Greek (<1%), Dutch (<1%) and Tagalog (<1%) (ABS A. B., 2011).

The Aboriginal and Torres Strait Islander population has increased from 147 to 270 people from 2001 to 2011 (ABS, 2011). Wangaratta has the 29th highest population of Aboriginal and Torres Strait Islander people in the state (2012 Local Government Area Profiles: RCoW, 2013). Aboriginal and Torres Strait Islanders make up 0.99% of the population in Wangaratta, compared to the state average of 0.74% (2012 Local Government Area Profiles: RCoW, 2013). The median age of Aboriginal and Torres Strait Islanders in Wangaratta is 20 years, which is significantly lower than the whole population median age of 43 years (ABS, 2011).

Results: Food Outlet Interviews

A total of 107 food outlets were contacted by a phone call or visited. Businesses not included were those not open. Five restaurant/cafe menus were sourced from the internet (see **Appendix 4** for full table of results). Categories for assigning healthy options were None, Limited (<4) or Sufficient (4+).

Green Grocer

Supermarkets were included as green grocers however they were not interviewed. Green grocers used in this survey include Olive's Health Foods, which stock a small range of organic fruit and vegetables, and La Bella Rocca Fruit, which has a large range of fruits and vegetables. The fruit and vegetables are sourced from locals where seasonably available. Otherwise, they come from a market in Melbourne. The barriers identified in selling fresh produce are competition from supermarkets, cost (incl advertising) and storage space. The clientele are mostly local.

Convenience Store

Many of the convenience and general stores are located within close proximity to at least one school, including pre-schools, kindergartens, primary schools and high schools. Many of these stores at the time of inspection stocked fruit and vegetables, however only had a limited amount (less than 4 types). Cheshunt general store was the only outlet to stock a sufficient amount of fruit and vegetables (4+).

Poor demand and spoilage were recognised as the main barriers to selling fresh produce. Enablers to stocking fruit and vegetables include stocking only popular fruit items due to demand as an easy snack for the school kids. The demand for vegetables isn't as high. The clientele in these stores are mostly school kids and locals.

Bakery

Most bakeries in Wangaratta have sandwich bars as their healthy/fruit and vegetable option. All the bakeries in this survey were recorded as either having limited or no healthy options/fruit and vegetables. A barrier identified to selling healthy options was the number of cafes already supplying these. The clientele include tourists and locals.

Cafe/Restaurant

Various cafes, restaurants and bars provide some healthy food options. A common trend noticed among all, were that the children's menu never incorporated healthy options. Most venues had salad and vegetable options, particularly as a side, however this was often not the main element of a meal. How the meals are prepared is an unknown in this survey. The healthy options and fresh produce is sourced from locals where possible. Barriers to selling healthy options are around spoilage (if it is organic, shelf life is less), and availability of products (eg seasonally available). Enablers to selling healthy options include popularity and chef's passion about cooking healthy options. One business stated that gluten free and vegetarian eating is becoming more popular; the perception being that this means it was healthy. The clientele include locals and tourists.

Takeaway foods

A total of 13 takeaway outlets were contacted. The chain takeaways were not contacted. Most takeaway food outlets have limited healthy options. If anything, this group of food outlets would have a sandwich bar and/or quiches, focaccias; sandwich's or rolls on the menu. A barrier to takeaway outlets selling healthy options is that the general consensus is customer's only want hot foods such as pies/chips in the winter and there is a lack of demand for healthy options.

Results: Existing Nutrition Programs

There are many initiatives and programs running across RCoW that have been heard about through Key Informant interviews, local knowledge and contacting schools and early childhood education centres using Survey Monkey.

The Survey Monkey had a response rate of 86% from primary schools and 66% from early childhood centres. All of the primary schools promote healthy eating in the classroom, with 83% having fruit breaks and 79% having their own edible gardens. All of the early childhood centres have healthy eating policies, with 92% having fruit breaks and 61% having their own edible gardens.

There were no emerging cultural groups identified by the organisations, however many services noted that they had seen an increase in the 'working poor', that is, working families who are struggling with the increasing cost of living. There is no financial assistance for those who are middle class and seen to be struggling to make ends meet. When asked about the barriers to food access and healthy eating issues raised were lack of available transport, costs of travel and knowledge on how to cook and prepare healthy food.

