East Gippsland Food Security Needs Assessment & Plans for a Way Forward
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Executive Summary

East Gippsland is a predominately rural area located in the eastern most part of Victoria. The region is quite disadvantaged, with a SEIFA Index of Disadvantage lower than the national average. Compared to Regional Victoria, East Gippsland has a higher proportion of people of the age of 65 years of age, and a significantly larger population of Aboriginal and Torres Strait Islanders.

In 2012 the East Gippsland Primary Care Partnership (EGPCP) identified food security as a potential area for health promotion action. As there was limited evidence regarding food security in East Gippsland, the EGPCP made a commitment to conduct a thorough food security needs assessment in order to understand the local determinants in East Gippsland. The purpose of this food security needs assessment was to:

- Identify ‘food deserts’
- Understand how food security is presently being addressed
- Determine the cost and availability of healthy food

Three methods were used to assess food security:

- Mapping of food outlets in relation to public transport routes and SEIFA data
- Mapping current food security initiatives
- Conducting the Victorian Healthy Food Basket (VHFB) Survey

The results revealed that food insecurity exists in East Gippsland.

- 8 of 22 towns (36.36%) mapped are classified as potential ‘food deserts’. Most of these are small, remote towns.
- The current variety of activities addressing food insecurity in East Gippsland is limited with most addressing aspects of social inclusion.
- Healthy food is more likely to be available in a chain supermarket and in towns where there was more than one store, however the majority of towns in East Gippsland only have one store therefore families living in these towns/localities are required to travel large distances to purchase healthy food
- A family may need to spend up to 47% of their unemployment benefits to purchase a basket of healthy food, therefore healthy food is likely to be unaffordable for many families in East Gippsland

Based on these results a number there are a number of recommendations:

- Conduct a series of local qualitative discussions with community members and local agencies
- Develop appropriate mechanisms to communicate the results of the needs assessment to key stakeholders
- Develop a food security working group.
- Advocate to the Shire around the development a food security policy
- Continue to monitor food security in East Gippsland by using the local food security monitoring and surveillance framework
- Explore the development of policies and guidelines with local government around the variety, diversity and proximity of food stores.
- Explore innovative transport options to enable increased access to healthy food.
- Explore innovative options that making healthy food more affordable, particularly for families.
- Explore innovative solutions to making healthy food more available, particularly for small, remote towns.
- Use a community participatory approach.
- Explore the multi-component food security innovations (e.g. that use a socio-ecological approach).
Food Security and its Determinants

Food security is defined by VicHealth as 'the state in which all persons can obtain nutritionally adequate, culturally acceptable, safe foods through non-emergency food sources (Victorian Health Promotion Foundation, 2005).’ The determinants of food security involve food access and supply (Appendix 1) (Rychetnik, Webb, Story, & Katz, 2003). Access involves the resources and capacity to acquire and use food such as transport to shops, financial resources, access to social eating environments, knowledge and skills about nutrition, and food choices (Rychetnik, et al, 2003). Food supply issues can include production issues for growers, location of outlets, availability, price, quality, variety and promotion (Rychetnik, et al, 2003). These determinants are often interrelated, and inadequate food access and/or supply results in food insecurity (Rychetnik, et al, 2003). Food insecurity is defined as 'limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire appropriate foods in socially acceptable ways (Rychetnik, et al, 2003)’.

Consequences of Food Security

Food insecurity leads to poor dietary intake and nutritional status, resulting in negative health outcomes, including reduced quality of life (Kregg-Bryers & Schlenk, 2010; Olson & Holben, 2002). In developed countries, food insecurity has been linked to an increased risk of adult overweight and obesity, particularly in women (due to increased consumption of affordable energy dense, processed foods), resulting in an increased risk of chronic diet-related diseases such as cardiovascular disease, type 2 diabetes and some cancers (Olson & Holben, 2002; Rychetnik, et al, 2003; VicHealth, 2005). Food insecurity also affects emotional and social health, due to feelings of anxiety, powerlessness and social exclusion (Montague, Jolly, Siauw, & Potter, 2011; Rychetnik, et al., 2003; Victorian Health Promotion Foundation, 2005). In children, food insecurity has been associated with reduced cognitive functioning and academic performance (Bastian & Coveney, 2011; Olson & Holben, 2002).

Vulnerable Groups

Certain groups of the population are particularly vulnerable to food insecurity, including those with low incomes, chronic illness or disability (including mental illness), culturally and linguistically diverse (CALD) or Indigenous backgrounds, and people living in remote or geographically isolated areas (Montague, et al., 2011). However, food insecurity can affect anyone, particularly in light of recent global phenomena such as climate change and economic crises (Kregg-Bryers & Schlenk, 2010; Palermo & Wilson, 2007).
Profile of East Gippsland

East Gippsland covers an area of approximately 20,945 square kilometres and has many townships and small communities (EGSC, 2009). The largest commercial centre is Bairnsdale, located 280km east of Melbourne, while the largest tourist centre is Lakes Entrance (EGSC, 2009). Other significant townships include Orbost, Paynesville, Omeo and Mallacoota (Appendix 2) (EGSC, 2009).

East Gippsland has a population of approximately 42,800 people (EGSC 2012). The age group that makes up the largest proportion of the population is 60-64 years (8.6%) (EGSC 2012). Compared to Regional Victoria, East Gippsland has a higher proportion of people in the older age groups (65+); 23% are aged 65 years and over, compared to 18% for Regional Victoria (Appendix 3) (EGSC 2012).

The population of East Gippsland is predominately Anglo-Saxon with 84.1% stating Australia as their place of birth ("EGSC 2012). The most common country of birth other than Australia is the United Kingdom ("EGSC, 2012). English is the primary language spoken in households across East Gippsland (92.8%), however 3.2% of households speak a language other than English; most commonly Italian ("East Gippsland Shire Community Profile," 2012).

Compared to Regional Victoria, East Gippsland has a larger population of Aboriginal and Torres Strait Islanders (3.2%) ("EGSC, 2012). East Gippsland also has a lower percentage of family households (22.3%) and a higher percentage of lone person households (27.6%) (EGSC, 2012) (Appendix 3).

East Gippsland scores 962.9 on the SEIFA (Socio Economic Indexes for Areas) Index of Disadvantage, indicating it is more disadvantaged than the national average (EGSC 2012). East Gippsland has a higher proportion of low income households (32.2%) and individuals (43.3%) (EGSC, 2012). In addition, 43.5% pay $200 per week or more in rent and 56.5% pay $300 per week or more on mortgage repayments, representing a large percentage of income for many residents (EGSC, 2012).

Six per cent of households in East Gippsland do not own a car (EGSC, 2012) (Appendix 3). East Gippsland has a higher proportion of people who leave school early (Year 10 or less) (43.3%) and lower proportion who complete Year 12 (31.8%) compared to Regional Victoria (EGSC, 2012). Compared to Regional Victoria, East Gippsland also has a higher percentage of persons unemployed; 6.2% compared to 5.7% for Regional Victoria (EGSC," 2012) (Appendix 3).
Food Security in East Gippsland
In 2008, 5.3% of people in East Gippsland were found to be food insecure, that is, in the previous 12 months they had run out of food and had not been able to afford to buy more (Department of Health, 2011). Given the population of East Gippsland in 2011, this is equivalent to approximately 2268 people ("East Gippsland Shire Community Profile," 2012). This compares to 5.8% in Gippsland and 5.6% in Victoria (Appendix 4) (Department of Health, 2011). However given that this data was collected a number of years ago, the recent Global Financial Crisis, and the increasing cost of living; these figures may be somewhat conservative.

Data from the Victorian Public Health Survey 2008, indicates that residents of East Gippsland can’t always access the food they want because they find it too expensive (28.5%), they can’t always get the quality they want (33.2%), their access to variety is limited (8.8%), they can’t always get culturally appropriate food (5.4%), or access to public transport is inadequate and unreliable (13.6%) (Appendix 5) (Department of Health, 2011).

Food insecurity may be contributing to the fact that chronic diet-related diseases such as cardiovascular disease, type 2 diabetes and cancer rank within the top ten causes of burden of disease in East Gippsland (Department of Health, 2010).

Food Security is a Priority Area
In accordance with the Victorian health promotion priority ‘promoting accessible and nutritious food’, a better understanding of the barriers that prevent people from accessing nutritious food in East Gippsland needs to be developed in order to facilitate future directions in research and interventions (Department of Human Services, 2007). Currently there is limited evidence regarding food security in East Gippsland (with the VHAB conducted for the first time in 2011). Thus in 2012, EGPCP made a commitment to conduct a thorough food security needs assessment in order to understand the local determinants in East Gippsland. The purpose of this food security needs assessment was to:

- Identify ‘food deserts’ in East Gippsland by mapping food outlets in relation to public transport routes and SEIFA data;
- Understand how food security is presently being addressed in East Gippsland by mapping current initiatives; and
- Determine the cost and availability of healthy food in East Gippsland by conducting the Victorian Healthy Food Basket (VHFB) Survey.

