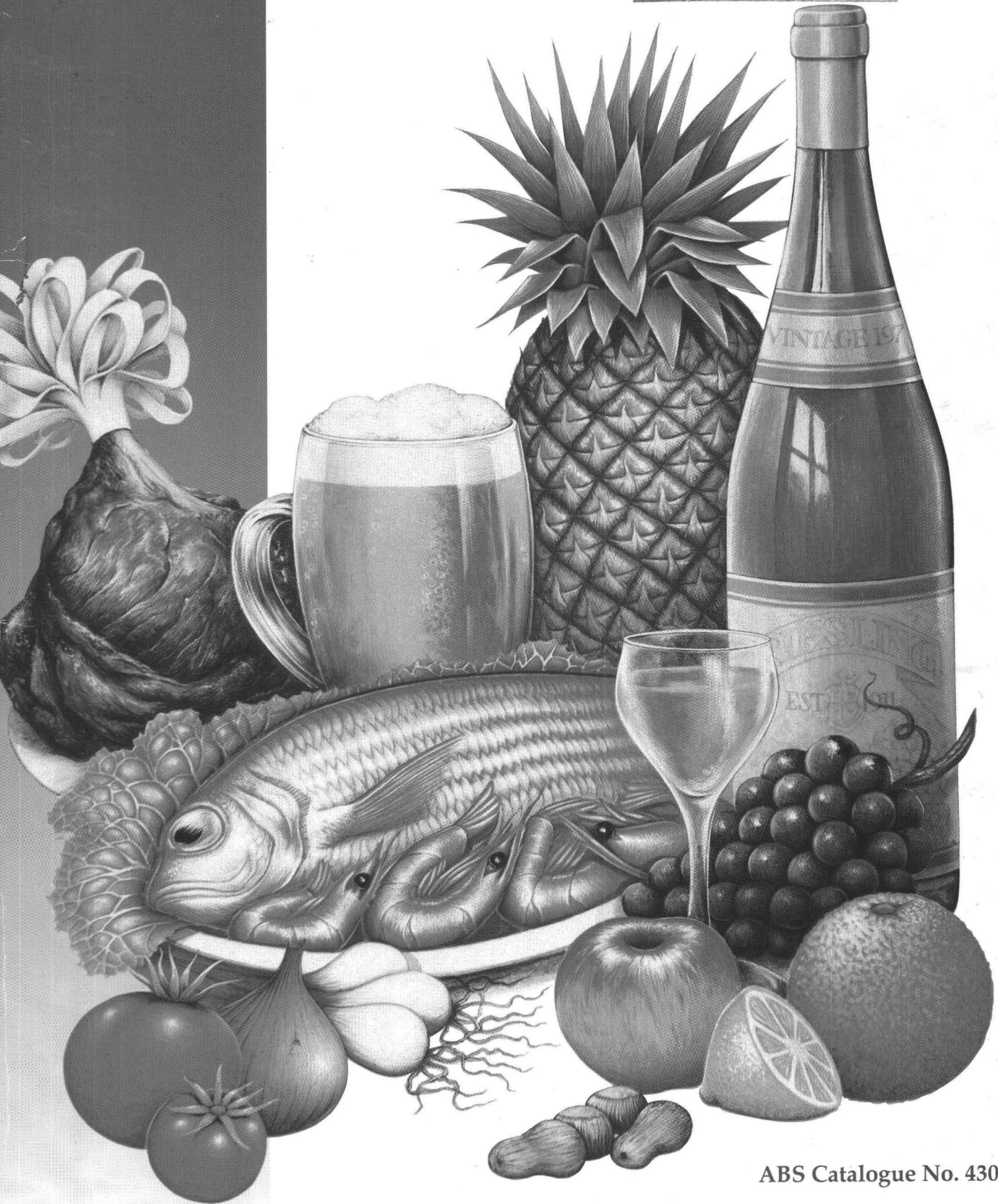


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Apparent Consumption of Foodstuffs and Nutrients Australia 1988-89



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**APPARENT CONSUMPTION OF FOODSTUFFS AND
NUTRIENTS, AUSTRALIA
1988-89**

**W. McLENNAN
Acting Australian Statistician**

AUSTRALIAN BUREAU OF STATISTICS

CATALOGUE NO. 4306.0

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INQUIRIES

- *for further information about statistics in this publication and the availability of related unpublished statistics, contact Joanne Gibbons on Canberra (06) 252 5329 or any ABS State office*
 - *for information about other ABS statistics and services please refer to the back page of this publication.*
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SUMMARY OF FINDINGS

NOTE : Throughout this Summary, "Consumption" refers to "apparent consumption per capita in the relevant financial year". While this publication contains detailed statistics and analysis (including nutrient intake) for the year 1988-89 the ABS has separately published preliminary estimates of apparent consumption in summary form for 1990-91.

