

# Victorian Healthy Food Basket Survey Baw Baw 2020



CENTRAL WEST  
GIPPSLAND  
Primary Care Partnership

**Written by:**

Gerrie Werner

Health Promotion Officer, Central West Gippsland Primary Care Partnership

**Contact:**

Gerrie Werner

Health Promotion Officer

Central West Gippsland Primary Care Partnership

E: [Gerrie.Werner@lchs.com.au](mailto:Gerrie.Werner@lchs.com.au)

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

'By working together we will enhance the wellbeing of all people in our community'

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## Executive Summary

Food security is defined as “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”.<sup>1</sup>

Sustainable and reliable access to affordable and nutritious food promotes healthy eating habits and contributes to a healthy life, and when people have limited or irregular access to affordable, safe and nutritious foods they are considered to be food insecure.<sup>2</sup> Research has identified a significant link between food insecurity and the rise in obesity; a correlation referred to as the ‘food insecurity-obesity paradox’.<sup>2,3</sup> Obesity is a growing health issue that continues to aid in the development and progression of several chronic diseases, and can reduce life expectancy by many years.<sup>2</sup>

If all Australians had the option to access a healthy, affordable and well-balanced diet the rates of chronic diseases may decline; reducing the economic costs to both the private and public health sectors while improving the overall health and wellbeing status of the Australian population.<sup>2</sup>

The Victorian Healthy Food Basket Survey (VHFBS) was conducted in Baw Baw to understand the cost and affordability of food throughout the region, with key findings from this research including:

- In 2020 a family of four living in Baw Baw needs to spend an average of 27.07% of their fortnightly income on food
- The cost of the healthy food basket has increased overall from 2010 to 2020 with a typical family in Drouin paying \$54.19 more in 2020 compared to 2010
- An elderly pensioner is able to spend a significantly reduced proportion of their income on food compared to other family types
- A typical family can spend up to \$78 more when shopping at an independent store

These findings will be used to guide future initiatives aimed at improving food security outcomes, and provide a snapshot of the current cost of food in relation to income for a variety of family types across Baw Baw. Data will also be used to identify trends over time when compared with previous reports conducted in 2010, 2012, 2016 and 2018.

## COVID-19 and JobSeeker Payments

It should be noted that the data collection for the 2020 VHFBS was conducted during the COVID-19 pandemic. This may have influenced the pricing and availability of products in some areas.

Centrelink's Newstart Allowance ceased on 20 March 2020 and was replaced with the JobSeeker payment as the main income support payment for individuals aged between 22 and 66 years. To read more, please visit [Centrelink JobSeeker Payment](#).

## Background

The Food and Agriculture Organisation (FAO) of the United Nations defines food security "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life".<sup>1</sup> Adequate fruit and vegetable intake is essential to a well-balanced diet that protects against chronic diseases such as heart disease, some cancers, diabetes and obesity.<sup>1</sup> Food security is recognised as an important determinant of health, however there are a variety of social and economic factors that influence people's ability to afford, and access to healthy foods.<sup>2</sup>

The Victorian Healthy Food Basket (VHFB) is a tool developed by Monash University to monitor the affordability, availability and accessibility of a healthy diet. The healthy food basket is made up of a variety of 44 common household groceries to meet the nutritional requirements of four family types for a period of two weeks.<sup>7</sup> The basket items provide greater than 80% of the nutritional reference values (NRVs) for all essential nutrients, and at least 95% of energy requirements.<sup>7</sup>

The VHFB was undertaken in Baw Baw in 2020 to provide a current snapshot of the affordability and availability of healthy food across the region, and contribute to previous research undertaken in 2010, 2012, 2016 and 2018 monitoring the cost over time. Baw Baw hosts a population of approximately 53,000 people and is located roughly 120kms east of Melbourne. Baw Baw Shire covers a large area incorporating 24 townships and villages, including the two major town centres; Drouin and Warragul.

