

# **Food Security Resource Pack and Background reading**

*Raising awareness of food security knowledge among health  
professionals*

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## **Background Information**

### **Food Security**

When all people at all times have regular access to safe, affordable, culturally appropriate and nutritionally adequate food from a non-emergency source<sup>1</sup>.

### **Food Insecurity**

Food insecurity can result due to a combination of factors including:

- Not having sufficient food<sup>2</sup>
- Experiencing hunger as a result of running out of food and being unable to afford more<sup>2</sup>
- Eating a poor quality diet as a result of limited food options<sup>2</sup>
- Anxiety about acquiring food<sup>2</sup>
- Having to rely on food relief<sup>2</sup>

### **Who is at risk of food insecurity in Australia?**

- Low income families and individuals, in particular people who are unemployed or have limited formal education<sup>2</sup>
- Individuals with a disability, including mental illnesses<sup>2</sup>
- People from non-English speaking backgrounds such as refugees and asylum seekers<sup>2</sup>
- Frail elderly individuals, specifically those who are socially isolated and have low incomes<sup>2</sup>
- Individuals affected by alcohol and/or substance abuse<sup>2</sup>
- Homeless people<sup>2</sup>
- Individuals from Aboriginal and Torres Strait Islander backgrounds<sup>2</sup>

## **Food Security in Australia**

***Two million Australians rely on emergency food relief at some point during the year<sup>3</sup>.***

As a nation Australia can be considered to be food secure, however there are pockets within the population that are food insecure. Therefore an adequate food supply at a national level does not guarantee household level food security<sup>4</sup>.

***The standard question used in Australia to identify food insecurity is: "have you anytime in the past 12 months ran out of food and have not been able to afford more<sup>5</sup>?"***

It should be noted that the question addresses only one dimension of food security in that it does not measure rates of hunger, anxiety about acquiring food, or reliance on food aid. In addition results from such surveys may underestimate the true prevalence of food insecurity because the most disadvantaged and vulnerable members of a community are usually underrepresented in general population surveys<sup>2</sup>.

- The Australian Bureau of Statistics (2002) indicates that almost 60,000 Australians in low income working families are food insecure<sup>6</sup>.
- The Australian National Nutrition Survey (1995) reported that 5.2% of adults (>19 years) experienced food insecurity in the previous 12 months. This figure rose to 9% of all persons in the areas of most disadvantage and 11% of all young people aged 16-24 years<sup>4</sup>.
- The NSW Population Health Survey (2007) found 4% of people aged 16 years or over reported experiencing food insecurity in the previous 12 months<sup>4</sup>.

***The characteristics of food insecurity in Australia and in other developed countries are different to those of the developing world.***

In developing countries food insecurity is related to a limited supply of food and people who suffer illness from being underweight. However, in Australia and in other developed countries, food insecurity may be associated with higher rates of overweight and obesity<sup>6-9</sup>.

Food insecurity and diet-related diseases such as diabetes and cardiovascular disease have been shown to follow the socio-economic gradient, with those of lower socio-economic status (SES) exhibiting a higher incidence of these conditions<sup>4, 10</sup>. One of the reasons suggested for these disease trends is that those that do not have the financial capabilities to purchase a constant supply of food may be more likely to consume foods that are not nutritious<sup>11, 12</sup>. For example, when food is available intermittently, individuals may be more likely to over consume cheap or free foods or energy dense foods when available, therefore increasing the risk of diet related diseases<sup>13, 14</sup>.

There is some evidence that individuals' perceptions of food costs do not always match objective costs with findings demonstrating that it may be perceived that processed energy dense foods are of better value for money than fresh food<sup>15, 16</sup>.

