

FoodSwitch:  
**State of the  
Food Supply**

April 2019



The George Institute  
for Global Health



**FOODSWITCH**

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Unhealthy diets are a leading contributor to poor health all around the world. In Australia, poor diet accounts for at least 25,000 deaths each year.<sup>1</sup> Key problems with the Australian diet are inadequate consumption of fruit, vegetables, nuts, seeds, whole grains and fibre, combined with excess intake of unhealthy processed foods and beverages. Long-term exposure to excessive levels of saturated fat, sugar, and salt are leading causes of disease. The Australian government has focused on reducing exposure to these unhealthy dietary components, as well as reducing over-consumption of calories from energy-dense foods that are served in large portion sizes.<sup>2</sup>

The Australian Dietary Guidelines provide sensible advice about how to promote health and well-being by recommending that Australians primarily consume fresh and minimally-processed foods and beverages. Unfortunately, fewer than one in 10 Australians consumes a diet in line with these recommendations,<sup>3</sup> and most get more than half of their food and beverages from highly processed or pre-prepared sources.<sup>4</sup> Foods and beverages identified as unhealthy comprise about one-third (35%) of energy intake for Australian adults, and an even higher proportion for Australian children (41%).<sup>5</sup>

In 2018, packaged food and beverage sales in Australia grew by 3%.<sup>6</sup> The widespread manufacture,

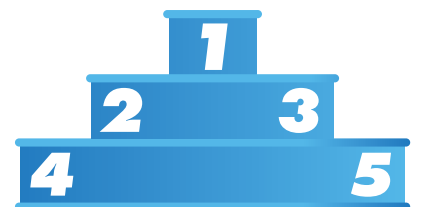
marketing, and consumption of unhealthy processed and pre-prepared foods and beverages is the primary reason why Australians consume excess quantities of energy, saturated fat, sugar, and salt.

The World Health Organization (WHO) recommends limiting the levels of harmful nutrients in products and ensuring that consumers can access and afford healthy food choices.<sup>7</sup> In Australia, the Federal government has engaged with the food and beverage industry to create a healthier food environment for Australians. Through *The Healthy Food Partnership* and the prior *Food and Health Dialogue*,<sup>8</sup> food and beverage manufacturers have been encouraged to voluntarily reformulate their products and to improve the nutritional quality of their product ranges.

# Purpose

The goal of this *FoodSwitch: State of the Food Supply* report is to support government, business and community efforts to help Australians eat healthier diets. Our annual 'snapshot' of the Australian food supply highlights the changing nutritional composition of Australian foods and beverages.

***In the battle of the “own label brands”, Woolworths is the healthiest supermarket. Coles 2nd, ALDI 3rd, IGA 4th.***



## ***The FoodSwitch Database***

This report includes data collected as part of The George Institute's FoodSwitch program. The FoodSwitch program includes a bespoke technology system that enables the systematic, standardised and replicable collection and collation of data describing Australian packaged foods and beverages.<sup>9</sup> Images of food packaging are captured, stored and processed with key data extracted from food labels and secondary measures of healthiness derived.

The FoodSwitch Monitoring Dataset is generated from annual, in-store surveys done at large grocery stores owned by Aldi, Coles, Independent Grocers of Australia (IGA) and Woolworths. The Monitoring Dataset covers the same stores each year and is designed to track annual changes in the Australian packaged food and beverage supply. This report uses the 2018 Monitoring Dataset for the primary analyses and makes comparison to the 2017 Monitoring Dataset to explore recent changes.

## ***Foods and beverages***

All packaged foods and beverages available in-store on the days of survey were imaged and processed using the FoodSwitch Data Collection system. Products that did not have a Nutritional Information Panel were excluded, and duplicates of an identical product in different package sizes were removed.

Products were assigned to one of 727 food categories according to the system developed as part of an international collaboration to compare and monitor the nutritional composition of processed foods.<sup>10</sup> This hierarchical system classifies foods into major categories (e.g. bread and bakery products), minor categories (e.g. bread; biscuits), and further subcategories (e.g. savoury biscuits; sweet-filled biscuits). Results are provided for 15 major categories and selected sub-categories. Excluded categories include alcoholic beverages, baking powders, chewing gum, cough lollies, herbs and spices, plain teas and coffees, vitamins and supplements, yeasts and gelatines since they do not contribute significantly to nutrient intake nor are manufacturers required to display a Nutritional Information Panel for these products.

## ***Manufacturers***

Manufacturers were included based on a retail sales value share of 1% and above and were categorised according to the primary components of their product portfolio.<sup>11</sup> There were 25 packaged food manufacturers that sell 62% of all packaged foods and 11 beverage manufacturers that sell 81% of all soft drinks in Australia. The four grocery retailers that provide diverse 'own brand' products were also included and these retailers sell the majority of Australian 'own brand' products.

### **Nutritional quality**

*Four indicators of nutritional quality were assessed:*

*Australian Health Star Rating* - The Australian Government's Health Star Rating (HSR) system uses a nutrient profiling algorithm<sup>12</sup> to assign packaged foods and beverages a rating between 0.5 (least healthy) and 5.0 stars (most healthy) in 10 half-star increments.<sup>13</sup> If the reported HSR was labelled on pack, then this value was used. If no HSR was labelled on pack, then the product's HSR was calculated from data provided on the Nutrient Information Panel as reported from external databases. Products were classified as 'healthy' if their HSR was 3.5 or above, based on prior research demonstrating that this threshold discriminates between healthy and unhealthy products.