This report presents the findings of this food security needs assessment. It provides important insight into areas of East Gippsland where healthy foods are inaccessible, unaffordable or unavailable. Based on these findings, recommendations have been made to prevent and reduce the burden of food insecurity.
Methods for Assessment of Food Security

Three key methodologies were employed to assess food security in East Gippsland: mapping of food outlets, mapping of current activities addressing food security and conducting the Victorian Healthy Food Basket. Results were used to assist in forming recommendations for health promotion action.

Mapping ‘Food Deserts in East Gippsland

Socio-Economic Indexes for Area (SEIFA) maps were obtained for towns across East Gippsland from the Department of Health. The SEIFA scores used were created by combining information collected in the 2006 Census (ABS, 2008). These scores were standardised against a mean of 1000 with a standard deviation of 100 (ABS, 2008). Meaning that the average SEIFA score is 1000 and the middle two-thirds of SEIFA scores fall between 900 and 1100 (approximately) (ABS, 2008).

Using East Gippsland Shire Council records and Yellow Pages, a list of all the supermarkets, general stores, green grocers, butchers, bakeries and take away stores registered in East Gippsland and their locations obtained and collated. Take away stores were included so that the accessibility of healthy and unhealthy food could be compared. Public transport routes and timetables were determined in consultation with the Gippsland Regional Department of Transport and Department of Health as well as using the Viclink Journey Planner tool online at http://jp.metlinkmelbourne.com.au. Timetables for each route were analysed and suitability for shopping was determine based on start and finish times, trip duration, and disabled access.

Store locations and public transport routes were then mapped on the SEIFA maps using Geographic Information Systems (GIS) software.

A 500m radius was drawn around stores as a way of identifying potential ‘food deserts’. Areas were deemed as being ‘food deserts’ in East Gippsland if they were:

- A below average SEIFA area outside the 500m radius
- Without access to a store that had greater than 80% of a Victorian Healthy Food Basket available and
- Without access to public transport suitable for shopping

A radius of 500m was selected on the basis that it included a wide range and number of outlets and because it has been cited amongst the literature as being a reasonable walking distance for an adult to carry home bags of groceries (Apparicio, Cloutier & Shearmur, 2007).

In towns where a VHFB was unavailable (or where only 80% was available) the distance (km) and time (hours/minutes) residents were required to travel to obtain a full VHFB was determined using the Get Directions tool online at www.whereis.com.

Mapping Current Activities Addressing Food Security in East Gippsland

Community initiatives in East Gippsland currently addressing food security were identified by searching Yellow Pages, Shire Council and agency websites and face-to-face or phone conversation with key agency staff (e.g. health service, schools, neighbourhood houses, bush nursing centres, welfare agencies). Community initiatives were mapped against the environments for health framework (DHS, 2001). This framework was designed to support local governments to consider the broader determinants of health (by focusing on 4 environmental pillars including social, economic, natural and built environments) and provide a practical guide to scanning for issues, researching, identifying action and setting priorities (DHS, 2001).
Conducting the Victorian Healthy Food Basket in East Gippsland

The VHFB was designed to measure the cost and availability of healthy food in Victoria (Palermo & Wilson, 2007). It is tailored to Victorian family composition and food choices (Palermo & Wilson, 2007). The VHFB survey calculates the cost of a basket of healthy food for four reference families:

- A ‘typical family’ (44 year old male and female, 18 year old female, 8 year old male)
- A ‘single parent family’ (44 year old female, 18 year old female, 8 year old male)
- An ‘elderly woman’ (71 year old female)
- A ‘single man’ (male >31 years of age)

These four family types were selected as they are considered to be most at risk of food insecurity (Palermo & Wilson, 2007). The VHFB consists of 44 core food items (e.g. bread, milk, fruit, vegetables, meat), selected according to the Australian Guide to Healthy Eating (Kellett, Smith, & Schmerlaib, 1998) (Appendix 6). It meets at least 80% of nutrient requirements and 95% of energy requirements for the four reference families for a fortnight (Palermo & Wilson, 2007).

Although not included in the actual VHFB, data on the cost and availability of two non-core food items (a soft drink (Coca Cola) and a chocolate bar (Mars Bar) is also collected purely to allow for price and availability comparison between healthy and unhealthy food (Palermo & Wilson, 2007). The VHFB also determines the percentage of the maximum fortnightly government unemployment benefit received by each family required to purchase the basket (Palermo & Wilson, 2007).

All supermarkets and general stores registered in East Gippsland were considered eligible. Discount stores such as ALDI were deemed unsuitable for the purposes of the survey as the nutritional content and availability of products from these stores are often different to regular stores.

Store managers were sent a letter of notification and a courtesy phone call was made prior to the VHFB survey being undertaken. During July 2012, Monash University Nutrition and Dietetics students and local community volunteers collected the VHFB data on a standardized collection sheet with accompanying detailed instructions. Ethics approval was not required to access this public data.

Prices of the cheapest, branded items in the specific package size were recorded. Generic items were not included as the nutritional content and availability of these products is subject to variation from store to store.

If the specified size was not available, the price of the next smaller size was recorded and quantities adjusted accordingly. No discounted or special prices were recorded.

Data was analysed using Microsoft Excel. Stores stocking less than 36 out of the 44 items were excluded from analyses. This is different to the cut off of 40 out of 44 items usually used when analysing the VHFB. A lower cut off of 36 out of 44 items allows insight into many stores in East Gippsland that would otherwise be excluded. Where items were not available, the cost of the item from the closest store stocking all 44 items was used to calculate a comparative total basket cost. The average cost of the VHFB was then calculated and compared with the fortnightly government unemployment benefits received by each different family type. This income was determined using government Centrelink data from July 2012, with the assumption that no family members were employed: family, $1357.18; single mother, $1057.02; elderly woman, $695.30; and single man, $489.70 (Centrelink, 2012).
Results

Food Deserts in East Gippsland
Maps showing SEIFA scores, public transport routes and store locations were produced for 22 towns located across East Gippsland. Overall, most towns had SEIFA scores below average (below 1000) and did not have access to public transport suitable for shopping (20 towns or 90%). Further, over a third of towns (36.36%) did not have access to at least 80% of a full basket of healthy food. Based on this mapping, 8 towns (across 4 districts) were classified as potential ‘food deserts’ (or 36.36%) - Cabbage Tree Creek, Newmerella, Marlo (Orbost District) Ensay (Omeo Region), Johnsonville, Nicholson (Twin Rivers District), Kalimna and Lake Tyers (Lakes Entrance District).

Bairnsdale (Appendix 7)
There are 34 food retail stores in Bairnsdale with a variety of outlets available from butchers (n=3), bakeries (n=9), supermarkets (n=3), green grocers (n=5) to general stores (n=2) and service stations (n=8). Take away stores and bakeries are the predominant food stores and were the most accessible (i.e. were concentrated within the 500m buffer zone) with around 70% of all stores located within the 500m buffer zone. Importantly, many disadvantaged areas of Bairnsdale (many of which have below average SEIFA scores) lie outside of the 500m buffer zone, meaning many would need to travel by foot, car or public transport, to obtain a full basket of healthy food. However, public transport is readily accessible, including in East Bairnsdale, which is the most disadvantaged area in East Gippsland (SEIFA 700-800). Residents living in this area would need to travel 3.2 km or 6 mins by car or bus or 36 mins each way by foot to access a full basket of healthy food.

Paynesville (Appendix 8)
There are 7 food retail stores available in Paynesville with a limited variety available- there are supermarkets (n=2), butchers (n=2), take away stores (n=2) and a bakery shop (n=1). There is no public transportation available (for shopping) in Paynesville so those living outside of the buffer zone would need to travel by foot or use private transport to obtain a full basket of healthy food, which is available in town. Paynesville has a slightly below average to above average SEIFA score (ranging from 950-1200).

Buchan (Appendix 9)
There are only 2 food retail stores available in Buchan – one take away store and one general store. Residents are able to purchase a full basket of healthy food locally. There is no, however, no public transport available, so resident would need to travel by foot or use private transportation to access a full healthy food basket. Buchan has a below SEIFA score (900-950).