Emergency Food Relief

There are three emergency food relief centres in Wangaratta; Loaves and Fishes, St Vincent De Paul and Carevan. Anglicare auspice the Loaves and Fishes emergency relief, which offers food vouchers and a range of perishable and non-perishable goods. They source these from state-wide food bank and local supermarkets. Loaves and Fishes mainly provide this service to holders of a centrelink card who are experiencing a crisis situation. Funding is from Federal Government and donations.

St Vincent De Paul (Vinnie's) also runs an emergency food relief program in Wangaratta. Their food is donated by local businesses such as Aldi (fruit and vegetable), Bakers Delight and Coles (Bread). They source some food from state-wide food banks. They also purchase approximately \$1000 of food from IGA per month. Funding comes from donations and opportunity shop profits.

Carevan currently provides wholesome evening meals 3 nights per week to people experiencing hardship in Yarrunga, Wangaratta West and Central Wangaratta. All food is donated and volunteers are used in all aspects of food preparation, storage and distribution.

Fresh Food Supply

There is one Wangaratta community market where fresh food is sold to the community. The Sunday market is run weekly and has fruit and vegetable stands, as well as plants, craft and bric a brac. The Moyhu Farmers market is run once a month. Oxley has an annual bush market in November that coincides with the Wangaratta Festival of Jazz, where fresh fruit and vegetables can be purchased.

Community Gardens

There is only one community garden in the Wangaratta area. Garden plots are allocated to individuals and users pay a fee for their plot. Pangerang Community House, Open Door Neighbourhood house and the King Valley Learning Exchange have small vegetable gardens that they utilise and encourage participants to use.

There are a number of schools and early childhood centres within the RCoW who have established edible gardens; however these are not generally able to be accessed by the general community.



Health Promoting Schools/Kindergartens

The Healthy Together Achievement Program is a joint Department of Health and Department of Education and Early Childhood Development initiative (Department of Health, Healthy Together Victoria, 2013). It is a state-wide health promotion program which focuses on creating healthy environments to influence children's health. All early childhood services and schools can join and have access to tools, resources and guidance to achieve a health promoting school status. The Achievement Program has replaced the Kids-‘Go For Your Life’ award. Currently one early childhood centre in Wangaratta is registered with the Achievement program. There are no primary schools registered.

Smiles 4 Miles is another health promoting initiative in early childhood centres funded by Dental Health Services Victoria (Dental Health Services Victoria, 2013). It aims to improve the oral health of children through ‘Eat Well, Drink Well, Clean Well’ messages. Currently a number of Wangaratta early childhood centres are involved in the Smiles 4 Miles program.



Education:

North East Support and Action for Youth (NESAY) run the HEAL (Healthy Eating and Active Living) program with at risk youth. HEAL is a 6 week program with 3 hour sessions focusing on increasing knowledge, independent living skills and peer relationships, as well as preparing and cooking meals.

Rural Housing Network staff have been trained to run the Bridges out of Poverty training which is a community change model with the goal of eliminating poverty. Rural Housing staff see value in running this program in Wangaratta in the future, if the opportunity to do so was available.

Borinya Wangaratta Community Partnership offers an alternative education setting for at risk or disengaged youth. Borinya utilises its edible garden and orchard as part of its Vocational Pathways programs. They also expressed interest in building the capacity of the parents and carers around eating healthier food.

Local Country Women's Association groups have a strong social justice focus and interest in sharing food, growing and cooking skills.

The neighbourhood houses run numerous cooking programs from kids cooking, cooking on a budget to community cooking.

Community Meals:

There are many community meals available for the aged population in Wangaratta. Meals on Wheels are available to HACC eligible aged residents in Wangaratta for a small cost (delivery once per day). There are cooked fresh daily at Northeast Health Wangaratta. Hot meals are delivered by volunteers in urban areas. Frozen meals can be arranged for clients in rural areas.

Carevan delivers meals three times per week in Wangaratta. They provide wholesome meals for people who may be homeless or, due to family and financial pressures, are struggling to provide food for themselves and often their families. Carevan does not discriminate, meaning no one is turned away from accessing the service. Carevan volunteers do the cooking and some meals are donated from restaurants. Carevan also has a relationship with Borinya and the Inner Wheel Club of Wangaratta who cook meals for the van. Any leftover food is donated to Anglicare.