*Australian Dietary Guidelines* - The Australian Dietary Guidelines classify foods as either 'Core' (foods that form the basis of healthy diets) or 'Discretionary' (foods that are nutrient-poor and not necessary for a healthy diet).<sup>14,15</sup>

*Level of processing* - The NOVA classification framework groups foods according to the extent and purpose of the processing applied during manufacture. The main classifications are 'unprocessed or minimally processed foods', 'processed culinary ingredients', 'processed foods' and 'ultra-processed food and drink products'.<sup>16</sup> There is an association between the greater consumption of foods with higher levels of processing and adverse health outcomes.

*Nutrient composition* - There are robust and consistent associations between greater consumption of nutrients such as salt, saturated fat, and sugars and foods with greater energy density with adverse health outcomes. Government food reformulation programs mostly target the levels of individual nutrients.

### **Ranking**

The primary ranking of manufacturers was done based on the mean HSR across each manufacturer's product portfolio. Mean HSR was chosen both because the underlying nutrient profiling method is underpinned by decades of nutritional research and because it is the current most active focus of government and industry action on the food and beverage supply in Australia.

# Product healthiness for leading manufacturers

**Table 1: Product Healthiness by Manufacturer**

Manufacturer	Number of products	Nutrient profiling summary score		Dietary guidelines	Extent of processing	Top three food categories per manufacturer
		HSR (Mean (SD))	Proportion HSR ≥ 3.5 (%)	Proportion discretionary (%)	Proportion ultra-processed (%)	
A2 Dairy	5	4.2 (0.4)	100.0	0.0	0.0	Dairy
Sanitarium	77	4.1 (0.7)	88.3	11.7	87.0	Cereal and grain products; Dairy; Special foods
Nudie Foods	39	4.1 (1.7)	79.5	0.0	43.6	Non-alcoholic beverages; Dairy
Simplot	439	3.8 (0.8)	85.4	28.0	62.2	Fish and fish products; Fruit and vegetables; Sauces, dressings, spreads and dips
Lion Dairy & Drinks	217	3.2 (1.3)	47.9	6.5	53.5	Dairy; Non-alcoholic beverages
Woolworths (own brand)	1,105	3.2 (1.3)	57.6	36.2	62.3	Fruit and vegetables; Bread and bakery products; Convenience foods
Heinz	261	3.1 (1.2)	64.4	27.6	77.4	Fruit and vegetables; Convenience foods; Non-alcoholic beverages
McCain	156	3.1 (1.1)	55.8	44.2	90.4	Convenience foods; Fruit and vegetables; Bread and bakery products
Parmalat	135	3.1 (1.0)	43.7	6.7	68.1	Dairy
Kellogg's	79	3.0 (1.1)	46.8	49.4	100.0	Cereal and grain products; Special foods
Coles (own brand)	1729	3.0 (1.4)	51.6	42.6	66.8	Bread and bakery products; Fruit and vegetables; Meat and meat products
Murray Goulburn Co-operative	41	3.0 (1.4)	48.8	17.1	14.6	Dairy; Edible oils and oil emulsions
Goodman Fielder	164	2.8 (1.1)	45.1	45.7	82.3	Bread and bakery products; Sauces, dressings, spreads and dips; Cereal and grain products
The Smith's Snackfood Company	130	2.8 (0.9)	28.5	84.6	94.6	Snack foods; Sauces, dressings, spreads and dips; Bread and bakery products
George Weston Foods	145	2.8 (1.3)	43.4	49.0	97.9	Bread and bakery products; Meat and meat products
Unilever	253	2.7 (1.0)	43.1	57.3	94.1	Dairy; Convenience foods; Sauces, dressings, spreads and dips
Aldi (own brand)	1695	2.7 (1.3)	41.0	50.6	71.7	Dairy; Bread and bakery products; Fruit and vegetables
Nestlé	293	2.6 (1.5)	46.1	65.2	96.9	Cereal and grain products; Confectionery; Non-alcoholic beverages
IGA (own brand)	136	2.6 (1.5)	41.2	47.8	54.4	Dairy; Confectionery; Bread and bakery products
Campbell Arnott's	212	2.4 (1.4)	35.4	63.2	92.5	Bread and bakery products; Convenience foods; Non-alcoholic beverages
Tru Blu Beverages	24	2.4 (1.4)	16.7	83.3	79.2	Non-alcoholic beverages
Warrnambool Cheese & Butter Factory	38	2.4 (0.8)	18.4	0.0	5.3	Dairy
Mars	261	2.3 (1.3)	33.0	92.0	96.9	Sauces, dressings, spreads and dips; Confectionery; Cereal and grain products
Bega Cheese	94	2.1 (1.2)	22.3	38.3	56.4	Sauces, dressings, spreads and dips; Dairy
Fonterra	72	2.0 (1.3)	15.3	45.8	19.4	Dairy; Edible oils and oil emulsions; Snack foods
Coca Cola	133	1.9 (1.1)	12.8	86.5	94.0	Non-alcoholic beverages
Bulla Dairy	64	1.9 (1.0)	6.3	90.6	90.6	Dairy
Schweppes	99	1.7 (0.6)	2.0	92.9	98.0	Non-alcoholic beverages
Peters Ice Cream	35	1.6 (0.8)	8.6	100.0	100.0	Dairy
Red Bull	7	1.4 (0.5)	0.0	100.0	100.0	Non-alcoholic beverages
Frucor Beverages	24	1.4 (0.6)	0.0	83.3	100.0	Non-alcoholic beverages
Mondelēz	281	1.2 (0.9)	4.6	87.9	91.1	Confectionery; Bread and bakery products; Dairy
Bundaberg Brewed Drinks	16	1.2 (0.4)	0.0	100.0	100.0	Non-alcoholic beverages

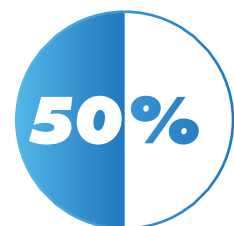


The manufacturer with the healthiest product portfolio was A2 Dairy with a mean HSR of 4.2. All A2 Dairy products were classified as healthy ( $HSR \geq 3.5$ ), and all products were classified as Core. A2 Dairy benefits in this analysis from having a very narrow product range included. Sanitarium, Nudie Foods, Simplot and Lion Dairy & Drinks were the other manufacturers in the top five based upon mean HSR, with four of these top five manufacturers having 'Dairy' as a significant proportion of their portfolio.