Orbost (Appendix 10)
There are 10 food retail stores in Orbost with a moderate range of outlets available from take away stores (n=1), supermarkets (n=2), butchers (n=2), bakeries (n=2) to service stations (n=1) and general stores (n=2). Most of these (80%) stores are located in the south end of Orbost, which is the least disadvantaged part of town (with a SEIFA score below average-900-950). Twenty-percent of stores (butchers and a take away store) are located at the north end of Orbost, the most disadvantaged end of town (with SEIFA score below average-800-900). Residents living in Orbost are able to access a full basket of healthy food but this is located in the least disadvantaged part of town (south end of Orbost). Notably, residents living in the north end of Orbost would need to travel 1km (or 12 minutes by foot and 2 mins by private car) to access a full basket of healthy food.
Cabbage Tree Creek, Newmerella and Marlo (Appendices 11-13)

Cabbage Tree Creek, Newmerella and Marlo are single store towns with each only having a general store available. These areas (which all have a below average SEIFA score-950-1000) have been identified as ‘food deserts’ as residents are unable to access a basket of healthy food (i.e. stores do not have at least 80% of a full basket available) and there is no public transport available to access this in the nearest town. Residents would need to travel (15.2 km and 11 minutes by car from Marlo; 27.4km and 20 minutes by car from Cabbage Tree Creek and 5.9 km and 5 minutes from Newmerella by car) to Orbost to access a basket.

Omeo (Appendix 14)

There are 6 food retail stores available in Omeo with limited variety-takeaway (n=1), butcher (n=1), supermarket (n=1), bakery (n=1), service station (n=2). At least 80% of a full basket of healthy food is available in Omeo with around 50% of the residents living outside of the buffer zone. There is also no public transportation available (that is appropriate for shopping in Omeo) and so residents would need to travel by foot or use private transportation to access this. In order to access a full basket of healthy food, residents of Omeo would need to travel 29.2km (26 minutes) by car to Benambra where this is available. The SEIFA score for Omeo is below average (900-950).

Swifts Creek (Appendix 15)

There are 4 food retail stores in Swifts Creek with limited variety- supermarket (n=1), takeaway (n=1), service station (n=1) and bakery (n=1). Ninety per cent of these stores are situated within the 500m buffer zone with the service station the only store outside of the buffer. Access to at least 80% of a basket of healthy food basket is available within the buffer zone in Swifts Creek, although residents would need to travel by foot or car (there is no public transport available for shopping). In order to access a full basket of healthy food, residents would need to travel to Benambra, which would equate to 53 km and would take 1 hour 13 minutes by car. Swift Creek has a below average SEIFA score (900-950).

Benambra (Appendix 16)

Benambra is a single store town- there is a general store. A full basket of healthy food is available in Benambra. However, given there is no public transport available for shopping, access is limited to private transport or access via foot. The SEIFA score for Benambra is below average (900-950).

Ensay (Appendix 17)

There is no food retail store in Ensay and no public transport available to connect residents to towns with food retail stores where a basket of healthy food available. Residents of Ensay are therefore potentially living in a ‘food desert’.

Johnsonville (Appendix 18)

There are only 2 food retail stores available in Johnsonville with limited variety of food retail stores available – service station (n=1) and general store (n=1). A basket of healthy food is not available in Johnsonville (with stores stocking less than 80%) and residents would need to travel by private transport, as no public transport is available for shopping, to Bairnsdale or Lakes Entrance where it is available -19.8km and 18 minutes to Bairnsdale and 20.1km and 18 minutes to Lakes Entrance. Johnsonville is a ‘food desert’ and has a SEIFA score for Johnsonville is slightly below average to average (950-1000).

Metung (Appendix 19)

There are only 3 food retail stores in Metung with limited variety available-bakery (n=1), butcher (n=1) and general store (n=1). There is no public transport available in Metung for shopping and in order for residents to obtain at least 80% of a full basket of healthy food; they would need to travel into town by foot or car. However, to access a full basket of healthy food, residents living in Metung would need to travel to Lakes Entrance or Bairnsdale where this is available.
This is 19.8km and 18 minutes to Lakes Entrance and 31km and 31 minutes to Bairnsdale. The SEIFA score for Metung is above average (1000-1050).

Nicholson (Appendix 20)
Nicholson is a single store town- there is 1 general store. Residents are not able to purchase a basket of healthy food in Nicholson (less than 80%) and would therefore need to travel (using private transportation as there is no public transportation available for shopping) to Bairnsdale or Lakes Entrance where this is available. The distance to Bairnsdale is 15.8 km and would take 15 minutes and the distance to Lakes Entrance from here is 27.7km and would take 24 minutes. Nicholson is classified as a ‘food desert’ and has a slightly below to average SEIFA score (950-1000).

Swan Reach (Appendix 21)
There are 2 food retail stores available in Swan Reach – a general store and service station. It is not known whether a full basket or whether at least 80% of a full basket is available in Swan Reach. Swan Reach has a slight below average SEIFA score (950-1000) and is a potential ‘food desert’. To access a full basket, residents would need to travel to Bairnsdale or Lakes Entrance by car- 24.4km and 21 minutes to Bairnsdale and 17.4km and 16 minutes to Lakes Entrance (there is no public transport appropriate for shopping).

Lakes Entrance (Appendix 22)
There are 27 food retail stores in Lakes Entrance with a great variety of stores available from butchers (n=3), bakeries (n=2), take away stores (n=13), supermarkets (n=2), general stores (n=1), to service stations (n=3), food cooperatives (n=1) and green grocers (n=2). A full basket of healthy food is available in Lakes Entrance. However, a significant proportion of residents live outside of the 500m buffer zone, particularly those from the most disadvantaged areas, and would therefore need to travel by foot, car or use public transport, which is readily accessible in these areas for shopping. Notably, for residents living in some of the most disadvantaged areas, a trip would be around 3.6 km and would take 5 mins by car or bus and 36 mins by foot. Lakes Entrance has a below average SEIFA score (800-950).

Kalimna and Lake Tyers (Appendices 23-24)
There are only 2 stores available in Kalimna and 1 store available in Lake Tyers Beach – a green grocer and a general store and a general store, respectively. A basket of healthy food is not available in Kalimna or Lake Tyers. In order to access a full basket of healthy food, residents would need to travel to Lakes Entrance, which would take 5.5km and 10 minutes by car (and 1 hour by foot) from Kalimna and 9.7km and 10 minutes by car from Lake Tyers Beach (or 2 hours and 16 minutes by foot). Both Kalimna and Lake Tyers Beach are classified as ‘food deserts’ and have slightly below average in SEIFA (950-1000 for each town).

Mallacoota (Appendix 25)
There are 5 food retail stores in Mallacoota-supermarkets (n=2), bakery (n=1), service station (n=1) and a butcher shop (n=1). At least 80% of a basket of healthy food basket is available in Mallacoota but the most disadvantaged areas of Mallacoota live outside the 500m buffer zone and would therefore need to rely on travelling by foot or private car to obtain a healthy basket (as no public transport is available for shopping). In order to obtain a full basket, however, residents would need to travel to Buchan or Lakes Entrance, which is would equate to 204.2km and 2 hours and 22 minutes and 200.9km and 2 hours and 22 minutes, respectively. The SEIFA score for Mallacoota is below average with areas scoring 800-900 and 900-950.
**Cann River (Appendix 26)**

Similarly, there are 5 food retail stores available in Cann River with, however, a limited variety – takeaway (n=2), bakery (n=2) and general store (n=1). All of these stores are located in the most disadvantaged region of town with a healthy food basket available (at least 80%). There is however a great proportion of people living in Cann River who live outside the 500m buffer zone and would therefore need to travel by foot or private car (as no public transportation is available). Residents living in Cann River would need to travel to Buchan or Lakes Entrance to access a full healthy food basket - this is 135.1km and 1 hour and 38 minutes to Buchan and 131.8km and 1 hour and 32 minutes to Lakes Entrance. Cann River has a below average SEIFA score (with many areas ranging from 800-900 and 900-950).

**Bruthen (Appendix 27)**

There are 4 food retail stores available in Bruthen with limited variation in foot outlet type – general (n=1) store, service station (n=1), bakery (n=1) and butcher (n=1). At least 80% of a healthy food basket is available in Bruthen, although there are potentially a great number of residents living outside the 500m buffer zone where there is no access to public transport for shopping. Residents would need to travel by foot or use private transport to obtain a healthy basket of food. To access a full basket of healthy food, residents would need to travel to either Buchan, Bairnsdale, Lakes Entrance or Nowa Nowa, which would take 53.5km and 42 minutes to Buchan, 27.2km and 24 minutes to Bairnsdale, 34.2km and 29 minutes to Lakes Entrance and 29.7km and 23 minutes to Nowa Nowa. Bruthen has a SEIFA score below average (900-950).