According to the 2017 Victorian Population Health Survey (VPHS), 43.4% of the adults in Baw Baw do not meet fruit and vegetable guidelines. While this is still lower than the Victorian average of 51.7%, this figure is relatively high.<sup>2</sup> However, the proportion of Baw Baw adults who were overweight or obese in 2017 (55.7%) does not exceed the Victorian average (50.8%).<sup>2</sup>

## Factors influencing food security

A common factor influencing food security is transport; whether or not people have access to a car or public transport substantially impacts their ability to purchase food.<sup>3</sup> Physical access, such as how long it takes to get to the store and an individual's mobility, can further impact a person's ability to access fresh, nutritious foods.<sup>3</sup> Many townships located outside of the two major town centres face geographical isolation. Residents living in these areas have reduced public transport options and often do not have access to large supermarkets, and are instead limited to smaller local stores where a reduced range of food items may be on display.<sup>16</sup> Walhalla, Erica and Willow Grove are examples of outer towns in Baw Baw that are not represented in the 2020 VHFB as, while they do host small general stores, they do not have a store that provides the majority of food items on the VHFB list. This is an example of how geographical isolation acts as barrier to food security, as residents may need to commute to neighbouring towns to purchase groceries from all food groups.

Income plays a significant role in the ability to purchase nutritious foods; and with food prices continuing to grow in many areas, further strain is placed on the available food budget; particularly in low income households.<sup>4</sup> As a result those who are low income earners, are underemployed or unemployed, Aboriginal and Torres Strait Islanders, and those living in rural areas face greater social and economic hardships that vastly impact their ability to fresh, nutritious, affordable food.<sup>5</sup> Factors of food insecurity are transferable to other major health issues such as obesity. Those with low incomes struggle to afford highly priced vegetables and meats, and often instead purchase and consume cheap, high-energy dense foods that are in abundance in rural and remote areas.<sup>3</sup> Food is considered to be unaffordable when 30% or more of an individual or families total income is spent on food. This is particularly relevant when factoring in the increasing cost of living, including: fuel, housing, healthcare and energy costs.<sup>13, 14</sup>

## Methodology

The VHFB was conducted in 2020 to support previous research conducted in 2010, 2012, 2016 and 2018 on the cost and availability of healthy food within Baw Baw. Data was collected over a one week period during early August to limit product variation due to seasonality and to ensure data reliability and accuracy.

Letters were sent out to store managers of participating supermarkets, detailing all relevant information for the collection for VHFB data before the data collection was initiated. Data was only collected from supermarkets that met the VHFB requirements. The VHFB requires prices for a list of 44 food items from the five food groups and identifies the total average cost of the food basket, and a percentage of what that cost represents as part of a family's income based on estimates of government assistance.<sup>8</sup> Collection of data from stores that have less than 40 of the 44 items in the basket is not recommended. Thus, for the purpose of this report, stores such as small general stores were not included in the data collection. Data was obtained from 8 chain and independent supermarkets in the following towns: Drouin, Warragul, Yarragon, Longwarry, Neerim South and Trafalgar.

Results are presented as fortnightly, for four different family types who solely rely on government payments. The four family types are:

- Typical family (44 year old male and female, 18 year old female and 8 year old male)
- Single parent family (44 year old female, 18 year old female and 8 year old male)
- Elderly pensioner (71 year old female)
- Single adult (adult male >31 years old)

## Results

### Socio-economic index for areas

Socio-economic indexes for areas (SEIFA) is a tool that ranks all areas in Australia in relation to their socio-economic advantage and disadvantage. Socio-economic status is defined by “people’s access to material and social resources, and their ability to participate in society”.<sup>10</sup> The lower the SEIFA ranking the more disadvantage experienced in an area and, alternatively, the higher the SEIFA ranking the less disadvantage experienced in an area.<sup>10</sup> Figure 1 shows the variation of SEIFA indexes across the Baw Baw townships included in this study.