Community meals provide residents of the Rural City of Wangaratta with a nutritious, home cooked two course meal in a social setting. Meals are held fortnightly at the Whorouly Senior Citizens Club and the Glenrowan Senior Citizens Club, monthly at the Wangaratta Italian Pensioners Club and bi-monthly in Springhurst Senior Citizens Club and the Eldorado Senior Citizens Club. Meals are also held bi-monthly at Peechelba and Cheshunt/Edi Upper for senior residents to attend. Participants are requested to pay a minimal fee for the cost of the meal (Rural City of Wangaratta, 2013).

Pangerang Community House run a food swap every Wednesday from 9am-10am. Community members are encouraged to bring excess produce to share with others. Those without produce to share may also take food from the table.

Results: Key Informant Interviews

Health Promotion Officers conducted several key informant interviews with local support services in RCoW. These services included neighbourhood houses, welfare agencies and emergency food relief agencies. The following are key themes from those interviews.

Transport

Transport arose as an issue for accessing healthy food with many of the key informant interviews. A range of barriers were identified regarding public transport, especially for those living in rural areas. Transport into Wangaratta from the King Valley is difficult as the bus only picks up from outside the Whitfield general store and it can be problematic getting to that location. It was also mentioned that people living in rural areas are feeling more isolated as they do not have the access to services or for purchasing healthy food. One key informant interview mentioned 'one of the main supports requested by the target group was being able to come into town to do their shopping'.

Skills and Knowledge

Skills and knowledge were cited as barriers for healthy eating and a common issue for those accessing support from agencies. Many agencies offering support spoke about clients not having skills around budgeting, preparing and storing food or how to follow basic recipes, with one interview stating 'my feeling is it is around education, it is a generational thing. They are not taught how to prepare food'. Agencies also made comments about the lack of access to services for their clients, such as financial counselling. There are only two financial counsellors in the RCoW that work with those clients accessing support services and the waiting list to access them are months long.

Financial Issues

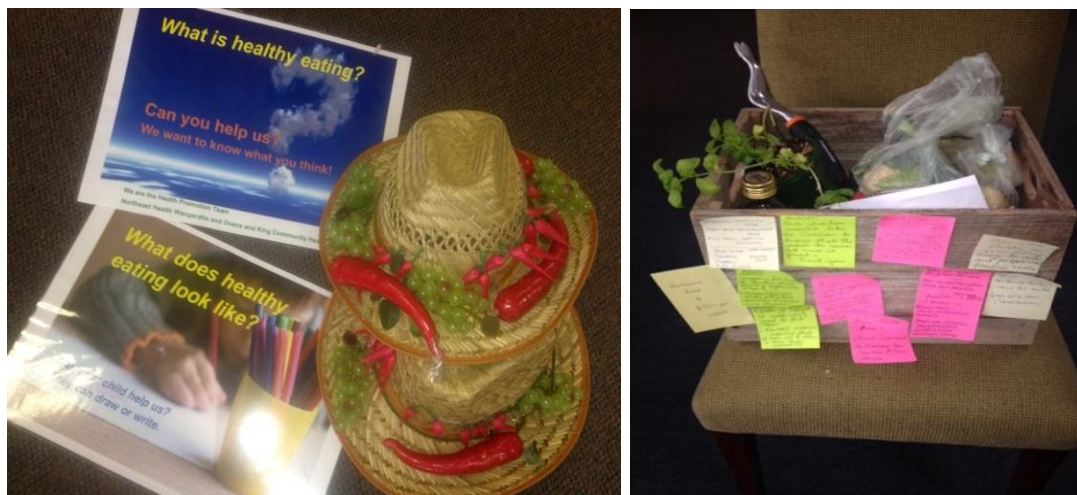
Financial issues such as cost of purchasing healthy food and increasing cost of living in general was a common theme. Two support agencies stated that they had seen an increase in what they call 'working poor'; families that are working but are beginning to struggle as the cost of living is increasing. One interviewee stated that 'people from a lower socio-economic group can get various forms of assistance, however there is no such financial assistance available for the middle class. The key informant interviews informed us that they were noticing in long term clients that financial issues seem to becoming a 'generational' issue and 'becoming the norm' for young people.

Results: Community Consultations

Health Promotion Officers sought opportunities to attend existing community group gatherings to build relationships and discuss healthy eating. These groups were within communities where a greater proportion of residents experience low socio-economic lifestyles – Yarrunga, Wangaratta West and local Aboriginal groups.

During one community event the question 'What is healthy eating' was asked to community members. Key themes that came out of this discussion were that most people are able to identify eating more fruit and vegetables with other components such as having less fat, salt, sugar and drinking plenty of water. Eleven people highlighted the need for balance and moderation in what people eat. Even people who acknowledge they didn't have a great diet knew the things they should be eating to improve it, with one person stating 'just because we know it doesn't mean we do it!'