**Nowa Nowa (Appendix 28)**

There is only 1 store in Nowa Nowa – a general store. A full healthy food basket is available, although there is no public transport suitable for shopping and so residents would need to travel by car or foot to access the basket. The SEIFA score for Nowa Nowa is slightly below average.
Current Initiatives Addressing Food Security in East Gippsland

A number of community organisations across East Gippsland are attempting to address or prevent food security. The table below shows outlines current initiatives mapped against the Environments for Health Framework (Department of Human Services, 2001). Currently, there are a limited variety of initiatives and agencies addressing food insecurity across East Gippsland. The overwhelming majority of these initiatives address aspects of social inclusion with large gaps around the economic, built or natural environments, suggesting a weakened or fragmented (disconnected) food system.

Table 1. Current activities addressing food security in East Gippsland mapped against Environments for Health Framework.

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<th>LOCAL FOOD SYSTEM</th>
<th>ACTION AREAS</th>
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<td><strong>Built</strong></td>
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<td>Food Produced</td>
<td>Community gardens:</td>
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<td></td>
<td>Orbost regional Health; Buchan Neighbourhood House; Lake Tyers (planned);</td>
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<td></td>
<td>Community College East Gippsland; Bairnsdale Neighbourhood House; Bairnsdale</td>
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<td>East Neighbourhood House; Benambra Neighbourhood House; Veggie &amp; Herb</td>
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<td>Garden Orbost Neighbourhood House</td>
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<td></td>
<td><em>School Veggie gardens:</em></td>
</tr>
<tr>
<td></td>
<td>Orbost Secondary College; Nicholson Primary School; Marlo Primary School;</td>
</tr>
<tr>
<td></td>
<td>Newmerella Primary School; Orbost North Primary School; Orbost North Primary</td>
</tr>
<tr>
<td></td>
<td>School; Nicholson Primary School; Paynesville Primary School)</td>
</tr>
<tr>
<td>Farms/Farmers Markets/Food Cooperatives:</td>
<td>Farmers Market (Paynesville; Bairnsdale and Metung)</td>
</tr>
<tr>
<td></td>
<td>Food Social Enterprise (Moogji-Orbost-planned)</td>
</tr>
<tr>
<td></td>
<td>Fruitfarm (Johnsonville)</td>
</tr>
<tr>
<td></td>
<td>Picnic Point Farm (Bairnsdale)</td>
</tr>
<tr>
<td></td>
<td>Fishermans Cooperative (Lakes Entrance)</td>
</tr>
<tr>
<td></td>
<td>Ferry Seafoods (Lakes Entrance)</td>
</tr>
<tr>
<td></td>
<td>Food Coop (W-tree)</td>
</tr>
<tr>
<td>Food Processed</td>
<td>Preserving fruit/food:</td>
</tr>
<tr>
<td></td>
<td>Orbost Neighbourhood House</td>
</tr>
<tr>
<td>Food Distributed</td>
<td>Orbost Produce Swaps:</td>
</tr>
<tr>
<td></td>
<td>Orbost Neighbourhood House; Orbost Regional Health @ Forest Park; Marlo</td>
</tr>
<tr>
<td></td>
<td>bait/tackle shop; Cabbage Tree General Store; Bairnsdale Neighbourhood House</td>
</tr>
<tr>
<td></td>
<td><em>Food Relief:</em></td>
</tr>
<tr>
<td></td>
<td>UCO; Bairnsdale Neighbourhood House; GEGAC-limited service-bread and</td>
</tr>
<tr>
<td></td>
<td>occasional fruit and veg; Salvation Army Bairnsdale; Orbost foodshare</td>
</tr>
<tr>
<td></td>
<td>Storage/Budgeting:</td>
</tr>
<tr>
<td></td>
<td>Buy Fresh Local (East Gippsland Shire Council);</td>
</tr>
<tr>
<td></td>
<td>Bill Busting &amp; Household Budgeting (Orbost Neighbourhood House);</td>
</tr>
<tr>
<td></td>
<td>Buying food on a Budget-Smith Family (Bairnsdale)</td>
</tr>
</tbody>
</table>
| **Food Consumed** | **Breakfast Programs:**  
Orbost Secondary College; UnitingCare Gippsland; Bairnsdale Secondary College; Bairnsdale West Primary School; 754 Primary School; Bairnsdale East Neighbourhood House; Lake Tyers Trust; Cann River School; Paynesville Primary School  
**Free Fruit Friday Program:**  
Bairnsdale West Primary School; East Gippsland Specialist School; Bruthen Primary School; Buchan Primary School; Clifton Creek Primary School; Goongerah P-8 school; Lakes Entrance Primary School; Mallacoota P-12 College; Metung Primary School; Newmerella Primary School; Nicholson Primary School; Nowa Nowa Primary School; Omeo Primary School; Orbost North Primary School; Orbost Primary School; Swifts Creek Primary School  
**Community Café:**  
Bairnsdale Neighborhood House and Bairnsdale East Neighborhood House  
**School cooking programs:**  
Orbost North Primary School; Clifton Hill Primary School  
**Community cooking programs:**  
Cookery for Kids and Adults Orbost Neighbourhood House  
**Community Kitchens:**  
Orbost Regional Health; St Brendans Primary School  
**Community Lunch:**  
East Bairnsdale Neighborhood House; Bairnsdale Neighborhood House & Tubbut Neighbourhood House and Resource Centre  
**Stephanie Alexander Kitchen Garden:**  
Swan Reach Primary School; Paynesville Primary School; Tambo Upper Primary School  
**Healthy Lifestyles/Snack Programs:**  
Bairnsdale West Primary School; Nowa Nowa Primary School; Clifton Creek Primary School) | **Food Waste/Redistributed** | **Food Redistribution Schemes:**  
Surplus fruit & veg Orbost Neighbourhood House; Citrus Celebration orbost Neighbourhood House; Food Rescue Program every morning-Bairnsdale Neighbourhood House |
**Availability of Healthy Food in East Gippsland**

During July 2012, the VHFB survey was conducted in 34 stores across 24 towns in East Gippsland. Stores types included chain supermarkets, independent supermarkets and general stores. Five towns had more than 1 store eligible to be surveyed, while 19 towns had only 1 store eligible to be surveyed. There were also many towns that had no stores to survey.

Of the 34 stores surveyed, 9 (26.5%) stores across 6 (25%) towns had all 44 VHFB items (100%) available. In contrast, the soft drink and chocolate bar were available in every store surveyed (100%). Nineteen (55.9%) out of the 34 stores surveyed could supply at least 40 of the VHFB items (≥90%). Of the 34 stores, 20 (58.8%) stores across 13 towns in East Gippsland could supply at least 36 of the VHFB item (≥80%). Of these 20 stores, 3 were chain supermarkets, 9 were independent supermarkets and 8 were general stores. Eight of these 20 stores were the only store located within the town. Items missing from stores were usually fresh food items such as fruit and vegetables, meat and dairy.

**Cost of Healthy Food in East Gippsland**

Please see Table 2 for the median cost and medium percentage of unemployment benefit required to purchase the VHFB in East Gippsland during July 2012. For all of the reference families, the VHFB cost the most when purchased from a general store in a lone store town; and cost the least when purchased from a chain supermarket in the largest town. Please see Appendices 29-32 for maps of the average cost of the VHFB and average percentage of unemployment benefit required by a family, single mother, elderly woman and single man to purchase the VHFB in each district of East Gippsland. More in depth results of the VHFB conducted are available in a separate report (*The Cost and Availability of Healthy Food in East Gippsland*).

*Table 2. The median cost and medium percentage of unemployment benefit required to purchase the VHFB in East Gippsland during July 2012*

<table>
<thead>
<tr>
<th>Reference family</th>
<th>Medium cost ($)</th>
<th>Medium percentage of unemployment benefit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>498.87</td>
<td>36.76</td>
</tr>
<tr>
<td>Single mother</td>
<td>340.83</td>
<td>32.25</td>
</tr>
<tr>
<td>Elderly woman</td>
<td>119.77</td>
<td>17.22</td>
</tr>
<tr>
<td>Single man</td>
<td>158.50</td>
<td>32.37</td>
</tr>
</tbody>
</table>
Discussion & Limitations

The results of this food security needs assessment provide important insight into areas of East Gippsland where healthy foods are inaccessible, unaffordable or unavailable. However this food security needs assessment has a number of limitations.

How accessible is healthy food in East Gippsland?
The mapping of food retail stores across East Gippsland demonstrated that 8 of the 22 towns mapped (36.36%) were classified as ‘food deserts’- these were small towns across 4 districts. A limited diversity (i.e. number) and variety (i.e. type) of food retail stores were evident across most small towns with the exception of Bairnsdale and Lakes Entrance (the main towns with the largest population). Proximity to stores to access at least 80% of a basket of healthy food was also an issue affecting most small towns. Public transport was evident in limiting access to healthy food retail stores as there was no public transport available for shopping in 20 out of the 22 areas mapped (with the exception of readily available and accessible transport in most parts of Lakes Entrance and Bairnsdale).