The lowest scoring manufacturers were Bundaberg Brewed Drinks, Mondelēz, Frucor Beverages, Red Bull, and Peters Ice Cream. 'Non-alcoholic beverages' were a significant component of the product portfolio for three of these manufacturers.

Throughout, there were generally strong correlations between higher mean HSR, and higher proportion of Core products across manufacturers. The association between these indicators and the proportion of foods defined as ultra-processed was less strong, indicating that some processed foods retain nutritional quality.

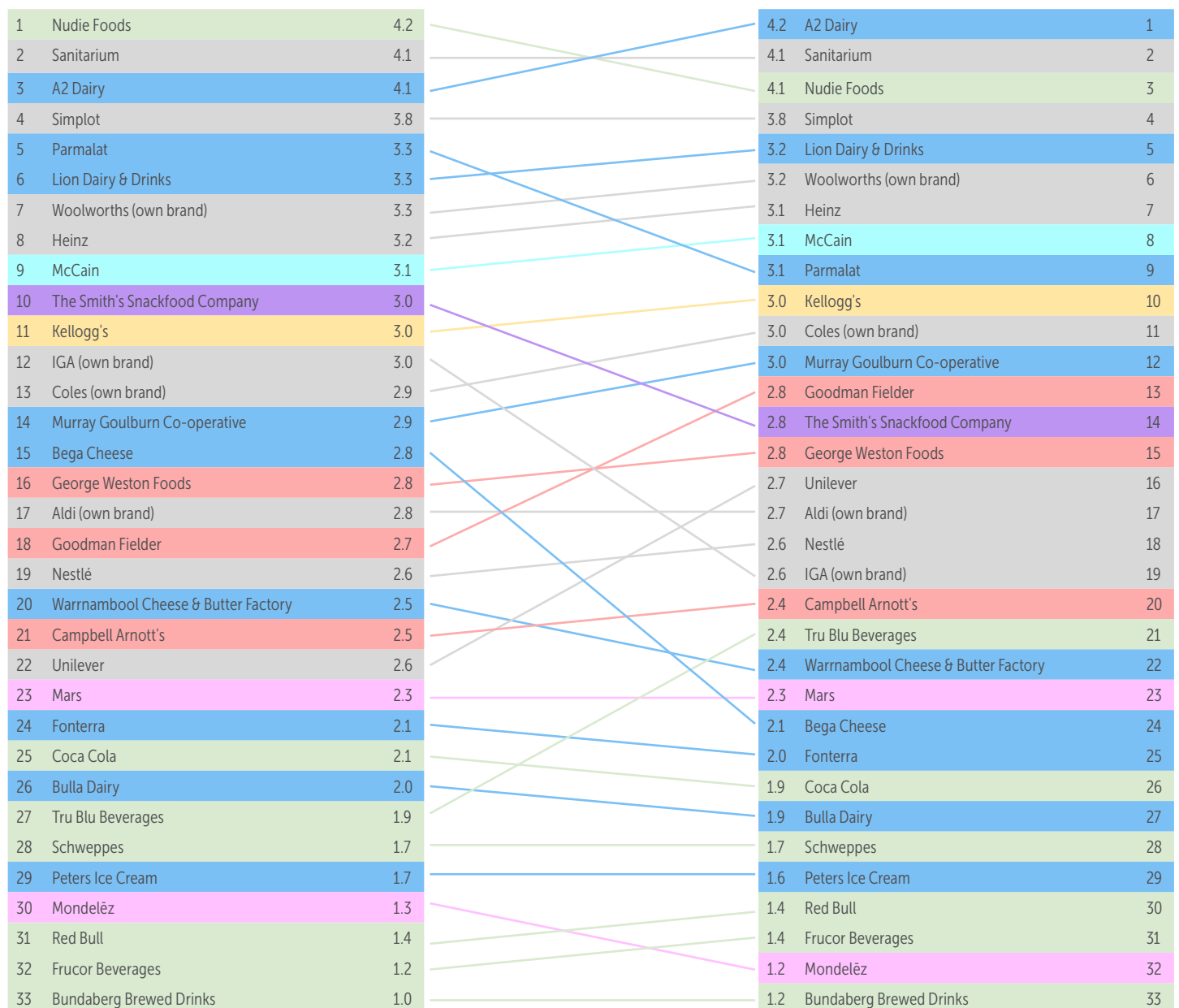
***32,000 packaged food items were analysed – almost half were classed as junk or discretionary foods***





# Manufacturer rankings for 2017 and 2018

Figure 1: Manufacturer Ranking



The annual rankings of leading Australian manufacturers are based on the mean HSR of their product portfolios in 2017 and 2018. The largest movers in the rankings were Bega Cheese, which moved down nine places from 15 to 24, IGA (own brand) which moved down seven places, Tru Blue Beverages which moved up six places, and Unilever which also moved up six places. Overall, the mean HSR of the product portfolios fell for 16 companies, rose for eight companies, and was unchanged for nine companies. The fall in the ranking of Bega Cheese principally reflects its acquisition of the Vegemite and Zoosh brands, which score poorly because of high levels of salt, sugar and saturated fat. The decline in the ranking of IGA was due to more Black & Gold brand confectionery items on shelf in 2018 compared to 2017 and to fewer recorded fresh packaged fruit and vegetables products in their portfolio.