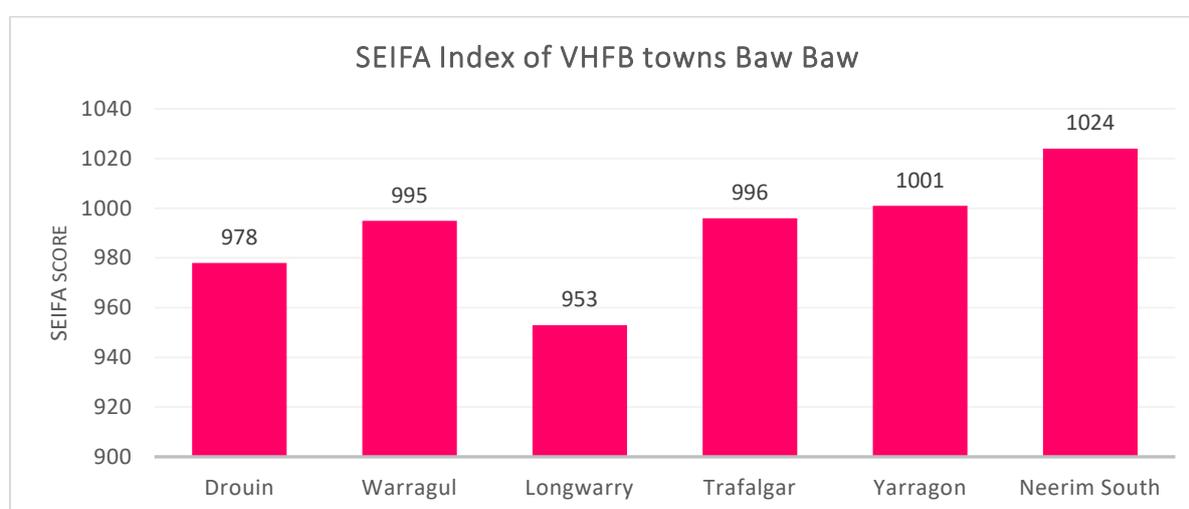


Figure 1. SEIFA ranking for VHFB towns across Baw Baw

### Income

The VHFB is based on four different family types that receive government payments as their only source of income.<sup>9</sup> In 2020 all family types received an increase in government income payments compared to 2018, with the exception of elderly pensioners, who saw a 3.8% decrease in income support. Typical families saw the largest increase of 19.5% (Table 1).

The increase in government payments over the last two years has influenced the percentage of income available to purchase food in all four family types (Table 1). In 2020, typical and single parent families receiving government payments are spending less of their available income on food; a difference of 7% and 6% since 2018. Single adult families are also spending slightly less of their income on food, with a decrease of 2%, while elderly pensioners see a slight increase of 0.4% since 2018.

Table 1. Percentage difference between income and cost for the healthy food basket, for four family types, 2018 to 2020.

Family Type	2018 Income	2020 Income	% Income Difference 2018-2020	% Income Spent on VHFB 2018 – 2020
Typical family	\$1449	\$1762	+19.5%	-7%
Single parent family	\$1267	\$1465	+14.5%	-6%
Elderly pensioner	\$894	\$861	-3.8%	+0.4%
Single adult	\$539	\$566	+4.9%	-2%

### Store distribution, accessibility and cost

There is an uneven distribution in the availability of chain supermarkets across Baw Baw, such as Coles and Woolworths, and smaller independent food markets such as local IGA’s and FoodWorks (Figure 2). In both Drouin and Warragul there are no small independent VHFB stores, only chain stores available (0:2), while outer Baw Baw hosts only independent stores (4:0) (Figure2).

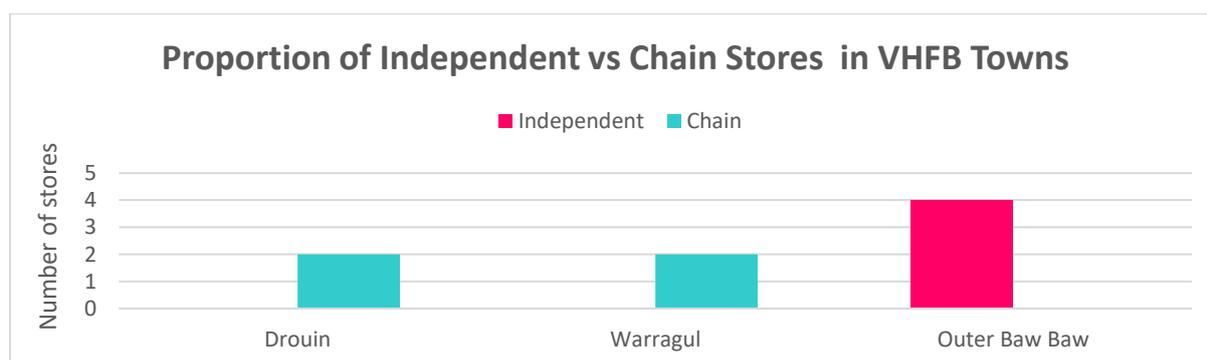


Figure 2. Number of independent and chain stores in the townships of the Baw Baw catchment area, 2020.