These findings suggest there is a correlation between population size and the number and type of food retail stores available in a geographical area; that is, the larger population, the larger the number and type of food retail stores available or, conversely, the smaller the population size, the fewer the number and type of food retail stores within a geographical area.

This is supported by other research evidence which states that that this is part of the natural course of urban development and economic growth. According to Larsen and Gilliland (2007) the diversity and variety of food retail stores is driven by economic interests in order to maximise profit.

Importantly, it is also worth noting that there was a noticeable imbalance in the distribution of healthy versus unhealthy food retail stores- this was evident in 9 out of 22 towns mapped. The degree of imbalance between healthy and unhealthy food varied from town to town, although the imbalance was greater in the main towns (e.g. 1.6 times more unhealthy food retail stores in Bairnsdale than healthy and 2.3 times more unhealthy than healthy retail food stores in Lakes Entrance). These unhealthy food retail stores appear to be more accessible (by proximity) to residents, particularly those living in areas with below average SEIFA scores. This may play a role in healthy eating and healthy food choice and possibly an increased risk in the development of diet-related chronic disease. Davis and Carpenter (2009) state that exposure to poor-quality food environments may have negative long term impacts on eating patterns and overweight and obesity.

Other research also suggests that access to a variety of food positively influences a healthy diet. Two American studies found that African-American residents were more likely to eat a healthy diet when they had access to a local supermarket compared to smaller grocery retailers (Morland, Wing, Roux, 2002; Zenk, Schultz, Israel, James, Bao and Wilson, 2005). The literature is, however, inconclusive as to whether easier access to healthy or unhealthy foods influences one's overall diet. It is also important to note that there are a range of other determinants that also play a role in local food choice (Larsen & Gilliland, 2007).
Further, the findings of this mapping exercise also highlight the integral role transport plays in being able to access healthy food. As the majority of towns do not have appropriate public transport available for shopping, residents need to rely on private car transportation (or travel by foot). Whilst not documented in this study, it is anecdotally understood that many residents, particularly those in the Far North or Far East, need to travel vast distances to obtain a variety of healthy food (although some can access this more locally at higher costs). This may have detrimental effects on overall health and quality of life (i.e. through increased stress and financial costs), particularly for those who do not have access to a private vehicle (Larsen & Gilliland, 2007). However, further research is warranted at a more local level in East Gippsland to determine the role transportation plays in shopping behaviour (and frequency).

**What activities are currently happening in East Gippsland to address food security?**

The current variety of initiatives occurring throughout the region is limited. An overwhelming number aim to address some aspect of social inclusion and are single interventions addressing one or a few determinants. Multi-component interventions that take a socio-ecological approach to addressing the multiple (underlying) determinants of food insecurity are required. Approaching food insecurity in this way is more likely to be effective in reducing (and preventing) food security at a population level (and thus strengthen the local food system) (Kaiser, 2011).

**How available is healthy food in East Gippsland?**

The VHFB found that 40% of stores in East Gippsland cannot supply at least 36 of the VHFB items (≥80%). The VHFB showed that healthy food is more likely to be available in a chain supermarket and in towns where there was more than one store such as Bairnsdale, Lakes Entrance and Paynesville; however the majority of towns in East Gippsland only have one store. There are also many towns/localities in East Gippsland that have no store. Families living in these towns/localities are required to travel large distances to purchase healthy food.

**How much does healthy food cost in East Gippsland?**

The VHFB showed variation in the cost of the VHFB in different store types across East Gippsland. For a family, the cost of a full VHFB ranged from $408.07 to $642.92. The VHFB cost the most when purchased from a general store in a lone store town; and cost the least when purchased from a chain supermarket in the largest town. While the differences across East Gippsland may be due to extra geographical distance from Melbourne, there is limited evidence to suggest that food in more rural areas of Victoria have greater food costs (Palermo, Walker, Hill, & McDonald, 2008).
Taking into consideration indispensable household expenses, it has been proposed that food should account for no more than 30% of income in order to remain affordable (Williams, James, & Kwan, 2004). In East Gippsland however, a family may need to spend up to 47% of their unemployment benefits to purchase the VHFB. Healthy food is therefore likely to be unaffordable for many families in East Gippsland.

The elderly woman’s expenditure on a VHFB, 17% (Figure 7), was in line with the estimated average income expenditure on food, 17% (ABS, 2005), providing evidence that single pensioners in East Gippsland have good economic food access. However, other work has reported that due to physical issues such as mobility, disability, illness and transport, the elderly are still vulnerable to food insecurity (Booth & Smith, 2001).

**Limitations**

This Food Security Needs Assessment has a number of limitations:

Identification of food stores for the mapping and the VHFB may not have captured all food outlets in East Gippsland. The council database together with use of websites does not guarantee a full complement of stores. The limited time for the work prevented physical mapping of outlets by hand but this would have ensured a complete sample.

Similarly, public transportation routes have slightly been altered during the time the needs assessment was conducted and thus not all possible routes were able to be included for the purposes of the mapping.

The mapping of initiatives aimed at addressing or preventing food insecurity (Table 1) is also limited in that it was collected at one point in time and communities are ever changing in their initiatives to improve access to healthy food.

The VHFB in itself has a number of limitations:

- It is based on foods of limited cuisine and does not cater for CALD communities’ food preferences (i.e. Indigenous).

- The methodology (excluding generic brands to improve reliability) does not provide a picture of the cheapest baskets of food available.

- To be included in analysis, stores must have available 36 VHFB items or more. There are many towns in East Gippsland where not all of the VHFB items are available in the main store but the remaining items are available from other specialty stores, such as green grocers and butchers, within the town.

- The VHFB only determines the cost of the VHFB for four family types. These four family types were selected as they are considered to be most at risk of food insecurity (Palermo & Wilson, 2007). However, it is likely that other family types exist in East Gippsland who are also at risk of food insecurity.

- In this study, the percentage of income required to purchase the VHFB was only determined for families on unemployment benefits. The percentage of income required to purchase the VHFB for working families is more difficult to determine.
## Recommendations

**Based on the results of the food security needs assessment, a number of recommendations have been made to address the future food security work in East Gippsland.**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
<th>Food Security Determinant(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct a series of local qualitative discussions with community members vulnerable to food security and with local agencies</td>
<td>To test the assumptions from the data produced in the needs assessment and whether this holds true for particular local communities and to explore other determinants of food security and the lived experience of local communities (and to enable them to be empowered and drive the solutions)</td>
<td>General</td>
</tr>
<tr>
<td>Develop appropriate mechanisms to communicate the results of the needs assessment to key stakeholders</td>
<td>The data from this needs assessment needs to be interpreted and communicated to key stakeholders, who will be engaged in future food security work. It is important that the communication of this is tailored to the communication needs of these stakeholders.</td>
<td>General</td>
</tr>
<tr>
<td>Create an East Gippsland food security working group</td>
<td>It is important to provide a platform to engage key stakeholders, streamline efforts, focus the work and drive solutions locally.</td>
<td>General</td>
</tr>
<tr>
<td>Advocate to the Shire around the development a food security policy</td>
<td>This may provide the impetus towards a systems approach in East Gippsland – potentially impacting on the whole population.</td>
<td>General</td>
</tr>
<tr>
<td>Continue to monitor food security in East Gippsland by developing a local food security monitoring and surveillance framework</td>
<td>It is important to monitor food security in East Gippsland regularly to determine if there have been any changes in the rate of food insecurity and ensure vulnerable communities are captured and the target of food security initiatives</td>
<td>General</td>
</tr>
<tr>
<td>Explore the development of policies and guidelines with local government around the variety, diversity and proximity of food stores</td>
<td>The need to better balance the food environment so that there is a variety and diversity of food stores (access and supply). This would provide a more supportive environment and enable healthier food choice/healthier eating behaviours.</td>
<td>Access and Supply</td>
</tr>
<tr>
<td>Explore innovative transport</td>
<td>Physical access to food outlets is a major determinant of food security in East Gippsland with</td>
<td>Access</td>
</tr>
<tr>
<td>Options to Enable Increased Access to Healthy Food for the Community</td>
<td>Many (residents in smaller and remote towns) having to travel vast distances to access food. This may reduce the overall burden (i.e. financial, time and stress) placed on shopping.</td>
<td></td>
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<tr>
<td>---</td>
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<td></td>
</tr>
<tr>
<td>Explore Innovative Options That Making Healthy Food More Affordable, Particularly for Families</td>
<td>Families in East Gippsland spend almost half of their fortnightly income (based on centrelink unemployment benefits) on food. Given this, families may be sacrificing healthy food choices to accommodate other important living expenses. Other innovations are needed to support families to make healthier eating choices.</td>
<td></td>
</tr>
<tr>
<td>Explore Innovative Solutions to Making Healthy Food More Available, Particularly for Small, Remote Towns Across East Gippsland</td>
<td>The lack of available healthy food is an important issue in East Gippsland, affecting small, remote towns in particular. A collaborative (upstream) effort is needed between and across sectors if food supply issues are to be effectively addressed and sustained.</td>
<td></td>
</tr>
<tr>
<td>Use a Community Participatory Approach</td>
<td>The local community need to be engaged and empowered to be part of the solution – they need to be seen as equitable partners. This level of participation and engagement is more likely to lead to the ownership and success of any food security interventions.</td>
<td></td>
</tr>
<tr>
<td>Explore the Multi-Component Food Security Innovations (e.g. that use a socio-ecological approach)</td>
<td>Taking a socio-ecological approach will enable the multiple determinants of food security to be addressed and will enable the multiple levels of influences to be taken into account.</td>
<td></td>
</tr>
</tbody>
</table>
References