Tru Blu Beverages rose because more plain sparkling water varieties were recorded. This difference delivered a large change in mean HSR for Tru Blu Beverages because of the relatively small number of products in the Tru Blu product portfolio. The range of Unilever products captured was similar across years and the rise of Unilever up the rankings is due to a larger proportion of products having higher HSR values.

# The healthiness of different food categories

**Table 2: Healthiness by Category**

Major and minor food category	Number of products	Nutrient profiling summary score		Dietary guidelines	Extent of processing
		HSR (Mean (SD))	Proportion HSR ≥ 3.5 (%)	Proportion discretionary (%)	Proportion ultra-processed (%)
<b>Bread and bakery products</b>	<b>2,182</b>	<b>2.3 (1.2)</b>	<b>28.4</b>	<b>62.6</b>	<b>98.3</b>
Biscuits	891	1.8 (1.1)	12.5	74.6	100.0
Bread	642	3.5 (0.8)	75.4	14.0	94.1
Cakes, muffins and pastries	649	1.7 (0.7)	3.7	94.3	100.0
<b>Cereal and grain products</b>	<b>1,803</b>	<b>3.6 (1.0)</b>	<b>71.2</b>	<b>19.1</b>	<b>61.7</b>
Breakfast cereals	463	4.0 (0.8)	81.4	10.6	87.9
Cereal and nut -based bars	267	2.9 (1.0)	31.5	100.0	100.0
Couscous	16	4.0 (0.4)	100.0	0.0	31.3
Noodles	235	2.7 (1.2)	39.1	10.6	82.1
Other cereal and grain products	279	4.2 (1.0)	80.6	1.1	17.6
Pasta	390	3.8 (0.6)	89.0	0.0	36.9
Rice	153	3.7 (0.3)	92.8	0.0	31.4
<b>Confectionery</b>	<b>1,147</b>	<b>1.2 (0.8)</b>	<b>2.9</b>	<b>100.0</b>	<b>100.0</b>
<b>Convenience foods</b>	<b>1,497</b>	<b>3.4 (0.6)</b>	<b>73.1</b>	<b>7.3</b>	<b>97.7</b>
Pizza	104	3.0 (0.6)	40.4	13.5	100.0
Pre -prepared salads and sandwiches	265	3.5 (0.6)	73.0	1.1	100.0
Ready meals, meal kits and other frozen foods	789	3.4 (0.5)	75.4	10.8	98.6
Soup	341	3.5 (0.7)	77.7	2.1	93.3
<b>Dairy</b>	<b>2,357</b>	<b>2.7 (1.3)</b>	<b>34.7</b>	<b>30.2</b>	<b>58.3</b>
Cheese	740	2.7 (1.3)	35.4	0.0	6.4
Cream	71	1.4 (0.8)	4.2	90.1	64.8
Desserts	191	2.4 (0.9)	18.8	82.2	100.0
Ice cream and edible ices	475	2.0 (0.8)	5.7	100.0	100.0
Milk	408	3.6 (1.0)	70.6	3.7	51.5
Yoghurt and yoghurt drinks	472	2.9 (1.5)	42.8	0.0	85.8
<b>Edible oils and oil emulsions</b>	<b>323</b>	<b>2.6 (1.3)</b>	<b>47.4</b>	<b>27.9</b>	<b>14.9</b>
Edible oils	138	1.8 (1.3)	20.3	65.2	34.8
Oil emulsions	185	3.2 (1.0)	67.6	0.0	0.0
<b>Eggs</b>	<b>52</b>	<b>4.0 (0.0)</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Fish and fish products</b>	<b>606</b>	<b>3.6 (0.8)</b>	<b>82.2</b>	<b>0.0</b>	<b>42.2</b>
<b>Fruit and vegetables</b>	<b>1,906</b>	<b>3.9 (1.0)</b>	<b>74.6</b>	<b>23.1</b>	<b>16.4</b>
Fruit (packaged)	552	3.5 (0.9)	68.1	12.7	15.6
Jam and marmalades	113	2.1 (0.3)	0.9	100.0	100.0
Nuts and seeds	392	4.4 (0.8)	91.8	0.0	0.0
Vegetables (packaged)	849	4.1 (1.0)	80.6	30.3	13.4
<b>Meat and meat products</b>	<b>1,214</b>	<b>2.6 (1.2)</b>	<b>41.4</b>	<b>66.1</b>	<b>85.6</b>
Meat alternatives	146	4.1 (0.6)	95.9	0.0	71.2
Processed meat	1,068	2.4 (1.2)	34.0	75.2	87.5