When community members were asked whether they would use a box of food containing ingredients to make a healthy meal, responses were varied and included things like the ingredients would need to be something familiar to them (not red kidney beans which was in an example box that was shown to them), and they would need to be able to access the boxes locally and somewhere there wouldn't be a stigma attached to going for example not having them at a welfare agency. People also suggested that having some cooking lessons accompanying the box would assist them to feel more comfortable in using the ingredients.



Discussion

The VLGA Municipal Food Security Scan was completed successfully in partnership with the RCoW, Northeast Health Wangaratta and Ovens and King Community Health Service. Many key stakeholders were involved in the data collection process, including services linked with disadvantaged people in Wangaratta. Data about the natural, built, economic and socio-cultural environment was successfully collected through the use of the VLGA Food Security Scan, food outlet mapping, VHFBS, community consultations and food outlet audits. The results from community consultations and key informant interviews validated the results gained from other methods such as food outlet mapping.

The food security scan found that many population groups residing in the RCoW were at high risk of food insecurity. The mapping of food outlets demonstrated that the majority of Wangaratta have poor physical access to fruit and vegetables. Neighbourhoods with high socio-economic disadvantage have been shown to be located in food desert areas. People living in Wangaratta South are at risk of food insecurity due to physical barriers of reaching the centralised food outlets, i.e. there are a high number of households without cars and there are poor public transport options. The limited transport to centralised food outlets may impact significantly on people's fruit and vegetable intake. Residents may be required to purchase food from more expensive non-essential food outlets, which often have limited fruit and vegetable options and more energy dense foods high in sugar and fat (Vic Health, 2011). The physical access also denies some residents the opportunities for purchasing fresh produce at local markets.

Wangaratta has a high population of low income single parents, with majority being women. Women are more likely to be food insecure than men (Department of Health, Victorian Population Health Survey 2008, 2009). There is potential that more households will be at risk of food insecurity as parents moving from the

Single Parent Payment to Newstart Allowance will need to spend approximately 40% of their income on a healthy food basket. This increasing amount of household expenditure required for healthy food, coupled with rental stress and increased costs of utilities may influence parents' decisions to prioritise other expenses before food, or choose cheaper, and less nutritious foods (Anglicare Australia, 2012).

Wangaratta has a population at high risk of food insecurity. Wangaratta has the 24th highest rate of food insecurity out of 79 Local Government Areas (LGA's), with 6.4% of the population running out of food in the past 12 months and could not afford to buy more (Department of Health, Victorian Population Health Survey 2008, 2009). This rate was also slightly higher than the Victorian average of 6.0% (Department of Health, Victorian Population Health Survey 2008, 2009).

The impact of a diet low in fruit and vegetables is a significant public health issue, with 10% of the total burden of disease related to poor intake (AIHW, 2008). Those facing food insecurity are more likely to be overweight, obese or underweight (Burns C., 2004). Women with a low socioeconomic status are 20-60% more likely to be obese which may be due to perceived poor food access (Cameron, et al., 2003). A recent study has found that disadvantaged children are more likely to be overweight or obese (Jansen, Menash, Nicholson, & Wake, 2013).

Addressing the increase in obesity rates in disadvantaged communities is a public health priority. Improving the perceived healthy food access within a municipality has the potential to make a positive impact upon peoples' food choices. One study found that women of low socioeconomic status who have perceived physical access to fruit and vegetables, as well as a neighbourhood that values healthy eating, are more likely to consume fruit and vegetables (Hume, Ball, Crawford, McNaughton, & Stephens, 2007).

The recommendations of the Scan are based upon the VicHealth Food For All program and include growing food locally, getting residents and food together, advocacy, land use planning and using Council's regulatory and fiscal power to drive change (Vic Health, 2011).