Appendices

Appendix 1. Determinants of Food Security (Adams et al., 2012; Rychetnik, et al., 2003)

Determinants of Food Security

Food Supply
Indicators of a local food supply
- Location of food outlets
- Availability in outlets
- Price
- Quality
- Variety
- Promotion

Access to Food
Resources and capacity to acquire and use food
- Financial resources
- Distance and transport to shops
- Knowledge skills preferences
- Storage facilities
- Preparation and cooking facilities
- Time and mobility
- Social support

Food Security
means that food intake is:
- Sufficient
- Reliable
- Nutritious
- Safe
- Acceptable
- Sustainable
Determinants of food security are commonly categorised into two groups: food supply and food access. The availability of nutritious food (food supply) and the ability to access nutritious food (food access) influence the level of food security within a community [59].

**Food Access** is the term used to describe an individual’s ability to access their local food supply. This includes financial constraints and expenses that may restrict a person’s ability to purchase nutritious foods, distance and transport to shops, knowledge, skills and preference, storage facilities, convenience, preparation and cooking facilities, time and mobility, as well as social support (Department of Health, 2011).

**Factors which affect food access (Adams, et al., 2012; Rychetnik, et al., 2003)**

<table>
<thead>
<tr>
<th>Factors which affect food access</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial constraints and expenses</td>
<td>Having sufficient funds to purchase nutritious foods is a key determinant of food security. Often when disposable income is limited, food is first to be sacrificed. In today’s society bills, mortgages, rent and medical expenses are becoming more expensive and often take a higher priority over food[1,13,59,62].</td>
</tr>
<tr>
<td>Distance and transport to shops</td>
<td>Physical access to food is determined by distance and transport to shops (particularly supermarkets where there is a greater variety of nutritious foods at competitive prices). Studies have found that areas of higher socio-economic status usually have a shorter distance to travel to large supermarkets and fresh food outlets compared to areas of lower socio-economic status [1,63].</td>
</tr>
<tr>
<td>Knowledge, skills and preference</td>
<td>In order to improve food security it may be important for individuals to have the ability to make healthy food choices and the skills to prepare nutritious meals. In addition, personal food preferences influence the food choices that individuals make thus it is vital to understand people’s perceptions of food and their social norms. In saying this, having a good knowledge about food does not necessarily mean that an individual will make the right food choices. In order to engage in positive diet-related behaviours, motivation and a desire to overcome barriers to change is required [64,65].</td>
</tr>
<tr>
<td>Storage facilities</td>
<td>Food is often cheaper when purchased in bulk thus it is important to have adequate storage equipment such as fridges, freezers and storage rooms. Individuals living in cheap housing, hostels and shelters often have limited access to storage facilities which can contribute to food insecurity.</td>
</tr>
<tr>
<td>Convenience, preparation and cooking facilities</td>
<td>Convenience, preparation time and availability of cooking facilities and equipment are all determinants that influence food security. Not having appropriate cooking facilities and equipment can be a barrier to producing nutritious meals at home. Similarly, due to people’s lifestyles becoming increasingly busy with less time being set aside for preparing meals, convenience is an important factor affecting what people choose to eat.</td>
</tr>
<tr>
<td>Time and mobility</td>
<td>Limited time to purchase and prepare nutritious meals can be a barrier to accessing a healthy diet, particularly for busy family where the parents work full time. Similarly, poor physical mobility can restrict a person’s ability to access supermarkets and prepare meals at home. This may be experienced by people with disabilities and the elderly thus contributing to an over-reliance on convenient, readily available processed foods, which often do not provide adequate nutrition.</td>
</tr>
<tr>
<td>Social support</td>
<td>Food along with its preparation and consumption are thought of as a social activity. Individuals who live alone or who are socially isolated are at risk of food insecurity. Social isolation and lack of support can contribute to poor appetite and diminish a person’s desire to cook and prepare...</td>
</tr>
</tbody>
</table>
Food Supply is the term used to describe the supply of food to individuals within a community. This includes the location of food outlets within the area; the availability of food within those outlets; the price, quality and variety of food available to the community and the promotion of different foods.

**Factors which affect food supply (Adams, et al., 2012)**

<table>
<thead>
<tr>
<th>Factors which affect food supply</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location of food outlets</strong></td>
<td>Food outlets can include supermarkets, fast food outlets and markets. The location of food outlets influences the food supply available to individuals. It is important that food outlets, which provide a variety of safe, nutritious and affordable foods, are located in appropriate areas so they are close to housing or easily accessible by public transport. Studies have found that areas of higher socio-economic status often have greater access to food outlets which provide a diverse range of nutritious affordable foods when compared to areas of a lower socio-economic status [1,69].</td>
</tr>
<tr>
<td><strong>Availability in food outlets</strong></td>
<td>The availability of appropriate, safe and nutritious foods within local food outlets can reflect an individual’s local food supply. Food choices are influenced by the availability of food within outlets. If people are only able to access small convenience shops with a limited availability of food compared to large supermarkets, this can affect household food security[59]. Studies have found this to be the case with many socio-economically disadvantaged groups living in areas with limited access to supermarkets that rely on a limited range of nutritious foods within smaller local convenience stores [13,69,70,71,72].</td>
</tr>
<tr>
<td><strong>Cost of food</strong></td>
<td>The cost of food can be a key factor in determining people’s food choices, particularly those with a low income. Studies have shown that when fresh fruit and vegetables are available at affordable prices, food security is improved. Individuals with a lower socio-economic status are likely to consume less fruit and vegetables. Possible reasons for this include the cost of food, less access to nutritious food and competing interests[13,16,19,71,74].</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>The quality of the local food supply needs to meet certain standards in order to provide appropriate nutritional value, flavour and acceptability. Similarly, good quality fresh foods need to be reasonably prices in order to improve food security.</td>
</tr>
<tr>
<td><strong>Variety</strong></td>
<td>A nutritious diet can be achieved through a good local food supply that provides individuals with a variety of different foods from all major food groups including fruit and vegetables, meat, eggs and dairy products, as well as breads, cereals, rice and pasta.</td>
</tr>
<tr>
<td><strong>Promotion</strong></td>
<td>The way the local food supply is promoted can greatly influence people’s food choices, including their ability to identify and locate nutritious foods. Foods can be promoted through in-store promotions, in-store product placement and advertising on buses, television, radio and billboards.</td>
</tr>
</tbody>
</table>
Appendix 2. Map of East Gippsland
Appendix 3. Profile of East Gippsland ("East Gippsland Shire Community Profile," 2012)

<table>
<thead>
<tr>
<th>Population</th>
<th>East Gippsland</th>
<th>Regional Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 years plus</td>
<td>23</td>
<td>18</td>
</tr>
<tr>
<td>Family households</td>
<td>22.3</td>
<td>26.9</td>
</tr>
<tr>
<td>Lone person households</td>
<td>27.6</td>
<td>26.8</td>
</tr>
<tr>
<td>Low income households (earning less than $600 per week)</td>
<td>32.2</td>
<td>27.2</td>
</tr>
<tr>
<td>Low income individuals (earning less than $400 per week)</td>
<td>43.3</td>
<td>39.6</td>
</tr>
<tr>
<td>Completed Year 10 or less</td>
<td>43.3</td>
<td>39.0</td>
</tr>
<tr>
<td>Completed Year 12</td>
<td>31.8</td>
<td>35.6</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Place of birth – Australia</td>
<td>84.1</td>
<td>84.3</td>
</tr>
<tr>
<td>Language – English</td>
<td>92.8</td>
<td>90.4</td>
</tr>
<tr>
<td>Language – Language other than English</td>
<td>3.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Aboriginal &amp; Torres Strait Islander</td>
<td>3.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Rent greater than $200 per week</td>
<td>43.5</td>
<td>49.3</td>
</tr>
<tr>
<td>Mortgage greater than $300 per week</td>
<td>56.5</td>
<td>59.6</td>
</tr>
<tr>
<td>Households that do not own a car</td>
<td>5.9</td>
<td>6.4</td>
</tr>
<tr>
<td>Households that own at least one car</td>
<td>88.1</td>
<td>87.5</td>
</tr>
<tr>
<td>SEIFA Index of Disadvantage</td>
<td>962.9</td>
<td>982.2</td>
</tr>
</tbody>
</table>