## **Food security in Victoria and the Yarra Ranges**

- The Victorian Department of Health identified seven state-wide health promotion areas for the period of 2007 – 2012, including the promotion of accessible and nutritious food<sup>17</sup>. This priority area is being addressed by a focus on the determinates of food security such as transport, income, density of fast food outlets and television advertising as well as health education and skill development in the areas of food choice and preparation<sup>17</sup>.
- Food security was measured in the 2007 Community Indicators Victoria Survey, which indicated seven percent of persons living in Yarra Ranges had experienced food insecurity, compared to 4.4% in the Eastern Metro Region and the Victorian state average of 6%<sup>5</sup>.
- The Yarra Ranges Council established a Community Wellbeing Plan for 2010-2013, with Priority Area 1 being specific to a reduction in food insecurity and Priority Area 2 aiming to reduce health inequalities in the LGA<sup>18</sup>. Below is an excerpt from the Community Wellbeing Plan stating what the priority areas will aim to achieve.

### **Priority Area 1: Support residents to achieve and maintain a healthy lifestyle<sup>18</sup>.**

- *Reduce food insecurity* within the municipality, by improving access to and the affordability of nutritious food.
- Increase consumption of healthy foods and reduce consumption of unhealthy foods amongst residents.
- Increase physical activity levels amongst residents.
- Position Council as a role model for other employers in the municipality through the provision of proactive staff, and health and wellbeing initiatives.

### **Priority Area 2: Reduce health inequalities within Yarra Ranges<sup>18</sup>.**

- Engage in a range of social inclusion and cohesion activities.
- Undertake advocacy activities across a range of emerging health and wellbeing issues.
- Advocate for improved services and facilities amongst disadvantaged areas/groups.
- Target services and facilities to areas/groups most in need.

## **Local Indicators**

To highlight the situation for a welfare dependent family living in the Yarra Ranges LGA:

- The median income is \$1000.52 per fortnight<sup>19</sup>.
- The Victorian Healthy Food Basket (VHFB), which is the estimation of the cost of basic food items to support a family of 4 for a fortnight, costs \$412.42 for a typical family living in the Yarra Ranges<sup>20</sup>.
- The median rent is \$370/fortnight<sup>21</sup>.

Overall this leaves \$ 218.00 for bills and essential household items. This demonstrates that if there are unexpected expenses, families can become at risk of food insecurity as meeting these expenses can be made a priority over purchasing food<sup>6</sup>.

***The Yarra Ranges LGA has the most expensive food across three local government areas (Knox, Maroondah and Yarra Ranges) for a welfare dependent family purchasing a healthy food basket<sup>20</sup>.***

This may be due to the following factors:

- Low competition between supermarkets can result in higher prices for food in local supermarkets. In addition there are a greater number of smaller supermarkets servicing the area that have higher prices than major supermarket chains<sup>22</sup>.
- Greater costs to food suppliers to transport food to food outlets which therefore increase the retail price of food<sup>2</sup>.