Issues and Opportunities to Improve Healthy Food Access

NATURAL	
Issues for Rural City of Wangaratta	Opportunities for Action
Limited community gardens outside of school settings	<p>Map RCOW for potential urban edible garden sites</p> <p>Change or develop local planning policies to support community initiatives in growing fruit and vegetables within existing land uses. e.g. community gardens into council owned land and within new residential developments, domestic planting of nature strips, fruit trees in parks</p> <p>Strengthening Wangaratta Community Centre demonstration garden as a resource hub for other gardens</p> <p>Investigate resources which could be obtained to support local organisations/services /groups who</p>

Only one organisation offering sharing of food from home gardens	have identified interest in establishing a community garden (e.g. Pangerang, King Valley Learning Exchange, Anglicare, West Wangaratta Town Group)
Difficulty for older residents to maintain existing food gardens/orchards	Local Community Grant criteria that addresses healthy eating Support initiatives that encourage residential gardening (household growing own food) Investigate programs that could link people wishing to learn home garden food growing skills and help maintain existing gardens
Home gardens in outlying townships dependent on rainwater are effected by poor rainfall Home gardens on town water affected by increase in water rates and potential water restrictions	Investigate access to affordable household water catchment sources and recycling for families e.g circular gardens.
The community is unaware of existing council sustainability initiatives	Council promote its efforts towards sustainability to the wider community as community role model

BUILT	
Issues for Rural City of Wangaratta	Opportunities for Action
Supermarkets are clustered within the central area of Wangaratta. No green grocers within RCoW. There is one fruit and vegetable outlet in Vincent rd and some convenience stores sell limited fruit and vegetable items.	Consider location of future supermarkets and other fresh food supply outlets to improve accessibility by residents and encourage health impact assessments to inform strategic land use planning decisions using the information about food deserts identified in the GIS Maps.
We know the number of existing food outlets , walking tracks and bus routes, however cannot assess the accessibility of these for residents living in the municipality	
Well defined cycling/walking tracks leading into location of existing supermarkets, but lack of pedestrian crossings that provide right of way for walkers once in the actual central business district area. Older people, people with disabilities and families with children are particularly vulnerable	Provide approved 'zebra style' pedestrian crossings in the CBD area and promotion to the community of the regulations around their use
Limited baby change room facilities in the CBD	Results of the Parenting Needs Survey, April 2013,

Number of local liquor outlets. More research needed to identify number of stores per concentration population.	<p>coordinated by Council in partnership with NHW Lactation Clinic, O&KCHS, WHGNE were used to address this issue</p> <ul style="list-style-type: none"> • establish a purpose built facility • require planning permits to include baby change facilities <p>Develop GIS Map of existing local liquor outlets. Consider applications for future liquor outlets and impact on health status of the community</p>
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ECONOMIC	
Issues for Rural City of Wangaratta	Opportunities for Action
Limited links with local food growers who have underutilised surplus.	Identify opportunities for communities to access fresh, affordable food from local food growers (e.g. Wangaratta rotary club currently seeking funding for mobile fruit and vegetable van/trailer that could be used to pick up excess fruit and vegetable).
Centralised location of supermarkets	Proposal for future supermarkets to be located in identified food deserts.
Limited affordable food outlets to buy fresh fruit and vegetables apart from the supermarkets.	Support local food growers to sell direct to the public through farm gate sales, or mobile food stalls etc. and encourage local business to source and promote local produce. Be flexible with applying regulations regarding signage and roadside sales. Support alternative fresh food distribution models such as community supported agricultural programs
Density of fast food outlets	Restrict or influence placement of fast food outlets and adjust signage regulation. Consider differential rates or other incentives for food retail outlets in favour of those that sell healthy food choices
Limited baby change room facilities in the CBD means people are shopping outside of Wangaratta or reduce shopping time in Wangaratta.	Seek ways to encourage local businesses and/or services to provide purpose built facilities to encourage shopping locally.

SOCIAL and CULTURAL	
Issues for Rural City of Wangaratta	Opportunities for Action
Lack of transport to community programs and activities for social and food connectedness, in particular our outlying communities.	Investigate feasibility of 'shuttle bus' services to complement existing bus services