**Only 40% of IGA's own brand items were rated as healthy – that is, 3.5 health stars and above**



<b>Non-alcoholic beverages</b>	<b>1,238</b>	<b>2.7 (1.6)</b>	<b>35.6</b>	<b>52.8</b>	<b>76.6</b>
Coffee and tea (flavoured)	142	2.4 (1.5)	35.2	45.8	100.0
Cordials and beverage mixes	90	1.7 (0.6)	1.1	100.0	100.0
Electrolyte drinks	40	1.6 (0.3)	0.0	100.0	100.0
Energy drinks	43	1.3 (0.5)	0.0	100.0	100.0
Fruit and vegetable juices	426	3.9 (1.6)	73.5	0.0	50.9
Soft drinks	347	1.6 (0.5)	0.0	100.0	100.0
Waters (plain and flavoured)	150	3.5 (1.5)	51.3	46.0	46.0
<b>Sauces, dressings, spreads and dips</b>	<b>1,834</b>	<b>2.6 (1.2)</b>	<b>32.5</b>	<b>93.0</b>	<b>93.5</b>
Mayonnaise and salad dressings	198	2.0 (0.8)	11.6	100.0	83.3
Sauces	1,142	2.6 (1.2)	33.7	97.7	97.7
Spreads and dips	494	2.8 (1.2)	38.1	79.1	87.7
<b>Snack foods</b>	<b>562</b>	<b>2.5 (1.2)</b>	<b>28.5</b>	<b>100.0</b>	<b>100.0</b>
<b>Special foods</b>	<b>423</b>	<b>3.8 (1.2)</b>	<b>65.7</b>	<b>72.8</b>	<b>100.0</b>
Breakfast beverages and milk-based protein drinks	76	4.7 (0.5)	98.7	0.0	100.0
Fitness or diet products	347	3.6 (1.2)	58.5	88.8	100.0
<b>Sugars, honey and related products</b>	<b>264</b>	<b>1.2 (0.9)</b>	<b>5.3</b>	<b>100.0</b>	<b>59.1</b>



# The nutrient composition of different food categories

**Table 3: Energy and Nutrient Composition by Category**

Major and minor food category	Number of products	Nutrient composition (Mean (SD))			
		Energy (kJ/100g)	Saturated fat (g/100g)	Sodium (mg/100g)	Total Sugars (g/100g)
<b>Bread and bakery products</b>	<b>2,182</b>	<b>1557 (404)</b>	<b>5.7 (5.7)</b>	<b>392 (243)</b>	<b>18.4 (17.7)</b>
Biscuits	891	1902 (222)	8.1 (6.3)	403 (283)	20.3 (16.7)
Bread	642	1148 (237)	1.6 (2.8)	449 (222)	4.2 (5.2)
Cakes, muffins and pastries	649	1489 (303)	6.3 (4.8)	320 (176)	29.8 (17.8)
<b>Cereal and grain products</b>	<b>1,803</b>	<b>1406 (504)</b>	<b>2.3 (2.9)</b>	<b>229 (412)</b>	<b>8.6 (10.3)</b>
Breakfast cereals	463	1656 (229)	2.1 (2.1)	120 (143)	14.6 (9.4)
Cereal and nut -based bars	267	1807 (245)	5.5 (3.7)	114 (106)	24.2 (8.5)
Couscous	16	1115 (469)	0.4 (0.3)	89 (112)	1.9 (0.9)
Noodles	235	938 (606)	2.9 (3.3)	699 (781)	1.8 (2.1)
Other cereal and grain products	279	1550 (424)	1.8 (2.9)	206 (388)	2.5 (3.2)
Pasta	390	1219 (434)	1.0 (1.4)	224 (319)	2.6 (1.8)
Rice	153	911 (400)	0.8 (0.7)	107 (189)	1.0 (1.0)
<b>Confectionery</b>	<b>1,147</b>	<b>1870 (540)</b>	<b>12.0 (9.8)</b>	<b>84 (98)</b>	<b>47.4 (19.8)</b>
<b>Convenience foods</b>	<b>1,497</b>	<b>590 (339)</b>	<b>1.9 (1.8)</b>	<b>396 (628)</b>	<b>3.1 (2.7)</b>
Pizza	104	992 (102)	3.8 (1.3)	514 (169)	4.2 (1.6)
Pre -prepared salads and sandwiches	263	688 (253)	1.6 (1.3)	384 (198)	4.4 (3.2)
Ready meals, meal kits and other frozen foods	789	620 (277)	2.3 (1.9)	335 (279)	2.8 (2.5)
Soup	341	325 (383)	0.8 (1.3)	512 (1220)	2.3 (2.6)
<b>Dairy</b>	<b>2,357</b>	<b>889 (526)</b>	<b>9.4 (8.2)</b>	<b>270 (381)</b>	<b>9.8 (10.0)</b>
Cheese	740	1386 (342)	17.8 (5.6)	721 (394)	1.7 (2.7)
Cream	71	1241 (439)	20.6 (9.0)	43 (45)	3.8 (2.2)
Desserts	191	924 (460)	5.7 (4.8)	127 (147)	20.8 (12.7)
Ice cream and edible ices	475	980 (355)	7.7 (4.7)	74 (58)	22.7 (5.4)
Milk	408	301 (209)	2.8 (4.6)	43 (19)	5.7 (6.1)
Yoghurt and yoghurt drinks	472	458 (152)	3.4 (3.6)	48 (19)	9.5 (4.5)
<b>Edible oils and oil emulsions</b>	<b>323</b>	<b>3113 (548)</b>	<b>27.7 (24.0)</b>	<b>154 (243)</b>	<b>0.6 (2.8)</b>
Edible oils	138	2672 (559)	34.8 (18.6)	354 (259)	1.1 (4.2)
Oil emulsions	185	3443 (194)	22.4 (26.2)	5 (38)	0.2 (0.5)
<b>Eggs</b>	<b>52</b>	<b>549 (90)</b>	<b>3.1 (0.8)</b>	<b>138 (10)</b>	<b>0.3 (0.1)</b>
<b>Fish and fish products</b>	<b>606</b>	<b>704 (269)</b>	<b>1.7 (1.6)</b>	<b>534 (769)</b>	<b>1.6 (2.3)</b>
<b>Fruit and vegetables</b>	<b>1,906</b>	<b>1074 (949)</b>	<b>2.9 (6.7)</b>	<b>205 (491)</b>	<b>15.5 (21.2)</b>
Fruit (packaged)	552	1091 (771)	4.2 (11.2)	36 (87)	31.7 (23.0)
Jam and marmalades	113	1082 (121)	0.2 (0.4)	12 (18)	59.6 (7.5)
Nuts and seeds	392	2548 (271)	6.4 (2.7)	141 (264)	6.2 (7.0)
Vegetables (packaged)	849	380 (336)	0.8 (1.9)	370 (672)	3.4 (4.5)
<b>Meat and meat products</b>	<b>1,214</b>	<b>877 (311)</b>	<b>4.6 (3.8)</b>	<b>711 (471)</b>	<b>1.9 (2.7)</b>
Meat alternatives	146	758 (255)	1.6 (1.8)	396 (242)	2.3 (2.1)
Processed meat	1,068	893 (315)	5.1 (3.8)	754 (478)	1.9 (2.7)