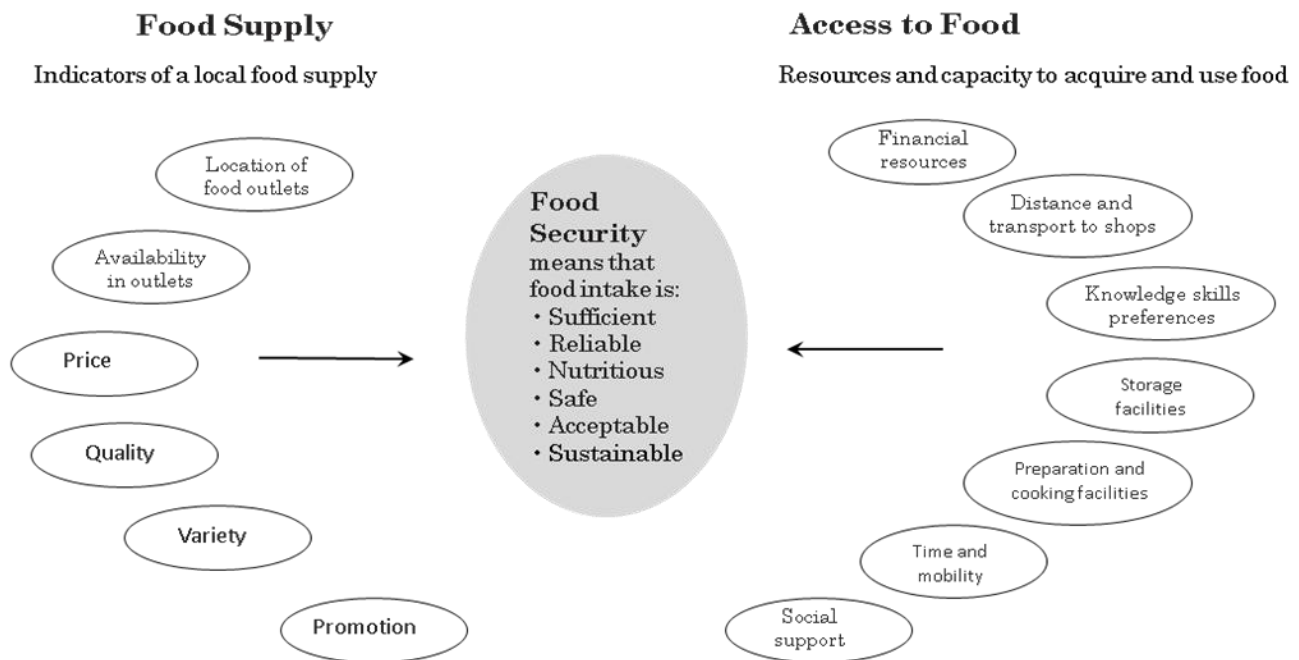
## **Why is food security important?**

- Having adequate food to eat is one of the basic elements of human rights stated in the Universal Declaration of Human Rights<sup>6</sup>.
- Basic human rights are about upholding dignity. Dignity does not come from acquiring food from emergency food sources, but from providing for one's self and having a choice over what foods to eat<sup>6</sup>.
- Food security is not only vital in order to prevent hunger and chronic illness. The overall eating experience involves purchasing, preparation and consumption of food with families, friends and communities, therefore having a high social and cultural importance<sup>6</sup>.
- Eating nutritious foods contribute to physical and mental wellbeing across the life span. Short term effects of food insecurity are anxiety, hunger and lack of energy<sup>6</sup>. In the longer term food insecurity may lead to higher rates of obesity, anaemia, frequent infections, depression, osteoporosis, heart disease, diabetes and health service utilization<sup>23</sup>. Postponing necessary medical care and reduced medication adherence can be a result of food insecurity as money is directed towards other priorities<sup>23</sup>. In childhood, food insecurity has also been associated with behavioural and psychosocial problems including poor academic development<sup>23</sup>.

# Determinants of food security

Factors that affect food security are summarised below.

## Determinants of Food Security



Rychetnik, L., Webb, K, Story, L. & Katz, T., 2002. Food Security Options Paper. A planning framework and Menu of options for policy and practice interventions. NSW Centre for Public Health Nutrition, NSW Health Department.

### **Food security has two main dimensions:**

The availability of food (food supply) and the ability to access the local food supply (food access). Food security is the product of social and economic systems that determine the supply of healthy food, as well as the resources and ability of individuals, households or communities to access that healthy food<sup>2</sup>.

*(Note slide 8 in the presentation is an animated slide that highlights each point under "Food supply" and "Access to food"; this corresponds with the notes accompanying the slide)*

## **Food Supply**

### ***Location of food outlets***

Food outlets that provide a diverse range of affordable foods such as supermarkets should be located in areas where people live or work or where they are easily reached by public transport<sup>2, 16</sup>. A study undertaken in the City of Casey found that areas of greater socio-economic advantage had closer access to supermarkets, conversely areas of less socio-economic advantage had closer access to fast food outlets<sup>24</sup>.