The average cost of the VHFB for each family type differs among store type; with the average cost of the VHFB higher in independent stores across all towns (Figure 3). For a typical family, an independent store can cost up to \$78 more than a chain supermarket, with single parent families paying up to \$52 more when shopping at smaller independent stores (Figure 3).

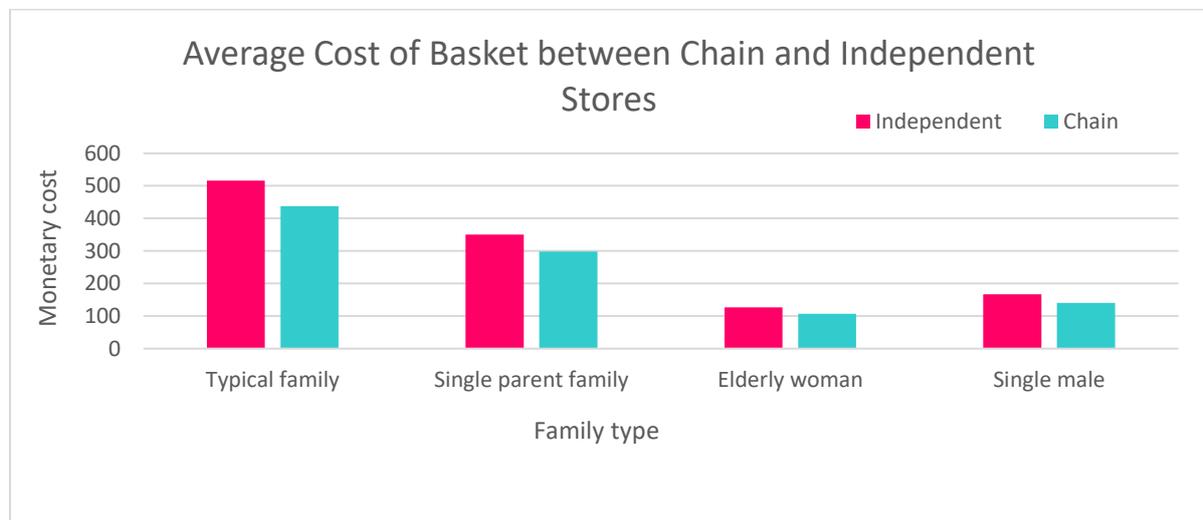


Figure 3. Average cost of basket across chain and independent stores in Baw Baw showing all four family types, 2020.

## Affordability

Affordability of the VHFB across Baw Baw differs depending on individual townships and the type of family (Figure 4). This variation results in inequitable food costs for families based on where they live; with a typical family living in Outer Baw Baw spending 29.3% of their fortnightly income on food (Table 2).