**ALDI topped the list with the highest amount of ultra-processed foods**

ALDI	~~~~~	~~~~~	~~~~~
Coles	~~~~~	~~~~~	~~~~~
Woolworths	~~~~~	~~~~~	~~~~~
IGA	~~~~~	~~~~~	~~~~~



<b>Non-alcoholic beverages</b>	<b>1,238</b>	<b>220 (366)</b>	<b>0.7 (2.9)</b>	<b>23 (114)</b>	<b>8.2 (10.7)</b>
Coffee and tea (flavoured)	142	901 (761)	4.8 (7.4)	71 (78)	19.8 (25.6)
Cordials and beverage mixes	90	158 (234)	0.1 (0.4)	54 (395)	7.5 (10.3)
Electrolyte drinks	40	94 (51)	0.1 (0.2)	39 (15)	5.2 (2.7)
Energy drinks	43	131 (96)	0.1 (0.3)	51 (31)	7.0 (5.5)
Fruit and vegetable juices	426	178 (48)	0.3 (0.4)	12 (32)	8.8 (2.8)
Soft drinks	347	106 (76)	0.1 (0.3)	9 (8)	5.7 (4.7)
Waters (plain and flavoured)	150	59 (63)	0.1 (0.3)	14 (18)	2.7 (2.9)
<b>Sauces, dressings, spreads and dips</b>	<b>1,834</b>	<b>891 (757)</b>	<b>2.6 (3.5)</b>	<b>1044 (1611)</b>	<b>11.8 (14.5)</b>
Mayonnaise and salad dressings	198	1284 (872)	3.3 (3.9)	524 (417)	12.9 (13.9)
Sauces	1,142	602 (519)	1.3 (2.2)	1365 (1932)	12.9 (15.3)
Spreads and dips	494	1401 (828)	5.2 (4.3)	510 (553)	8.7 (12.0)
<b>Snack foods</b>	<b>562</b>	<b>1938 (391)</b>	<b>6.2 (6.2)</b>	<b>578 (338)</b>	<b>5.6 (8.9)</b>
<b>Special foods</b>	<b>423</b>	<b>1270 (595)</b>	<b>4.2 (4.3)</b>	<b>226 (246)</b>	<b>11.1 (12.2)</b>
Breakfast beverages and milk-based protein drinks	76	294 (185)	0.7 (0.6)	70 (42)	5.8 (3.3)
Fitness or diet products	347	1484 (412)	5.0 (4.4)	260 (259)	12.3 (13.1)
<b>Sugars, honey and related products</b>	<b>264</b>	<b>1442 (422)</b>	<b>1.5 (4.4)</b>	<b>256 (1766)</b>	<b>69.9 (27.2)</b>



# Changes in the composition and healthiness of food categories from 2017 to 2018

**Table 4: Absolute Changes in Health Indicators by Category.**

Major and minor food category	Number of products in 2017 and 2018	Absolute change compared to 2017				Mean HSR
		Energy (kJ/100g)	Saturated fat (g/100g)	Sodium (mg/100g)	Total Sugars (g/100g)	
<b>Bread and bakery products</b>	<b>3,906</b>	<b>-24</b>	<b>-0.1</b>	<b>-16</b>	<b>0.5</b>	<b>0.0</b>
Biscuits	1,651	6	0.1	-21	1.3	0.0
Bread	1,117	-15	0.0	-17	-0.1	0.0
Cakes, muffins and pastries	1,138	-10	-0.2	-6	0.3	0.0
<b>Cereal and grain products</b>	<b>3,432</b>	<b>-9</b>	<b>0.1</b>	<b>10</b>	<b>-0.2</b>	<b>0.0</b>
Breakfast cereals	897	17	0.1	-1	-0.3	0.0
Cereal and nut-based bars	505	0	0.0	4	0.0	0.0
Couscous	35	-32	-0.3	-43	-0.4	0.0
Noodles	430	14	0.1	45	0.1	0.0
Other cereal and grain products	526	-15	0.0	-4	0.0	0.1
Pasta	746	-20	0.1	6	0.0	0.0
Rice	293	-40	0.2	-24	-0.3	0.1
<b>Confectionery</b>	<b>2,095</b>	<b>44</b>	<b>0.5</b>	<b>5</b>	<b>-0.3</b>	<b>-0.1</b>
<b>Convenience foods</b>	<b>2,658</b>	<b>19</b>	<b>0.1</b>	<b>-17</b>	<b>0.1</b>	<b>0.0</b>
Pizza	180	-10	0.0	-1	-0.2	0.1
Pre-prepared salads and sandwiches	446	-26	-0.3	-25	-0.1	0.3
Ready meals, meal kits and other frozen foods	1,365	26	0.2	9	0.1	0.0
Soup	667	-24	0.0	-33	0.0	0.1
<b>Dairy</b>	<b>4,365</b>	<b>-1</b>	<b>-0.1</b>	<b>-16</b>	<b>0.6</b>	<b>-0.1</b>
Cheese	1409	-18	0.0	-9	0.2	-0.1
Cream	140	-53	-1.0	-3	0.0	0.1
Desserts	343	126	1.4	-27	0.3	-0.1
Ice cream and edible ices	830	23	0.2	7	0.2	-0.1
Milk	775	-20	-0.2	-1	-0.4	0.0
Yoghurt and yoghurt drinks	868	4	0.1	-2	-0.4	0.0
<b>Edible oils and oil emulsions</b>	<b>620</b>	<b>7</b>	<b>-0.2</b>	<b>-2</b>	<b>0.0</b>	<b>0.0</b>
Edible oils	269	21	0.8	7	-0.1	-0.1
Oil emulsions	351	-22	-0.6	0	0.0	0.0
<b>Eggs</b>	<b>104</b>	<b>-4</b>	<b>-0.1</b>	<b>1</b>	<b>0.0</b>	<b>0.0</b>
<b>Fish and fish products</b>	<b>1,167</b>	<b>-7</b>	<b>0.0</b>	<b>14</b>	<b>-0.1</b>	<b>0.0</b>
<b>Fruit and vegetables</b>	<b>3,525</b>	<b>54</b>	<b>0.2</b>	<b>-12</b>	<b>-1.1</b>	<b>0.1</b>
Fruit (packaged)	998	56	0.5	3	-0.8	0.1
Jam and marmalades	243	9	0.1	0	-0.3	0.0
Nuts and seeds	694	-16	-0.4	20	-0.3	0.1
Vegetables (packaged)	1,590	7	0.0	-33	-0.2	0.1
<b>Meat and meat products</b>	<b>2,179</b>	<b>-9</b>	<b>-0.2</b>	<b>-14</b>	<b>0.1</b>	<b>0.0</b>
Meat alternatives	250	20	0.3	19	-0.1	-0.1
Processed meat	1,929	-10	-0.2	-13	0.1	0.0