### ***Availability in outlets***

The regular availability of healthy and appropriate foods within local stores is a good indicator of food security. Local access to supermarkets rather than small convenience stores can significantly contribute to household food security as supermarkets carry a wider range of food at competitive prices. There have been some studies demonstrating that economically disadvantaged individuals have been shown to disproportionately live in regions with a limited availability of large supermarkets and are therefore forced to be reliant on smaller stores stocking less variety at a higher price<sup>12, 20, 22, 24</sup>.

### ***Price***

Price is a key factor that determines what people purchase and consume. Food security is improved when fresh food is affordable<sup>2</sup>.

### ***Quality***

A local food supply needs to meet acceptable standards of quality and freshness. The quality of food will often determine its nutritional value, as well as its flavour and acceptability. The relationship between price and quality is important. In some areas food security is hindered by the fact that good quality fresh foods are locally available but relatively expensive<sup>2</sup>.

### ***Variety***

A good food supply should include a range of choices that encourage the selection of a variety of foods<sup>2</sup>.

### ***Promotion***

The way food is promoted can significantly affect consumers' ability to identify and locate healthy foods, and can influence their choice of foods. The positioning of food outlets is a very effective promotion strategy (e.g. fast food outlets near schools)<sup>2</sup>.

## **Food Access**

### ***Financial resources***

In relation to acquiring food, financial resources are important. When disposable income is limited, other bills can become a priority over purchasing food<sup>6, 20</sup>.

Overall low income families are often good at budgeting but have too little money to cover their basic needs<sup>16, 20</sup>.

It should be noted that food insecurity is sometimes experienced by people on moderate incomes who have higher than average living costs, e.g. high rent, large mortgage, expenses associated with chronic illness or disability<sup>2</sup>.

### ***Distance and transport to shops***

Many people who struggle to afford a healthy diet are often reliant on inadequate public transport to reach better quality and cheaper food shops. Rural and remote households often face these obstacles as these areas are often poorly serviced by public transport<sup>2</sup>.

In the Yarra Ranges it has been identified that there are areas where there is limited access to nutritious foods by foot or public transport in comparison to Knox and Maroondah local government areas. Food outlets that are classified as local are located within 2.5km or within walking distance from housing<sup>20</sup>. Refer to Appendix 1 for the Yarra Ranges LGA map highlighting food outlets with public transport.

A study conducted in Melbourne in 2009 found that individuals living in areas of higher socio economic status (SES) required less travel distances to supermarkets and fruit and vegetables stores from home than those living in areas of lower SES<sup>25</sup>. Refer to Appendix 2 for the Yarra Ranges LGA map indicating the supermarkets and fast-food or take-away outlets and their position in relation to Socio Economic Indexes For Areas (SEIFA) rankings. The Yarra Ranges was the only municipality in the Outer East to contain suburbs with SEIFA ranking in the lowest quartile (0-25th percentile range)<sup>20</sup>.

### ***Knowledge skills and preferences***

It is important that people know how to make healthy food choices and have skills about how to prepare and store healthy foods.

Nutrition-related health education can be an important and effective strategy for improving diet when used in combination with other health promotion interventions. Recent studies maintain that nutrition knowledge is an influential factor of favourable dietary-related behavior, be it in terms of cholesterol-lowering dietary approaches, compliance with nutrition messages, purchasing of healthier foods, consumption of lower-fat diets, consumption of more fruit and vegetables or weight loss<sup>26</sup>.

*An interesting point to consider is that nutrition knowledge is necessary although not sufficient for dietary change<sup>26</sup>.*

An underlying assumption of nutrition education is that increasing knowledge will change behaviour however, this is not sufficient for dietary change<sup>26</sup>. Nutrition knowledge must be accompanied by a positive intention to change dietary behaviours. In addition, the change must be seen as personally relevant and achievable. With this, motivation and willingness to overcome barriers to change is required<sup>27, 28</sup>.

In the case of food insecurity, the provision of more easily accessible healthy foods can provide an environment more conducive to an individual's nutrition knowledge being translated to actual behaviour change. The effectiveness of health education therefore depends on healthy food being readily available and accessible<sup>27</sup>.