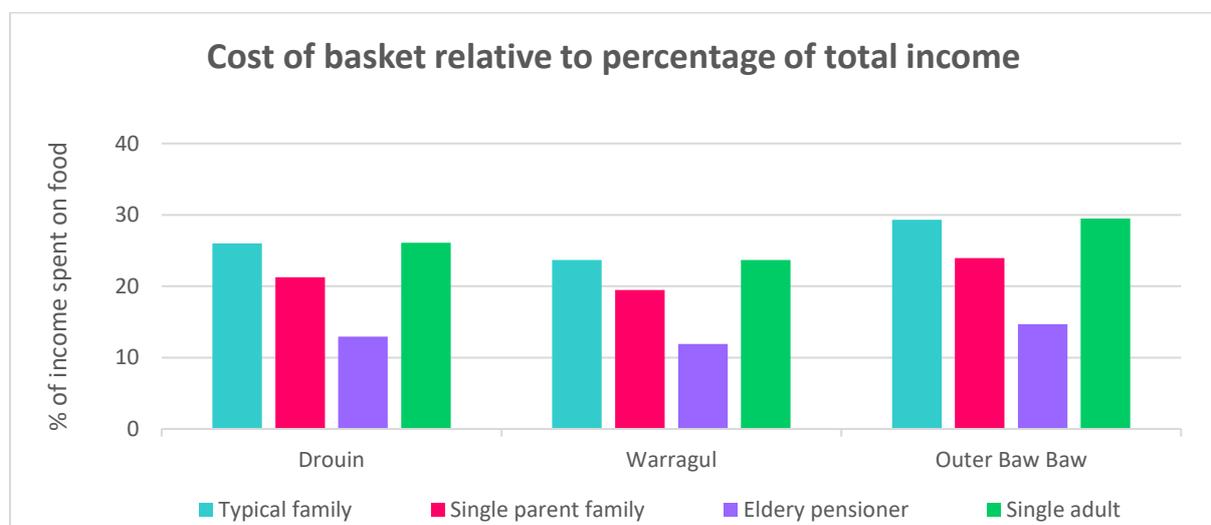


Figure 4. Percentage cost of basket vs. income, for four family types in the townships of Baw Baw.

All four family types are on average spending close to, or over a quarter of their total budget on food; with the exception to this being the elderly pensioner, who on average needs to spend 14% of their income on food (Table 3). Families living in Outer Baw Baw need to spend more of their income to purchase the VHFB compared to families living in Drouin and Warragul (Table 3).

Table 3. Mean cost (\$) of total basket, and proportion of income (%) per townships and family types, 2020.

Family Type	Drouin	Warragul	Outer Baw Baw	Baw Baw Average
Typical family	\$458.37 (26%)	\$417.46 (24%)	\$516.36 (29%)	\$477.14 (27%)
Single parent family	\$311.36 (21%)	\$285.02 (19%)	\$350.46 (24%)	\$324.33 (22%)
Elderly pensioner	\$111.47 (13%)	\$102.32 (12%)	\$126.30 (15%)	\$116.60 (14%)
Single adult	\$147.56 (26%)	\$133.92 (24%)	\$166.73 (29%)	\$153.73 (27%)

### Cost of food over time

The cost of the VHFB has increased overall from 2010 to 2020 with, for example, a typical family in Drouin paying \$54.19 more now compared to ten years ago. The 2018 VHFB reported the most expensive year for the basket across all areas (with the exception of Warragul, where 2016 data showed a \$0.99 increase when compared to 2018). Since 2018, Drouin, Warragul and Outer Baw Baw have seen a decrease in the cost of the VHFB of \$8.73, \$19.45 and \$16.14 respectively (Table 4).