Highlights

Although per capita consumption of Total Meat and Meat Products has remained fairly constant over recent years, in the longer term (1938-39 to 1988-89) this has declined by almost one-third to 83.8 kg. The long term effect is due to reduced consumption of mutton (down 73.2%) and beef and veal (down 36.9%).

However, consumption of Poultry has almost tripled since 1968-69 and the consumption of Seafood has increased by 16.2 per cent from 1983-84 and by 63.3 per cent from 1938-39.

Consumption of Vegetables has risen since 1983-84 by 9.6 per cent, whereas Sugar consumption has decreased by 5.1 per cent since 1938-39, and since 1983-84 has declined by 1.4 per cent.

Total Alcohol consumption, at 8.54 litres per person, is 151 per cent higher than in 1938-39, but 11 per cent below the peak of 1978-79 (9.59 litres per person). Consumption of tea has decreased by 61 per cent since 1938-39, whereas other beverages have increased, for example beer by 110 per cent, and wine by over 600 per cent. Aerated and carbonated waters have increased by 69 per cent since 1968-69.

Meat, meat products and poultry

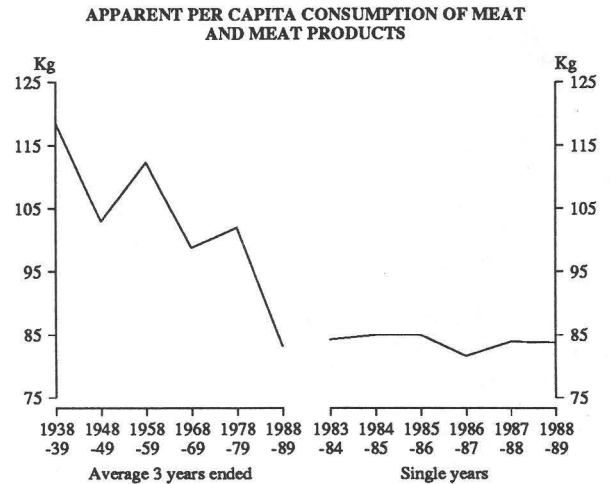
Consumption of Total Meat and Meat Products decreased marginally in 1988-89, falling 0.2 per cent to 83.8 kg, compared with 84.0 kg in 1987-88. Beef consumption increased by 3.4 per cent to 39.5 kg, whereas veal consumption fell by 16.7 per cent continuing the decline to be 37.5 per cent below the consumption recorded in 1983-84. In comparison beef consumption declined by 4 per cent since 1983-84.

The long term situation is similar, with consumption of beef and veal (combined), and Total Meat and Meat Products, falling by 36.9 per cent and 29.8 per cent respectively over the period 1938-39 to 1988-89.

Although consumption of lamb remained unchanged compared with 1987-88 at 14.9 kg, it fell over the period 1983-84 to 1988-89 by 11.8 per cent. Consumption of mutton declined sharply in 1988-89, falling to 6.8 kg. This represents a 13.9 per cent decrease compared with 7.9 kg

in 1987-88. Consumption of pigmeat has increased by 10.4 per cent since 1983-84.

In the longer time frame, from 1938-39 to 1988-89, consumption of pigmeat increased 4.5 times, and lamb consumption increased 2.2 times. Consumption of mutton has decreased to almost one-quarter of the 1938-39 level.



Consumption of offal fell 16.7 per cent to 3.0 kg in 1988-89, reversing the upward trend in recent years. A comparison between 1938-39 and 1988-89 shows only a 10.5 per cent decline in consumption of offal.

Consumption of poultry at 24.7 kg did not change in 1988-89 compared with 1987-88. Since 1983-84, however, intake has increased by 23.5 per cent. Between 1968-69 and 1988-89 consumption increased by 192.8 per cent.

Seafood

Seafood consumption has continued to rise and in 1988-89 increased by 8.9 per cent to 8.6 kg. Since 1983-84 consumption has increased by 16.2 per cent.