### ***Storage facilities***

Adequate storage equipment such as fridges and freezers are essential facilities to support healthy eating<sup>2, 29</sup>. Those that may have limited storage facilities could include individuals living in shared accommodation or public housing.

### ***Preparation and cooking facilities***

Inadequate cooking facilities are a significant barrier to healthy eating, particularly for those on a limited budget, as cooking at home is usually cheaper than buying ready prepared or take-away foods.

### ***Time and mobility***

A shortage of time to go shopping or prepare meals at home can limit access to a healthy diet, particularly in households where all adults work full-time. A lack of time can result in over-reliance on processed, ready-made or take-away food<sup>2</sup>.

Limited mobility can reduce food security and may be due to disability, illness or injury that is short or long term<sup>2</sup>.

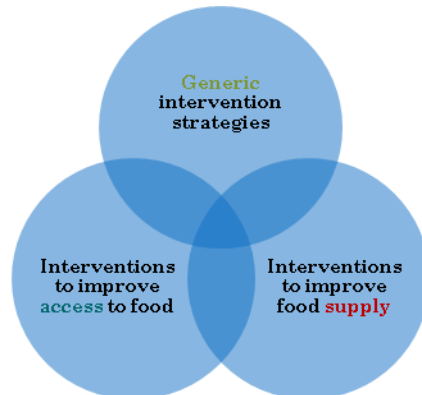
### ***Social support***

Socialisation is an important factor in relation to our eating habits. The social environment including interactions with family, friends, peers, and others in the community may impact on food choices through mechanisms such as role modeling, social support and social norms<sup>16</sup>.

Social isolation can lead to loss of appetite, or a reluctance to cook and prepare larger meals<sup>2, 15, 16, 29</sup>. Past research indicates that when people eat alone, levels of food consumption tend to be lower than when people eat with others or in a group setting.

Addictive behaviour such as behaviours associated with misuse of prescription drugs, excessive alcohol use, hard drugs, and gambling can lead to social isolation but can also independently have a negative effect on food security<sup>29</sup>.

## **Interventions to address food security**



Listed below are examples of areas under which intervention strategies can be targeted<sup>30</sup>.

### **Generic intervention strategies**

- Food policy coalitions or councils
- Research monitoring and evaluation
- Advocacy for food security
- Government subsidies and incentive schemes
- Community development and grant schemes

### **Interventions to improve food supply**

- Home gardens
- Community gardens
- School gardens
- Supporting local farming and agriculture
- Food transport
- Food retail outlets
- Emergency food parcels

### **Interventions to improve food access**

- Integrated services and referral systems
- Health education: food and nutrition
- Income support
- Transport to food suppliers
- Appropriate storage and kitchen facilities
- Community kitchens

## **Local interventions (The Yarra Ranges LGA)**

- Ranges Community Health Wellbeing plan “promoting accessible and nutritious food<sup>18</sup>”
- Vic Health Food Policy Coalition – currently developing policies addressing food security<sup>31</sup>
- Advocacy - identifying opportunities to advocate and help staff advocate within their organisation (*e.g. including food security in Yarra Ranges Council Community Wellbeing Plan 2010-2013*)
- Up skilling workforce
- Partnerships such as OEPCP nutrition network (NOURISH Food Fairness Outer East)
- No Interest Loans for white goods (e.g. fridge) – program available at Ranges Community Health
- Community Gardens (Healesville (Yarra Valley Community Health Service), Mount Evelyn (Morrisons), Croydon – Uniting Church)
- Community kitchen development –plans for developing these in 2011. Refer to NOURISH Food Fairness Outer East for more information
- Community meals - Yarra Ranges Emergency Relief Network is an extensive updated list of free meals in Yarra Ranges and neighbouring municipalities (available on the Yarra Ranges Council’s website).