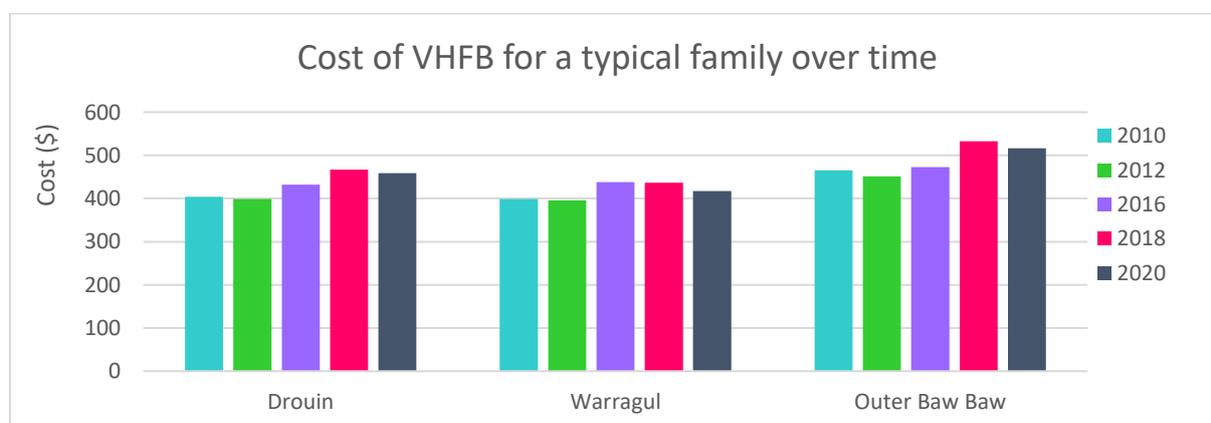


Figure 5. Cost of basket for a typical family, across Baw Baw from 2010, 2012, 2016, 2018 and 2020.

Table 4. For a typical family, the cost of the healthy food basket from 2010 to 2020.

Typical family	2010	2012	2016	2018	2020	Cost difference 2018-2020
<b>Drouin</b>	\$404.18	\$399.15	\$432.38	\$467.10	\$458.37	-\$8.73
<b>Warragul</b>	\$398.82	\$396.12	\$437.89	\$436.90	\$417.46	-\$19.45
<b>Outer Baw Baw</b>	\$465.43	\$451.21	\$472.94	\$532.50	\$516.36	-\$16.14

## Discussion

Monitoring the cost of the VHFB over time has shown that in 2020, families are required to spend less of their total available income on food (with the exception of elderly pensioners, who spent an increase of 0.4% since 2018). Compared to 2018, typical families are spending 7% less of their income on food, with single parent families' cost decreasing by 6%. This variation may be attributable to the overall decreasing cost of the basket for 2020, in addition to the significant increase in government payments for all family types (with the exception of elderly pensioners).

The cost of purchasing healthy food is only considered affordable if it does not exceed 30% of one's total income<sup>11</sup>. The 2020 data shows that all 4 family types in the recorded towns spend 30% or less of their income on food; meaning that food in Baw Baw is considered affordable at the time of data collection. Elderly pensioners spend, on average, 14% of their income on food, while typical families and single adults spend 27% and single parent families 22%.

It is important to reflect on previous years' reports where families were spending more than 30% of their income on food. When families or individuals are required to spend greater than 30% of their income on food they begin to struggle to afford other essential living costs such as rent, fuel, electricity, health care, transport, clothing, and household services.<sup>4</sup> The additional government assistance payments currently available due to the COVID-19 pandemic are not likely to continue indefinitely, which may influence food affordability for all four family types in the future.

While the overall cost of food increased between 2010 and 2020, the cost of the basket was higher in 2018 compared to any other year (with the exception of Warragul in 2016 reporting a slightly higher (\$0.99) cost when compared to the 2018 results). Due to this, all towns in 2020 saw a decrease in the cost of food when compared to 2018.

In 2020 there were eight participating stores in Baw Baw. Of these stores, four were chain stores (Woolworths, Coles) and four were independent stores (IGA and FoodWorks). The ratio of chain stores to independent stores was inconsistent throughout Baw Baw; with Drouin and Warragul both having two chain stores and no independent stores, and Outer Baw Baw having no chain stores and four independent stores.

The VHFB continues to show lower average costs at larger chain supermarkets compared to smaller independent stores (Figure 3). Many towns across Baw Baw do not have access to chain supermarkets, and therefore residents living in these areas are required to pay more to purchase the same healthy food options, or even go without these options as smaller stores may not stock many of the products. Communities that experience limited access to affordable foods are often situated in

higher SEIFA towns; meaning that those experiencing greater disadvantage are also required to pay more for healthier food options.

## Key findings

- In 2020 a family of four living in Baw Baw needs to spend an average of 27.07% of their fortnightly income on food
- The cost of the healthy food basket has increased overall from 2010 to 2020 with a typical family in Drouin paying \$54.19 more in 2020 compared to 2010
- An elderly pensioner is able to spend a significantly reduced proportion of their income on food compared to other family types
- A typical family can spend up to \$78 more when shopping at an independent store

## Recommendations

The report findings show a need for a range of initiatives and strategies that promote and increase the availability of affordable, nutritious foods to all residents in Baw Baw. Key recommendations include the following;