Appendix 4. Proportion of persons who ran out of food in the previous 12 months and could not afford to buy more, 2008 (Department of Health, 2011)

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>5.6</td>
</tr>
<tr>
<td>Gippsland</td>
<td>5.8</td>
</tr>
<tr>
<td>East Gippsland</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Appendix 5. Reasons why people don’t always have the quality or variety of foods they want, 2008 (Department of Health, 2011)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage (%) per Region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Victoria</td>
</tr>
<tr>
<td>Some foods are too expensive</td>
<td>28.3</td>
</tr>
<tr>
<td>Can’t always get the right quality</td>
<td>25.5</td>
</tr>
<tr>
<td>Can’t always get the right variety</td>
<td>10.9</td>
</tr>
<tr>
<td>Can’t always get culturally appropriate food</td>
<td>6.8</td>
</tr>
<tr>
<td>Inadequate and unreliable transport</td>
<td>8</td>
</tr>
</tbody>
</table>
### Appendix 6. Victorian Healthy Food Basket – 44 Items

<table>
<thead>
<tr>
<th>Basket item</th>
<th>Product size</th>
<th>Brand</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breads &amp; Cereals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White bread</td>
<td>650g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholemeal bread</td>
<td>650g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crumpets (rounds)</td>
<td>300g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weet-bix</td>
<td>750g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instant oats</td>
<td>500g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pasta</td>
<td>500g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White rice</td>
<td>1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instant noodles</td>
<td>85g</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fruit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apples</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oranges</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bananas</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned fruit salad, natural juice</td>
<td>825g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sultanas</td>
<td>375g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orange juice (100%) NAS</td>
<td>2L</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vegetables, legumes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tomatoes</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potatoes</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pumpkin</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cabbage</td>
<td>half</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lettuce</td>
<td>whole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrots</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onions</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frozen peas</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned tomatoes</td>
<td>400g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned beetroot</td>
<td>450g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned corn kernals</td>
<td>440g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned baked beans</td>
<td>420g</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Meat and alternatives</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh bacon, shortcut, rindless</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh ham</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beef mince, regular</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lamb chops, forequarter</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken fillets, skin off</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sausages, thin beef</td>
<td>per 1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned tuna (unsat.oil)</td>
<td>425g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinned salmon, pink (water)</td>
<td>210g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large eggs (min 50g, caged)</td>
<td>700g dozen</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dairy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh full cream milk</td>
<td>1L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh reduced fat milk</td>
<td>2L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced fat flavoured yoghurt</td>
<td>1kg tub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full fat long life milk</td>
<td>1L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheese, block</td>
<td>500g</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-core foods</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyunsaturated margarine</td>
<td>500g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White sugar</td>
<td>1kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canola oil</td>
<td>750ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basket total</strong></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Unhealthy items comparison</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mars bar</td>
<td>53g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coca-cola</td>
<td>600ml 'buddy'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 7. Map of stores, public transport routes and SEIFA scores in Bairnsdale
Appendix 8. Map of stores, public transport routes and SEIFA scores in Paynesville
Appendix 9. Map of stores, public transport routes and SEIFA scores in Buchan
Appendix 10. Map of stores, public transport routes and SEIFA scores in Orbost
Appendix 11. Map of stores, public transport routes and SEIFA scores in Cabbage Tree Creek
Appendix 12. Map of stores, public transport routes and SEIFA scores in Newmerella
Appendix 13. Map of stores, public transport routes and SEIFA scores in Marlo
Appendix 14. Map of stores, public transport routes and SEIFA scores in Omeo
Appendix 15. Map of stores, public transport routes and SEIFA scores in Swift’s Creek
Appendix 16. Map of stores, public transport routes and SEIFA scores in Benambra
Appendix 17. Map of stores, public transport routes and SEIFA scores in Ensay
Appendix 18. Map of stores, public transport routes and SEIFA scores in Johnsonville
Appendix 19. Map of stores, public transport routes and SEIFA scores in Metung
Appendix 20. Map of stores, public transport routes and SEIFA scores in Nicholson
Appendix 21. Map of stores, public transport routes and SEIFA scores in Swan Reach
Appendix 22. Map of stores, public transport routes and SEIFA scores in Lakes Entrance
Appendix 23. Map of stores, public transport routes and SEIFA scores in Kalimna
Appendix 24. Map of stores, public transport routes and SEIFA scores in Lake Tyers Beach
Appendix 25. Map of stores, public transport routes and SEIFA scores in Mallacoota
Mallacoota

Legend
- Bakery
- Butcher
- Food Cooperative
- General Store
- Grocer
- Service Station
- Supermarket
- Takeaway

SEIFA scores
- Below 760
- 760 - 890
- 890 - 950
- 950 - 1,000
- 1,000 - 1,050
- 1,050 - 1,100
- 1,100 - 1,300
- 1,300 - 1,500

Other
- 500 meters buffer
- Lakes
- Corridor districts
- Highway
- Arterial roads
- Local roads

Scale: 1:20,000

Source: SEIFA maps - Department of Health, Gippsland

Disclaimer: The compilation of this map is subject to Copyright laws and regulations. East Gippsland PCP does not guarantee the accuracy of the information shown or locations of the food outlets. East Gippsland PCP will not be liable for any loss or damage caused as a result of using this information.
Appendix 26. Map of stores, public transport routes and SEIFA scores in Cann River
Appendix 27. Map of stores, public transport routes and SEIFA scores in Bruthen
Appendix 28. Map of stores, public transport routes and SEIFA scores in Nowa Nowa
Appendix 29. Family – Map of Median Cost ($) and Median Percentage of Unemployment Benefit Required to Purchase VHFB in East Gippsland according to District

- **Bairnsdale & District**
  - Median Cost: $434
  - Median Percentage of Unemployment Benefit: 32%

- **Buchan & Lakes Entrance Districts**
  - Median Cost: $527
  - Median Percentage of Unemployment Benefit: 39%

- **Cann River & Mallacoota Districts**
  - Median Cost: $532
  - Median Percentage of Unemployment Benefit: 39%

- **Orbost District**
  - Median Cost: $517
  - Median Percentage of Unemployment Benefit: 38%

- **Omeo District**
  - Median Cost: $543
  - Median Percentage of Unemployment Benefit: 40%

- **Twin Rivers District**
  - Median Cost: $624
  - Median Percentage of Unemployment Benefit: 46%
Appendix 30. Single Mother – Map of Median Cost ($) and Median Percentage of Unemployment Benefit Required to Purchase VHFB in East Gippsland according to District

- **Bairnsdale & District**
  - Median Cost: $297
  - Median Percentage of Unemployment Benefit Required: 28%

- **Twin Rivers District**
  - Median Cost: $426
  - Median Percentage of Unemployment Benefit Required: 40%

- **Buchan & Lakes Entrance Districts**
  - Median Cost: $362
  - Median Percentage of Unemployment Benefit Required: 34%

- **Orbost District**
  - Median Cost: $357
  - Median Percentage of Unemployment Benefit Required: 34%

- **Omeo District**
  - Median Cost: $370
  - Median Percentage of Unemployment Benefit Required: 35%

- **Cann River & Mallacoota Districts**
  - Median Cost: $363
  - Median Percentage of Unemployment Benefit Required: 34%
Appendix 31. Elderly Woman – Map of Median Cost ($) and Median Percentage of Unemployment Benefit Required to Purchase VHFB in East Gippsland according to District
Appendix 32. Single – Map of Median Cost ($) and Median Percentage of Unemployment Benefit Required to Purchase VHFB in East Gippsland according to District

- Bairnsdale & District: $137, 28%
- Twin Rivers District: $197, 40%
- Buchan & Lakes Entrance Districts: $166, 34%
- Omeo District: $172, 35%
- Cann River & Mallacoota Districts: $169, 34%
- Orbost District: $161, 33%
Appendix 33. Focus Group Examples of Questions

Community Member Questions
- What do you think of when we say healthy eating
- Statement: Dietitians define healthy eating as having a balanced diet, including all the major food groups, such as breads and cereals, meats, dairy, fruit and vegetables.
- How do you feel your current diet compares to the Dietitians definition?
- How important is having a healthy diet to you and your family?
- What influences the food choices you make when you go shopping?
- How do you get to and from the shops?
- What are some of the barriers in your community for accessing healthy food?
- Scenario: how would you get by if you had an emergency situation and were on a lower than normal budget for food with no access to your usual mode of transport?
- Who can help make accessing healthy food easier?