Examples include:

- Mission Impossible Belgrave (Lunch)
- Yarra Valley Vineyard Christian Church Lilydale (Dinner)
- St John’s Anglican Church Croydon (Dinner)

*Food aid is a short term solution for people who are food insecure, and does not aim to solve or prevent food insecurity.*

## **The role of the health professional**

- Understand food security and its contributing factors
- Know how to **identify risk factors and those who are vulnerable** –
  - Full 'Food Security Risk Assessment Tool' available [www.isepich.org](http://www.isepich.org) look up Food Security Took Kit.
  - Clinicians assessment forms could include question/s regarding food access around: storage; knowledge; purchasing power; abilities and transport
- Know when to refer to other services
  - Council – home help, assistance with shopping, PAG
  - Emergency relief or free/cheap meals – short term assistance
  - Dietitian
  - Counselling
  - Social support
  - Physiotherapist or Occupational therapist
  - NILs program (No interest loan scheme)
  - Financial assistance
- Be aware of resources available
  - See following pages

## **Examples of resources available**

Below is a list of useful websites that are available to assist health professionals and clients to increase food security, knowledge and skills.

[www.communitykitchens.org.au](http://www.communitykitchens.org.au)

- Provides a list of community kitchens by suburb. This list is not exhaustive

[www.yarraranges.vic.gov.au/Things\\_To\\_Do/Transport -  
Getting Around Yarra Ranges](http://www.yarraranges.vic.gov.au/Things_To_Do/Transport_-_Getting_Around_Yarra_Ranges)

- Link to metropolitan train service timetable (Metro)
- Link to bus timetables (public and school buses)
- Links to location of local bikes and walking tracks
- Link to car pooling website
- Home and Community Care Transport information

<http://communitygarden.org.au>

- Community garden factsheets, where to find a community garden.

[http://www.brimbank.vic.gov.au/Page/page.asp?Page\\_Id=1775&h=1](http://www.brimbank.vic.gov.au/Page/page.asp?Page_Id=1775&h=1)

- This web page outlines Brimbank council's *Healthy Eating in Brimbank Project*. "Download Files" at the bottom of the page → includes: cheap eats, emergency food relief, cooking tips, shopping tips and more.

[http://www.iechs.com.au/food\\_brochures.php](http://www.iechs.com.au/food_brochures.php)

- Food Access and Food Security Resources, e.g.:
  - How to make the most of \$30 and \$100
  - Cheap and Easy oven meals
  - Cheap microwave meals
  - Cheap one pot meals for 1 or 2

<http://www.portphillip.vic.gov.au/food-security-toolkit.htm>[www.isepich.org](http://www.isepich.org)

[www.lovefoodhatewaste.com](http://www.lovefoodhatewaste.com)

- Includes food storage tips, two week menu planner to save time and money, and basic recipes

<http://busycooks.about.com/od/fiveingredientsorless/a/500fiveingredie.htm>

- Provides a list of recipes utilising five ingredients or less

[www.marketfresh.com.au/mf.asp](http://www.marketfresh.com.au/mf.asp)

- Contains produce preparation videos, recipes containing a specific main ingredient, purchasing tips, and a guide on Australian fruit and vegetables.

[www.vicfarmersmarkets.org.au/markets/region/4](http://www.vicfarmersmarkets.org.au/markets/region/4)

- Provides a list of farmers markets categorised by suburb

[www.taste.com.au](http://www.taste.com.au)

- Contains recipes listed by food category

[www.communityharvest.org.au](http://www.communityharvest.org.au)

- Directory for the Yarra Ranges LGA: local food retailers, farmers markets, producers, community gardens, cafes and restaurants as well as other local resources and information.

### Grocery delivery

[www.aussiefarmers.com.au](http://www.aussiefarmers.com.au)

[www.dailyharvest.biz](http://www.dailyharvest.biz)

[davegreengrocer@optusnet.com.au](mailto:davegreengrocer@optusnet.com.au)

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Accessed: 1 Sep, 2010.