- Continue to conduct the VHFB in Baw Baw to monitor trends around the price, availability, and access to nutritious foods
- Outer Baw Baw suburbs lack access to affordable VHFBS food outlets. This could be improved by increasing public transport options, investigating council-based transport to and from large chain supermarkets or prioritising more VHFB food outlets in these areas
- Investigate the logistics of increasing the supply of fresh, affordable produce to outer townships and disadvantaged areas and provide the foundation for more public health strategies that focus on increasing local access to nutritious foods
- Continue to encourage the development of community gardens, particularly in smaller outer towns
- Encourage Baw Baw Shire Council to raise awareness and emphasise the importance of food security to the community, relevant stakeholders, and throughout their own policies and strategies

## Conclusion

The cost of the VHFB in Baw Baw has increased in all areas of Baw Baw. To better align income payments to support increasing expenses, government benefits have increased over time; aiming to better assist families to afford basic living expenses.<sup>9</sup> However despite this rise in income, many family types are still spending close to 30% of their income on food. Townships in Outer Baw Baw experience reduced access to affordable foods, as smaller independent stores are their only source of groceries (Figure 2). The VHFB was found to be more expensive when purchased at an independent store, compared to a chain supermarket (Figure 3).

A typical family of four and single adults are spending on average 27% of their income on food, while single parent families are spending on average 22% of their income on food; which is more affordable than seen in previous years. While this figure is considered affordable by definition<sup>11</sup>, it is still a significant proportion of fortnightly income leaving many family types having to choose between purchasing nutritious food and other living expenses.

Report findings indicate a need for tailored initiatives and strategies targeting the availability, affordability and accessibility of nutritious foods in Baw Baw. Baw Baw Shire Council, key stakeholders in the food system and other major partners can contribute to be part of a positive change towards a more equitable food system.

## References

1. Food and Agriculture Organisation. Policy Brief: Food security. [Internet]. FAO's Agriculture and Development Economics Division (ESA) with support from the FAO Netherlands Partnership Programme (FNPP) and the EC-FAO Food Security Programme. [Updated June 2006; cited 2020 August 29]. Available from:  
[http://www.fao.org/fileadmin/templates/faoitaly/documents/pdf/pdf\\_Food\\_Security\\_Cocept\\_Note.pdf](http://www.fao.org/fileadmin/templates/faoitaly/documents/pdf/pdf_Food_Security_Cocept_Note.pdf)
2. Department of Health and Human Services. Victorian Population Health Survey 2017. [Internet]. Melbourne: DHHS; 2017 [updated 2019; cited 2020 August 29]. Available from:  
<https://www2.health.vic.gov.au/public-health/population-health-systems/health-status-of-victorians/survey-data-and-reports/victorian-population-health-survey/victorian-population-health-survey-2017>
3. Thorburn AW. Prevalence of obesity in Australia. *Obesity Reviews*. 2005; 6:187-189
4. Wilkinson RG, Marmot MG. Social determinants of health: the solid facts: World Health Organization; 2003.
5. World Health Organization. The determinants of health: Food and agriculture [Internet]. 2014 [updated 2-14; cited 2020 August 29]. Available from:  
<http://www.who.int/hia/evidence/doh/en/index3.html>
6. Latrobe Health Assembly. Food For All Latrobe Valley. [Internet]. Australia: Latrobe Health Assembly. 2018 [updated 2018 Feb 12; cited 2020 August 29]. Available from:  
<https://healthassembly.org.au/project/food-for-all/>
7. Palermo CE, Wilson A. Development of a healthy food basket for Victoria. *Australian and New Zealand Journal of Public Health*. 2007; 31(4): 360-363
8. Palermo C. The cost of nutritious food: a determinant of health. *Nutrition & Dietetics*. 2011; 68(4):246-7.
9. Australian Government Department of Human Services. A guide to Australian Government payments. 2019. [updated 2019 Sep 20; cited 2020 August 29]. Available from:  
<https://www.humanservices.gov.au/organisations/about-us/publications-and-resources/guide-australian-government-payments>