Workers from Organisations Questions
- We are very interested to hear why you were inspired to be involved today?
- What are the first things you think of when you hear the term ‘food access’ or ‘food security’?
- How have food insecurity and food access issues surfaced in your daily work?
- What do you perceive the issues/barriers that members of the community have to accessing nutritious and affordable food? Let’s rank these into a top 3
- Within your organisation, what are the issues you have in providing your services to your clientele? Again, let’s rank these into a top 3
- What do you think you could do to overcome these issues?
- Are there any additional points you would like to discuss?
Appendix 34. The Public Health Nutrition Practice Bi-cycle (Hughes & Margetts, 2011)

![Figure 3.4 The public health nutrition practice bi-cycle](image)

- **Intelligence**
  1. Community Analysis and Engagement
  2. Problem analysis
  3. Stakeholder analysis and engagement
  4. Determinant analysis
  5. Capacity analysis
  6. Mandates for action
  7. Intervention research and strategy portfolio
  8. Risk create and strategy prioritisation

- **Action**
  9. Writing statements for action (goals and objectives)
  10. Logic modelling
  11. Implementation and evaluation planning
  12. Managing implementation

- **Evaluation**
  13. Process evaluation
  14. Impact and outcome evaluation
  15. Economic evaluation
  16. Refinements and dissemination of learning

Intelligence: Understanding and learning from the experience of earlier interventions, ensuring a thorough canvassing of all strategies, options and availability.

Action: The "doing phase" of interventions and related monitoring of implementation to ensure implementation sticks to the plan, is completed and are ready for evaluation.

Evaluation: Evaluating if the strategies have been implemented as planned.

Impact and outcome evaluation:
- Evaluating if objectives and goals are achieved.
- Evaluating capacity gains that help explain intervention effects and predict sustainability.

Economic evaluation:
- Economic analysis of costs and benefits, outcomes of an intervention to assist value judgements about economic efficiency.

Refinements and dissemination of learning:
- Refining practice and understanding, dissemination of learning.
### Appendix 35. Themes of Existing Food Security Policies (Adams, et al., 2012)

In total, 10 food security policies were located, with dates ranging from 1998 to 2012. Eleven key themes were identified.

<table>
<thead>
<tr>
<th>Key theme</th>
<th>Explanation</th>
<th>Policies that each theme was found in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td>Developing initiatives that increase knowledge of food, food preparation and production of environmentally sustainable food[5,38,39,50]</td>
<td>Hobson’s Bay City Council’s Food Security Policy[38], Scotland’s National Food and Drink Policy[50], NSW Policy Options Paper[5], City of Darebin Council’s Food Security[39]</td>
</tr>
<tr>
<td><strong>Research, monitoring and evaluation</strong></td>
<td>Remaining up to date with trends and evidence regarding food security, as well as commissioning and monitoring local research into food security[5,40,51]</td>
<td>Maribyrnong City Council’s Food Security Policy[40], NSW Policy Options Paper[5], Canada’s Action Plan for Food Security[51]</td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
<td>Reducing the negative environmental impacts of the food system[3,41,51,52,53]</td>
<td>City of Melbourne’s Food Policy[41], Canada’s Action Plan for Food Security[51], Vancouver’s Food Charter[52], Tasmania’s Food and Nutrition Policy[53], City of Casey’s Draft Food Security Policy[3]</td>
</tr>
<tr>
<td><strong>Support during emergency situations</strong></td>
<td>Assisting residents to access food in times of need[5,38,51,53]</td>
<td>Hobsons Bay City Council’s Food Security Policy[38], Canada’s Action Plan for Food Security[51], Tasmania’s Food and Nutrition Policy[53], NSW Policy Options Paper[5]</td>
</tr>
<tr>
<td><strong>Urban planning</strong></td>
<td>Creating an environment that protects residents from food security through land use, town planning, economic development and infrastructure[3,5,38,39,40,51]</td>
<td>City of Casey’s Draft Food Security Policy[3], Maribyrnong City Council’s Food Security Policy[40], Hobsons Bay City Council’s Food Security Policy[38], Canada’s Action Plan for Food Security[51], NSW Policy Options Paper[5], City of Darebin’s Food Security Policy[39]</td>
</tr>
<tr>
<td><strong>The relationship between food, nutrition and health</strong></td>
<td>Increasing availability of healthy food and encouraging healthy eating practices to support the wellbeing of people now and into the future [38,41,50,53]</td>
<td>Melbourne City Council’s Food Policy[41], Hobsons Bay City Council’s Food Security Policy[38], Scotland’s National Food and Drink Policy[50], Tasmania’s Food and Nutrition Policy[53]</td>
</tr>
<tr>
<td><strong>Collaboration with other governments and organisations</strong></td>
<td>Working with other local, state and federal governments, as well as community groups and businesses to address food security issues[3,5,38,40,52]</td>
<td>City of Casey’s Draft Food Security Policy[3], Maribyrnong City Council’s Food Security Policy[40], NSW Policy Options Paper[5], City of Darebin’s Food Security Policy[39], Vancouver’s Food Charter[52]</td>
</tr>
<tr>
<td><strong>Building community resilience</strong></td>
<td>Enhancing future food security and increasing the ability of the community to overcome future food security challenges [3,39,40,41,50]</td>
<td>Melbourne City Council’s Food Policy[41], Maribyrnong City Council’s Food Security Policy[40], City of Darebin’s Food Security Policy[39], City of Casey’s Draft Food Security Policy[3], Scotland’s National Food and Drink Policy[50]</td>
</tr>
<tr>
<td><strong>Supporting local farming and agriculture</strong></td>
<td>Supporting local farming and agriculture to improve availability, variety and quality of food[3,5,41,50,52,53]</td>
<td>City of Casey’s Draft Food Security Policy[3], Melbourne City Council’s Food Policy[41], Scotland’s National Food and Drink Policy[50], NSW Policy Options Paper[5], Vancouver’s Food Charter[52], Tasmania’s Food and Nutrition Policy[53]</td>
</tr>
<tr>
<td><strong>Supporting the food and drink industry</strong></td>
<td>Supporting food and drink businesses while encouraging good quality, healthy, environmentally sustainable products[3,5,50,53]</td>
<td>NSW Policy Options Paper[5], Tasmania’s Food and Nutrition Policy[53], Scotland’s National Food and Drink Policy[50], City of Casey’s Draft Food Security Policy[3]</td>
</tr>
<tr>
<td><strong>Advocating for food security</strong></td>
<td>Advocacy by governments and key stakeholders for resources, policy direction and legislative changes to increase food security[3,5,38,39,40]</td>
<td>NSW Policy Options Paper[5], City of Casey’s Draft Food Security Policy[3], Maribyrnong City Council’s Food Security Policy[40], Hobsons Bay City Council’s Food Security Policy[38], City of Darebin’s Food Security Policy[39]</td>
</tr>
</tbody>
</table>
## Appendix 36. What, how, when and why to monitor food security

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic and demographic characteristics</td>
<td>ABS census data</td>
<td>New ABS census data is released (The Census is conducted every 5 years. The last Census was in 2011. The next Census will be in 2016)</td>
<td>To ensure vulnerable communities are identified and the target of food security initiatives.</td>
</tr>
<tr>
<td>Prevalence of food security</td>
<td>Population Health Survey single item question</td>
<td>Whenever new data released</td>
<td>To determine if there have been any changes in the rate of food insecurity and the coping mechanisms used.</td>
</tr>
<tr>
<td></td>
<td>ABS National Health/Nutrition Survey single item question</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CIV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current initiatives addressing food insecurity and participation rates</td>
<td>Create a database mapped against the Environments for Health</td>
<td>Continually update as things change</td>
<td>To link existing initiatives and ensure they complement rather than overlap.</td>
</tr>
<tr>
<td>Rate of participation in programs addressing food security</td>
<td>Encourage organizations to keep a record of number of participants</td>
<td>Annually</td>
<td>To determine the reach of initiatives, and whether they should continue to be implemented.</td>
</tr>
<tr>
<td>Cost &amp; Availability of healthy food</td>
<td>Conduct VHFB</td>
<td>Annually (The VHFB was conducted in East Gippsland in July 2011 and July 2012)</td>
<td>To monitor changes in the cost and availability of healthy food in East Gippsland of over time.</td>
</tr>
<tr>
<td></td>
<td>ABS Household Expenditure Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relative Price Index</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility of healthy food</td>
<td>Map stores in relation to public transport routes and SEIFA</td>
<td>New ABS Census SEIFA data is released (The Census is conducted every 5 years. The last Census was in 2011. The next Census will be in 2016)</td>
<td>To ensure food outlets are located near disadvantaged neighbourhoods, and that there is adequate public transport to access them.</td>
</tr>
</tbody>
</table>