# Appendices

## Appendix 1

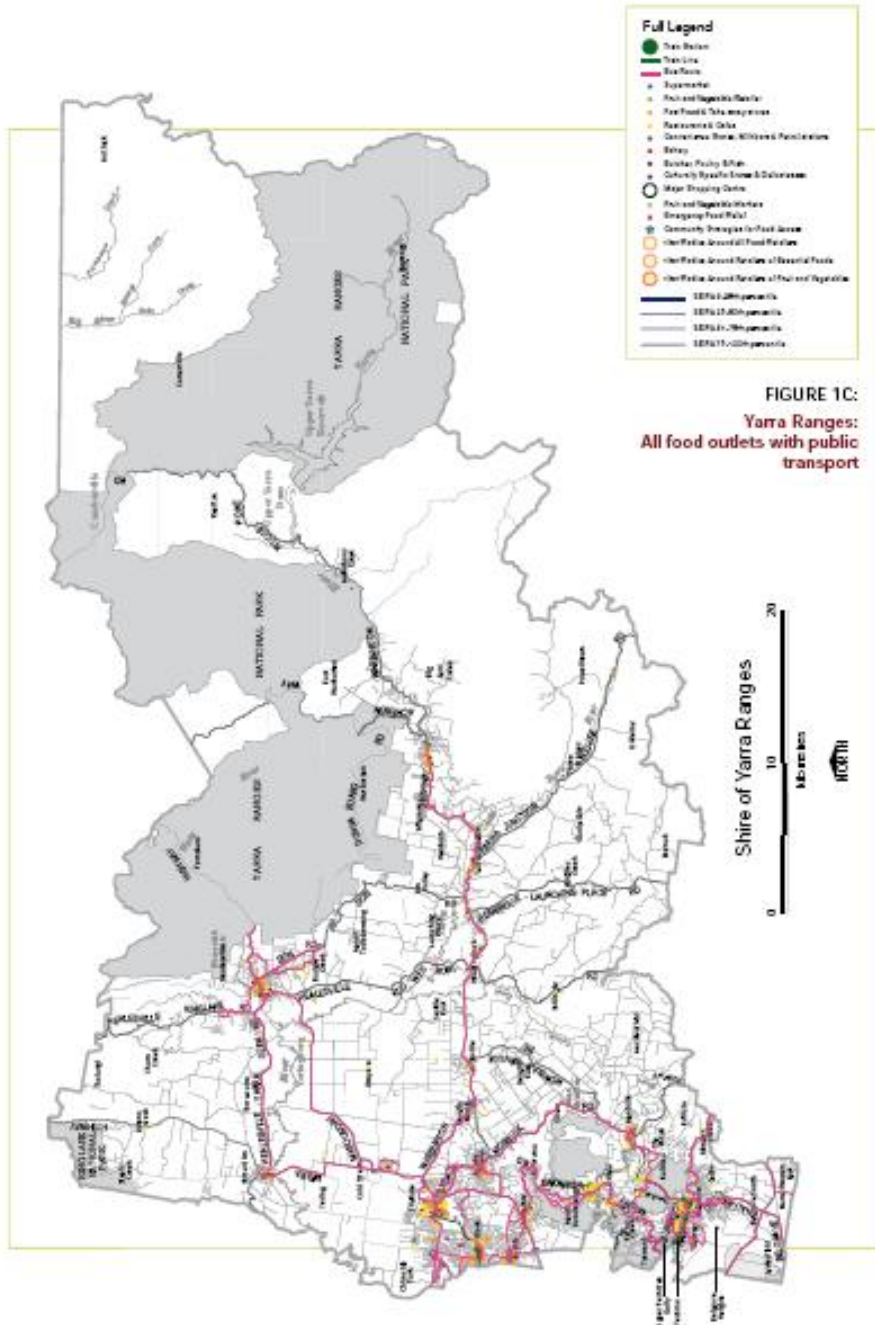


Figure 1. The Yarra Ranges LGA: All food outlets with public transport<sup>20</sup>.