Families who choose to shop in Shepparton/Albury or restrict time spent shopping in Wangaratta due to poor baby change/parenting facilities (Parent needs Survey 2013)	Utilise results of recent Parenting Needs Survey to encourage businesses to become a 'Breastfeeding Welcome Here' location
Lack of healthy food options at public events	To encourage provision of healthy, fresh food options at public events e.g. Jazz Festival, Lion's Swap Meet, Wangaratta show. Sporting and recreation clubs can access support through the CARN Healthy Sporting Environments Program. Look at the possibility of having this available in other languages. Better promotion and availability of this resource
Limited healthy meal options for children at local cafes and restaurants.	Support programs that encourage cafes and restaurants to offer healthy food options for children.
You're Welcome in Wangaratta document languages and availability	Community grant criteria that addresses healthy eating
More support, activities, community programs needed for social and food connectedness. Limited links with local food growers who have underutilised surplus	Identify opportunities for communities to access fresh, affordable food from local food growers through programs like Pangerang Food Swap, combined with mobile fresh food van/trailer potential project. Identify opportunities for this knowledge to be shared e.g. NEMA food recipe book project, CWA sharing 'nanna technology'.
Underutilised food growing and/or food preparation knowledge held by older community residents. Transport has been identified as a barrier	Investigate programs that could link people wishing to learn home garden food growing skills and help maintain existing gardens.
Difficulty for older residents to maintain existing food gardens/orchards and manage fruit fly.	Build on Do care Volunteer visitor Model (run by Council) A social model of health approach is needed when working with vulnerable groups. E.g. Bridges out of Poverty training has been identified as an evidence based program for working with vulnerable groups.
Healthy eating is not necessarily a first priority for vulnerable groups. Often vulnerable groups less likely to have skills and knowledge around shopping, storing, planning and preparing healthy meals	Support programs that encourage peoples capacity e.g. cooking programs, educational food skill programs, food rescue or recovery programs (similar to Street Harvest/conversion into meals

Key Recommendations

People in the RCoW are at risk of food insecurity and low fruit and vegetable intake due to the following issues of food access and availability:

- Low income
- High costs of a healthy food basket, particularly for low income single parents
- Food and fruit/vegetable deserts in both low socio-economic urban neighbourhoods and rural townships
- Limited public and private transport
- Disproportionate non essential to essential outlets (1:4 ratio essential to non-essential)
- Food outlets, particularly in rural areas, face barriers to stocking fruit and vegetable such as poor demand, cost, seasonal availability and competition with larger supermarkets.

The opportunities for action provide a starting point for Council, health agencies, stakeholders and the community, to begin working together on addressing food security/healthy eating in the RCoW. The Scan and community engagement undertaken have identified a range of activities and levels of interest already in play. There was not an active food security/sustainability network available to provide leadership and harness this interest.

To address this issue, the Healthy Food Connect model identifies the next step to be the establishment of a 'Local Food Coalition' to coordinate a collaborative approach.

The role of a local food coalition may include:

- Building partnerships
- Contributing to the prioritisation and undertaking of local strategies and programs that address food system-related needs in their community. This could be by enhancing capacity, identifying key partnerships and/or providing in-kind support, resources and/or funding
- Contributing to research and evaluation and/or education and awareness-raising activities
- Providing expert advice to government, non-government and community organisations (based on the food system data collected or activities undertaken)
- Advocating for the principles and actions of healthy food availability and access to be embedded through local government policy development and reform
- Removing obstacles to local action by working with statutory bodies and the private sector.

A local food coalition could draw together stakeholders from sectors across the food chain, planning and health, to play a key role in making healthy food more accessible and unhealthy food less accessible. The local food coalition would operate at a high level, providing leadership and having the potential to influence key initiatives and policy development. The coalition would have a decision making role in prioritising the identified opportunities for action in the short, medium and long term. This group could bring together the diversity of stakeholders to create a balanced forum and discuss food-related issues, while still keeping the aims of the Healthy Food Connect model a priority, that is, to address local food system change and create environments which help make 'the healthy choice the easy choice'. Leading such a successful food coalition therefore requires a high level of expertise in community engagement, partnership formation and stakeholder coordination.

Key recommendations to improve fruit and vegetable access in Wangaratta include:

1: Increasing connectivity between residents and food

- Producing a newsletter or online app detailing where to access local fresh produce or healthy options. This may help improve knowledge on access to fruit and vegetables
- Support community initiatives which promote access to healthy food e.g. Street Harvest/Food swap, farmers markets
- Provide acknowledgement to outlets that advertise stocking healthy produce. This will support local businesses and the selling of healthy meals. It could also provide an incentive for more outlets to start stocking fruits and vegetables.
- Provide internet access for online shopping to residents with poor access to food outlets and the internet e.g. in Library
- Explore options in increasing affordability and efficient use of water to support edible gardening interventions