<b>Non-alcoholic beverages</b>	<b>2,380</b>	<b>12</b>	<b>0.1</b>	<b>1</b>	<b>-0.4</b>	<b>-0.1</b>
Coffee and tea (flavoured)	245	61	0.1	0	-0.3	0.2
Cordials and beverage mixes	172	3	0.0	-3	-0.3	0.1
Electrolyte drinks	71	-1	0.0	0	-0.1	0.0
Energy drinks	83	-14	0.0	-2	-1.0	0.1
Fruit and vegetable juices	901	-1	0.0	1	-0.1	0.0
Soft drinks	635	-16	0.0	0	-1.1	0.1
Waters (plain and flavoured)	273	-12	0.0	-4	-0.7	0.0
<b>Sauces, dressings, spreads and dips</b>	<b>3,516</b>	<b>31</b>	<b>0.1</b>	<b>-29</b>	<b>-0.3</b>	<b>0.0</b>
Mayonnaise and salad dressings	376	-111	-0.4	-57	0.3	0.1
Sauces	2,191	12	0.0	-24	-0.4	0.1
Spreads and dips	949	127	0.3	-28	-0.7	-0.3
<b>Snack foods</b>	<b>997</b>	<b>15</b>	<b>-0.6</b>	<b>-9</b>	<b>0.7</b>	<b>-0.2</b>
<b>Special foods</b>	<b>699</b>	<b>7</b>	<b>0.1</b>	<b>14</b>	<b>-0.6</b>	<b>0.1</b>
Breakfast beverages and milk-based protein drinks	115	-2	0.2	2	-0.5	0.0
Fitness or diet products	584	61	0.4	24	-0.2	0.0
<b>Sugars, honey and related products</b>	<b>514</b>	<b>15</b>	<b>-0.2</b>	<b>34</b>	<b>1.9</b>	<b>-0.1</b>

Percentage change	Worse				Unchanged			Better	
	≥ 30%	≥ 15%	≥ 5%	≥ 1%	0%	≥ 1%	≥ 5%	≥ 15%	≥ 30%

Differences in the nutrient composition and healthiness of foods between 2017 and 2018 were mostly small, and there was no consistent pattern of change. Across the 15 major food categories examined, the four identified indicators of concern (energy, sodium, saturated fat and sugar) rose in 29 cases, declined in 28 cases and remained unchanged in three cases. The numbers of major food categories for which there were improvements were similar for sodium (eight categories), saturated fat and sugar (seven categories each), and energy (six categories). The summary effect of these changes on the average healthiness of the 15 major food categories, as indicated by the mean HSR, was improvement for two, worsening for five and no change for eight categories. In every case, the mean change in healthiness was small with the largest difference being a 0.2 fall in the mean HSR of 'Snack foods'.



Australian consumers have many packaged food and beverage options from which they can choose. Too often, available food and beverage options are unhealthy, and consumers will make unhealthy choices. Some companies are improving the nutritional quality of their products, but more companies appear not to be making improvements – between 2017 and 2018 the average Health Star Rating of product portfolios for the 33 largest manufacturers fell in 16 cases and rose for only eight manufacturers. Examination of the food category data identified no substantive improvement in the nutritional quality of any major food category, with levels of nutrients of concern and overall healthiness rising and falling in approximately equal numbers. The absence of greater numbers of major food categories showing declines in sodium concentrations, for example, is disappointing given sodium has been a focus of attention for health groups over recent years. Likewise, there is little evidence of reductions in sugar beyond chance, which suggests minimal impact of consumer concerns about the sugar levels in foods.