## Appendix 2

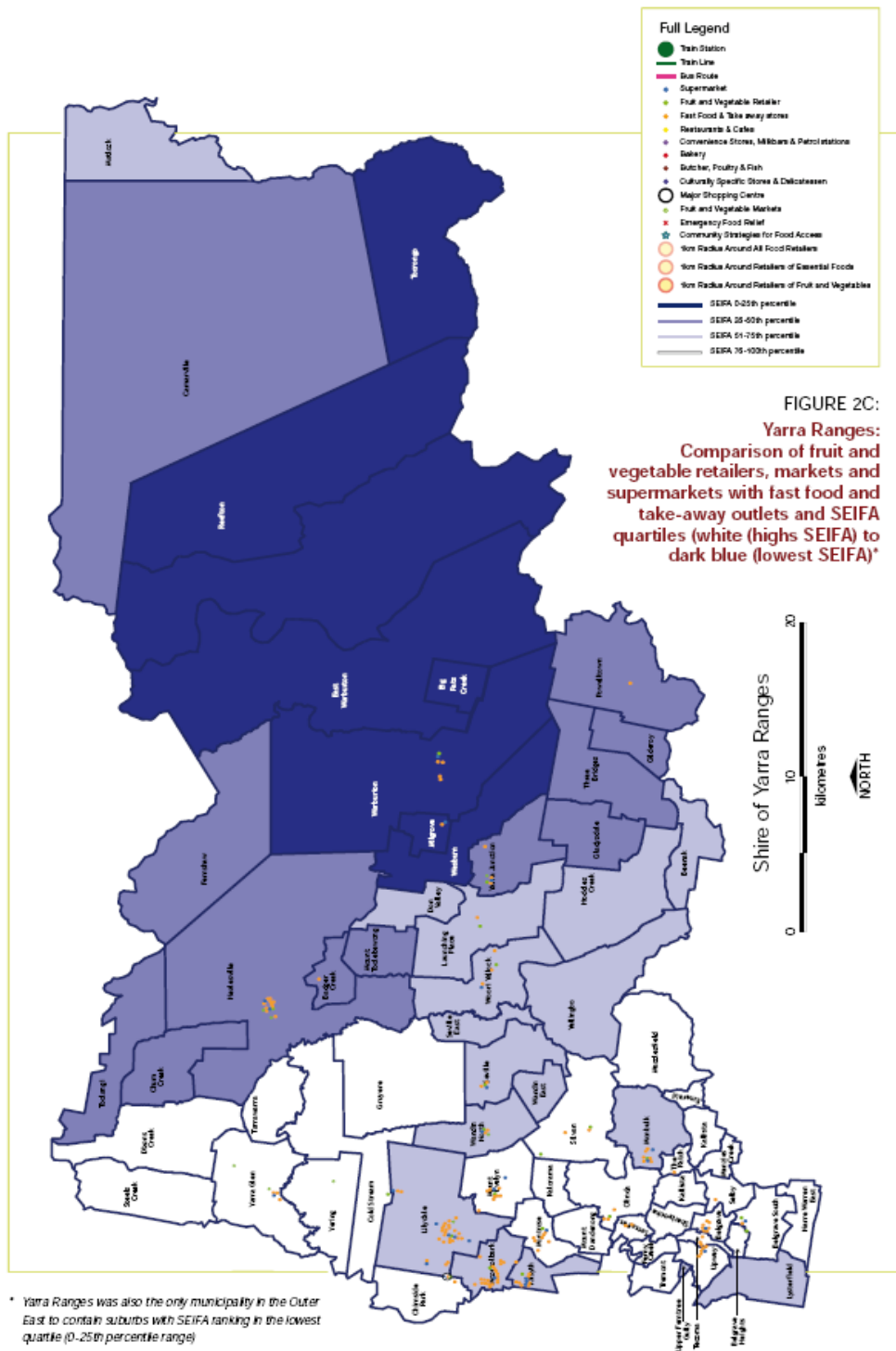


Figure 2. The Yarra Ranges LGA. Comparison of fruit and vegetable retailers, markets and supermarkets with access to fast-food and take-away outlets and SEIFA quartiles<sup>20</sup>.