10. Australian Bureau of Statistics. Socio-Economic Indexes for Areas. ABS, 2018. [updated 2018 Mar 27; cited 2020 August 29]. Available from:  
<https://www.abs.gov.au/websitedbs/censushome.nsf/home/seifa>
11. Burns and Friel. "It's time to determine the cost of a healthy diet in Australia" *Australian and New Zealand Journal of Public Health*. 2007. 31(4) 363-365
12. Graham SR, Carlton C, Gaede D, Jamison B. The benefits of using geographic information systems as a community assessment tool. *Public Health Reports*. 2011;126(2):298.
13. Victorian Government. Victorian Government Interim Response Bipartisan Independent Review of the Electricity and Gas Retail Markets in Victoria. 2018. [updated March 2018; cited 2020 August 29]. Available from: [https://www.energy.vic.gov.au/data/assets/pdf\\_file/0020/118190/Retail-Market-Review-Interim-Response-FINAL.pdf](https://www.energy.vic.gov.au/data/assets/pdf_file/0020/118190/Retail-Market-Review-Interim-Response-FINAL.pdf)
14. Anglicare Victoria. Rental Affordability 2019 Victoria Snapshot. 2019. [updated 2019; cited 2020 July 21]. Available from: [https://www.anglicarevic.org.au/wp-content/uploads/2019/04/41\\_Rental\\_Affordability\\_Report\\_FA\\_LR\\_03.pdf](https://www.anglicarevic.org.au/wp-content/uploads/2019/04/41_Rental_Affordability_Report_FA_LR_03.pdf)
15. Baw Baw. Community Profile. 2019. [updated 2019; cited 2020 29 August]. Available from:  
<https://app.rempln.com.au/bawbaw>
16. Australian Institute of Family Studies. Food insecurity in Australia: What is it, who experiences it and how can child and family services support families experiencing it? 2011. [Updated 2019; cited 2020 July 21]. Available from: <https://aifs.gov.au/cfca/publications/food-insecurity-australia-what-it-who-experiences-it-and-how-can-child>

## Appendices

**Table 5.** Average, median, minimum and maximum cost of total basket, standard deviation and proportion of income (%) per townships and family types, 2020.

Township and family type	Average Cost	Median Cost	Minimum cost	Maximum cost	Standard deviation	Proportion of Centrelink income (%)
<b>Drouin</b>						
Typical family	\$458.37	\$458.37	\$455.68	\$461.06	\$3.80	26.01%
Single parent	\$311.36	\$311.36	\$309.76	\$312.96	\$2.26	21.25%
Elderly woman	\$111.47	\$111.47	\$111.18	\$111.76	\$0.41	12.96%
Single male	\$147.56	\$147.56	\$146.61	\$148.50	\$1.37	26.09%
<b>Warragul</b>						
Typical family	\$417.46	\$417.46	\$393.46	\$441.45	\$33.93	23.69%
Single parent	\$285.02	\$285.02	\$267.40	\$302.63	\$24.91	19.45%
Elderly woman	\$102.32	\$102.32	\$96.65	\$107.99	\$8.02	11.89%
Single male	\$133.92	\$133.92	\$127.31	\$140.53	\$9.35	23.68%
<b>Outer Baw Baw</b>						
Typical family	\$516.36	\$523.69	\$445.92	\$572.13	\$55.89	29.3%
Single parent	\$350.46	\$355.65	\$300.47	\$390.09	\$39.68	23.92%
Elderly woman	\$126.30	\$128.82	\$107.03	\$140.54	\$14.78	14.68%
Single male	\$166.73	\$168.71	\$147.49	\$182.00	\$15.65	29.47%

**Table 6.** List of VHFB supermarkets in Baw Baw, 2020.

Store name	Street address	Suburb/post code
Woolworths	72-100 Young St	Drouin, 3818
Woolworths	58-66 Victoria St	Warragul, 3820
Coles	Young St	Drouin, 3818
Coles	30 Palmerston St Centrepoint Shopping Centre	Warragul, 3820
FoodWorks	2 Campbell St	Yarragon, 3823
IGA	2 Kennedy St	Longwarry, 3816
IGA	147 Main Neerim Rd	Neerim South, 3831
IGA	5 McCrorey St	Trafalgar, 3824