While the data included in this “FoodSwitch - State of the Food Supply” report indicate serious shortcomings in the healthiness of Australian foods and beverages, and little sign of recent improvement, there are clear opportunities. Manufacturers

are able to improve the average nutritional quality of their portfolios through two main approaches. First, companies can renovate existing products by reformulating them to healthier compositions with reduced concentrations of sugars, salt, saturated fat, or calories. Second, companies can change their ‘mix’ of products in their portfolio by deleting products that are unhealthy and introducing new ones with a better nutritional profile. Bega Cheese, for example, experienced a substantial decline in mean HSR, in large part, because of the addition of several less healthy brands to its product portfolio.

The wide ranges of HSR and nutrient values for most product categories (indicated by the wide standard deviations, SDs, in the tables) highlights the feasibility of making healthier versions of similar products. Unsalted versus salted versions of canned vegetables, for example, often have sodium concentrations that are more than twenty-fold different. Leaving the salt out during manufacturing and giving consumers the freedom to add salt if they wish would produce immediate and substantial improvements to nutritional quality for large numbers of foods within that category.

The four major retailers in Australia have a substantial role to play because they have very large ranges of ‘own brand’ products and are the gatekeepers to most food and beverage purchases made in Australia. The level of focus that



the retailers place on renovating the healthiness of their own brand products will be central to improving the nutritional quality of the foods available to Australians. In conjunction with their ability to also influence the branded product ranges available on shelf and how healthy versus unhealthy products are marketed in-store, retailers have more power to improve the nutritional quality of foods consumed in Australia than any other industry sector.

Government sets the regulatory environment within which Australian foods are manufactured, marketed, sold, and consumed. Data contained within this *FoodSwitch: State of the Food Supply* report suggest little recent impact of current Australian government efforts to improve the nutritional quality of the food supply. Investment in the work of the Healthy Food Partnership needs to be urgently upgraded to redress this. The apparent failure of recent food reformulation initiatives to improve the healthiness of foods highlights the need for more widespread implementation of the HSR system and other supportive policies. An HSR on every product in the supermarket would enable customers to more easily discriminate between more and less healthy products while waiting for government-led reformulation programs, and effective implementation of the Australian Dietary Guidelines to deliver across-the-board improvements in the nutritional quality of

foods available, purchased, and consumed.

### ***Strengths and limitations***

This report benefits from the highly standardised approach to data collection, processing, and evaluation over time and the very large range of products captured. Data analysis and preparation of the report independent of interested parties, in particular the food industry, is an important additional strength.

The report must, however, be interpreted in light of some limitations. While the data are representative of what was on the shelves of the sampled stores during the survey period, they may not represent all foods and beverages available in every store throughout the year. The analyses rely upon the data reported on pack by manufacturers with imputation of some metrics not required to be labelled but necessary for the calculation of an HSR. In addition, the data illustrate what is available for sale in stores but not what is actually purchased nor consumed though these factors are all correlated. Finally, these data identify only recent changes in the quality of the food supply, and additional insights might be obtained from an assessment of foods and beverages made over a longer time period.

# Recommendations and Conclusions

## **Recommendations**

*Government* should require mandatory on-pack labelling of all foods and beverages with a Health Star Rating label and the data required to calculate the HSR.

***Consumers have the right to know about the healthiness of the foods they are purchasing.***

*Government* must increase the scope and speed of the work being done by the Healthy Food Partnership. The Partnership must set clear targets and timelines for the reformulation of all unhealthy food categories and monitor progress against them. ***Real action across the whole food supply will be the most effective way of curbing the epidemic of obesity and diet-related ill health blighting Australia.***

*Food manufacturers* including retailers with own brand products, should benchmark the nutrient composition of their portfolios against best-in-category equivalents for levels of energy, saturated fat, sugar, and sodium.

***Food manufacturers must take responsibility for and improve the healthiness of all the foods they are making and marketing.***

*Food retailers* should take a more active role in improving the healthiness of the Australian food supply. Retailers could set minimum requirements for the healthiness of the foods and beverages they stock and promote in-store and could provide Health Star Rating shelf labelling for all products. ***As the gatekeepers to Australian food and beverage purchases, retailers have the opportunity to help every Australian buy, eat, and drink more healthily.***

## **Conclusions**

Packaged foods and beverages available in Australia include many products with excessive levels of energy, saturated fats, sugar, and salt. The Australian food and beverage industry has a responsibility to improve the healthiness of what it manufactures and make it easier for their customers to identify the healthier options available. There are multiple, highly plausible ways that industry could achieve this through better labelling, benchmarking, reformulation and marketing of foods and beverages, but rapid and substantive gains will be achieved only with significantly upgraded government leadership and action. Actions that improve the quality of the Australian food supply have the potential to reduce overweight, obesity and premature death and disability amongst millions of Australians.<sup>17,18,19</sup>

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## **Declaration of interest**

The George Institute for Global Health is a not-for-profit health and medical research institute, with a mission to improve the health of millions of people worldwide by focusing on the world's biggest killers. The Institute works with industry, government and community partners where it can advance this mission and engagement does not conflict with our ability to further our public good research goals. The George Institute has had multiple interactions with Australian industry, government and consumers in regard to the quality of Australian foods. This report was prepared independent of interested organisations and provides an objective evaluation of the state of the Australian food supply.

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The George Institute for Global Health is an independent global medical research institute, established and headquartered in Sydney, with major centres in China, India and the UK. The George is focussed on reducing the burden of the leading causes of death and disability around the world – chronic disease and injury. Our research has driven major improvements in the prevention and treatment of heart disease, stroke, diabetes, kidney disease, and many other conditions, and our researchers have been recognised among the world's best for scientific impact and excellence. Affiliated with world class universities such as UNSW Sydney, we have over 650 staff globally, a global network of collaborators, projects in more than 50 countries, and have raised over \$800 million for global health research.

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