2: Increasing affordable fruit and vegetable availability in food desert areas

- Investigate strategies to increase partnerships between primary producers and food outlets
- A review of the size, affordability and access to the local markets
- Support fruit and vegetable interventions and business in food deserts e.g. mobile fruit and vegetable vending
- The revision of bus routes and food deserts with reference to low SEIFA areas. This could provide further insight into the distribution of essential and non-essential food outlets
- Encourage interventions which aim to improve the percentage of healthy options offered on children's menus
- Encourage interventions that assist food outlets in offering healthier food options, particularly in fruit and vegetable deserts.
- Encourage interventions that support remote areas having access to fruit and vegetables, working with established shops such as the Milawa Snow Road Produce Café (who already stock some fruit and vegetables and are passionate about doing so)
- Increasing growth of fruit and vegetable gardens
- Support urban food production in food deserts (public space, private gardens, community gardens)

3: Increasing partnerships between stakeholders, local council, health agencies, businesses and community to deliver healthy eating interventions

- Include healthy eating into Municipal Health and Wellbeing Plan.
- Continue to support the establishment of a food coalition and partnerships within this.

Outcomes to Date

A food security network has been initiated in the RCoW and is known as the 'Community Food for All Network'.

Member organisations of the network have submitted grant applications to support food security in RCoW

Two parent feed/change facilities are now available in the CBD area.

Healthy eating has been included in the RCoW Municipal Health and Wellbeing Plan

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Appendices

Appendix 1. Monash University Victorian Healthy Food Basket Survey Instructions



INSTRUCTIONS FOR USE OF THE VICTORIAN HEALTHY FOOD BASKET Developed by Monash University, Department of Nutrition & Dietetics *Revised June 2012*

Introduction

The Victorian Healthy Food Basket meets the nutritional requirements of the four family types described below for two weeks, providing greater than 80% of the NRVs for nutrients and at least 95% of energy requirements.

The four family types include:

- i) Typical family – 2 adults and 2 children (44 year old male, 44 year old female, 18 year old female and 8 year old male).
- ii) Single parent family – 44 year old female, 18 year old female and 8 year old male.
- iii) Elderly pensioner – 71 year old female.
- iv) Single adult – Adult male > 31 years

The Victorian healthy food basket is designed to collect information on the cost, availability and accessibility of a healthy basket of foods from a store that has all the food groups in the basket.

Guidelines

Information for the healthy food basket survey must be collected during a period of time where prices will not be inflated. Avoid school holidays, public holidays, long weekends and other events may influence the price of food (for example, natural disasters such as the cyclones of north Queensland in 2006 that inflated banana prices).

Make sure to collect the data for your area within a 4-week period to improve the reliability of the data. Record the date of your data collection.

Obtain a list of ALL the supermarkets in the Local Government Area (LGA). This can be obtained from the LGA (usually Environmental Health Team), supermarket websites or from the Yellow Pages or community directories.

Choose a large chain supermarket (e.g. Coles, Safeway, Bi-Lo, IGA) in your desired area as the benchmark store. This store should have ALL 44 items contained in the basket and be a store that is generally accessible and reasonably priced. You will also need to survey other smaller or independent stores (e.g. IGA, FoodWorks).

When collecting information abide by the following points:

- Record the prices of all the food items in the healthy food basket using the 'Healthy food Basket form'. Choose the product in the stated size. The cheapest brand price in the specified size should be recorded.
- Do not include generic brands (e.g. Black and Gold, Homebrand etc) unless they are the only brand available for that particular product and it must be recorded that the brand was generic.
- Do not include special prices, only record regular prices of items. If the regular price is not listed and staff members cannot tell you, use the price of the item at your benchmark store.
- If the size of an item differs to what is specified in the form, choose the next closest smaller size. If the smaller size is not available choose the next larger size. You MUST record both the size and price of the item if an alternative size for an item is chosen.
- Where a brand name is specified, use only that brand of product. If the specified brand is not available, (eg. *Premium* biscuits or *Weet-Bix*) choose the closest alternative (eg. *Salada* biscuits or *Vita Brits*).
- If an item is not available, record the item as 'missing'.

Meats:

- Deli products can be used if they are the cheapest product.
- Meat prices should be recorded per kg unless otherwise specified. Bulk meat prices per kg should not be recorded. If the type of meat specified is not available (eg. regular mince, lean) choose the closest type of meat to what is specified.
- Ham (in this survey) is a lean, pink meat which is able to be sliced or shaved. Canned ham and shaped luncheon meat is not an acceptable substitute. Ham can be obtained from the deli or packaged in the refrigerator section.

Fruit and vegetables:

- Fruit and vegetables should be recorded per kg unless otherwise specified. Bagged fruit or vegetables prices should not be used unless they are the only type available.

Non-core foods:

- Polyunsaturated margarines should not be confused with monounsaturated margarines such as those made from canola and olive oils. Polyunsaturated margarines include *Nuttelelex*, *Eta*, *Meadow Lea*

Name & Address of Store:

Collectors Name:

Date:

Basket item	Product size	Cost
Cereal group		
White bread	650g	
Wholemeal bread	650g	
Crumpets (rounds)	300g	
Weet-bix	750g	
Instant oats	500g	
Pasta	500g	
White rice	1kg	
Instant noodles	85g	
Premium biscuits	250g	
Fruit		
Apples	per 1kg	
Oranges	per 1kg	
Bananas	per 1kg	
Tinned fruit salad, natural juice	450g	
Sultanas	375g	
Orange juice (100%) NAS	2L	
Vegetables, legumes		
Tomatoes	per 1kg	
Potatoes	per 1kg	
Pumpkin	per 1kg	

Cabbage	half	
Lettuce	whole	
Carrots	per 1kg	
Onions	per 1kg	
Frozen peas	per 1kg	
Tinned tomatoes	400g	
Tinned beetroot	450g	
Tinned corn kernels	420g	
Tinned baked beans	420g	
Meat and alternatives		
Fresh bacon, shortcut, rindless	per 1kg	
Fresh ham	per 1kg	
Beef mince, regular	per 1kg	
Lamb chops, forequarter	per 1kg	
Chicken fillets, skin off	per 1kg	
Sausages, thin beef	per 1kg	
Tinned tuna (unsat.oil)	425g	
Tinned salmon, pink (water)	210g	
Large eggs (min 50g, caged)	700g dozen	
Dairy		
Fresh full cream milk	1L	
Fresh reduced fat milk	2L	
Reduced fat flavoured yoghurt	1kg tub	
Full fat long life milk	1L	
Cheese, block	500g	
Non-core foods		
Polyunsaturated margarine	500g	
White sugar	1kg	
Canola oil	750ml	
Other Items		
Mars bar	53g	
Coca Cola	600ml	
Tim Tams – original	200g	
Teddy Bear Biscuits	250g	
Museli bars, fruit chewey	185g	
Potato chips	45g	
Frozen oven baked chips straight cut	1kg	
Fish fingers	375g	
Ice-cream - vanilla	2 L	
Frozen pizza – family supreme	500g	

Appendix 2: Food Outlet Categories

Food Outlet Category	Definition
Supermarket	Place to purchase majority of grocery items on VHFB list. Stores may include butchers, bakery. For example Woolworths, IGA
Convenience Stores	Sale of limited groceries such as milk, bread, packaged/canned foods e.g. general stores
Petrol stations and mixed business (low risk packaged)	Includes petrol stations with/without convenience store items. Also includes businesses that sell small amount of packaged foods and soft drink.
Fruit and vegetable shop	Shop selling mostly fresh fruit and vegetables e.g. green grocer
Bakery	Selling bread, pasties or cakes
Butcher, poultry, fish	Selling fresh meat, poultry or fish including wholesale sales to public.
Takeaway and fast food	Outlet where meals and refreshments are prepared and sold for immediate consumption at or away from the premises. Includes franchised outlets and local independent takeaway outlets e.g. McDonalds, fish and chip, pizza
Restaurant and café	Preparation and sale of foods to be eaten at the premises. May or may not include table service. Can provide alcohol and takeaway services e.g. coffee shops, Pubs
Liquor outlets	Drive through bottle shops, liquor outlets e.g. Liquorland
Farm gate sales	Producers selling produce directly to public from the farm
Culturally specific stores and delicatessen	
Specialty food store	Sells limited food items e.g. herbal supplements

Appendix 3: Food Outlet Interview Results

	Green Grocer/ Supermarket	Convenience/ General Store	Bakery	Café/ Restaurant/ Bar	Hotel/ Motel	Take away food	Service Station
Called	1	2	1	9	6	0	0
Visited	1	9	9	36	5	13	5
Internet				1	4		
Rural	0	4	4	8	11	2	4
Urban	6	7	7	40	6	12	4
Providing H/O or F&V	6	1	0	20	5	0	0
Providing limited H/O or F&V	0	8	10	24	8	7	0
Providing no H/O or F&V	0	2	1	1	4	7	8
% providing H/O or F&V	100%	9%	0%	44%	29%	0%	0%
Total No.	6	11	11	45	17	14	8

Note: Limited Options are classified as 1-3 healthy options within the menu.
H/O – Healthy Option F&V – Fruit and Vegetable