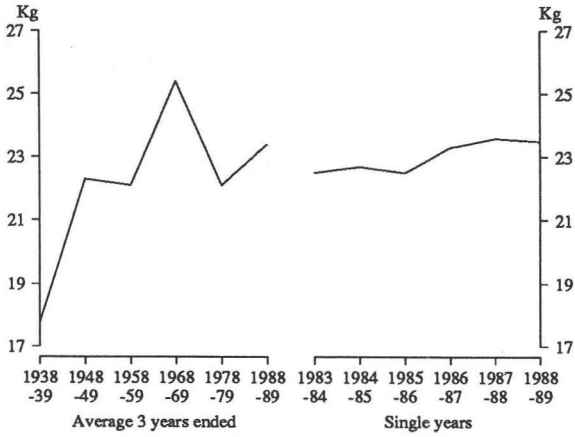
Dairy products

In 1988-89 consumption of Dairy Products decreased marginally to 23.5 kg. The most significant change occurred in powdered skim milk consumption which fell by 10.3 per cent to 2.6 kg. Cheese consumption continued to increase and in 1988-89 rose by 3.6 per cent to 8.6 kg. This is an 11.7 per cent increase compared with 1983-84.

Between 1938-39 and 1988-89, the consumption of cheese increased from 2.0 kg to 8.3 kg, a more than four-fold

increase. In contrast, consumption of Total Dairy Products in 1988-89 was about 1.3 times the 1938-39 level.

APPARENT PER CAPITA CONSUMPTION OF DAIRY PRODUCTS

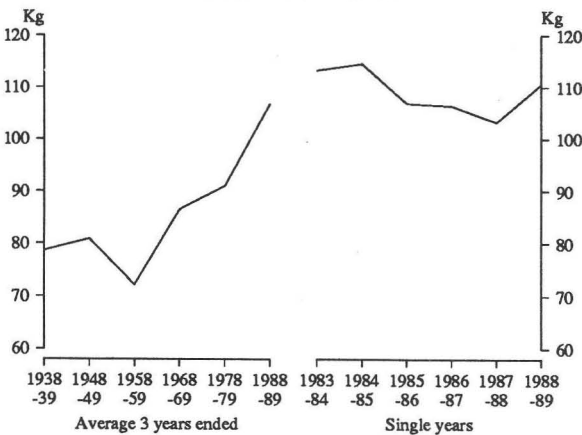


Fruit and fruit products

Consumption of all Fruit and Fruit Products increased by 7.1 per cent to 110.6 kg during the year reversing the downward trend of recent years. Citrus fruit consumption has increased by 19.6 per cent to 40.8 kg, due largely to increased imports of citrus foods. Consumption of processed fruits has declined, and at 7.4 kg represents a fall of 11.9 per cent from 1987-88.

Consumption of Fruit and Fruit Products has increased significantly since 1938-39 with an average of 106.8 kg for the three years ended 1988-89. This represents an increase of 35.7 per cent compared with 1938-39.

APPARENT PER CAPITA CONSUMPTION OF FRUIT AND FRUIT PRODUCTS



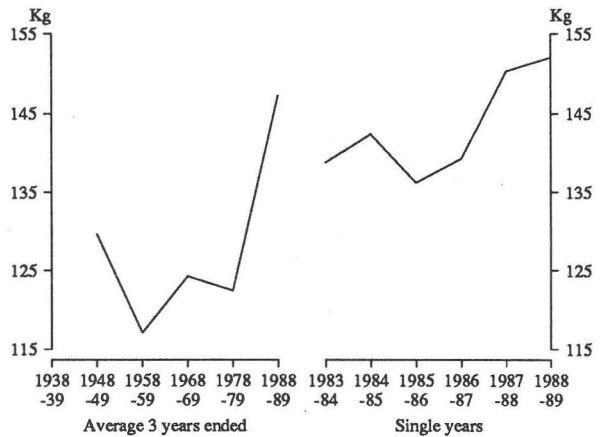
Vegetables

During 1988-89 consumption of Vegetables rose by 1.2 per cent to 152.1 kg, and by 9.6 per cent since 1983-84. Potato consumption fell 3.9 per cent to 61.5 kg whereas consumption of other root and bulb vegetables jumped 14.0 per cent to 21.2 kg. Compared with 1983-84, significant movements were recorded for leafy and green

vegetables, and tomatoes, increasing by 16.9 per cent and 12.9 per cent respectively.

Vegetable consumption increased during the period 1948-49 to 1988-89, with a rise of 13.6 per cent to 147.3 kg. Consumption of tomatoes, leafy and green vegetables, and potatoes over that period showed rises of 70.4 per cent, 16.1 per cent and 10.1 per cent respectively.

APPARENT PER CAPITA CONSUMPTION OF VEGETABLES

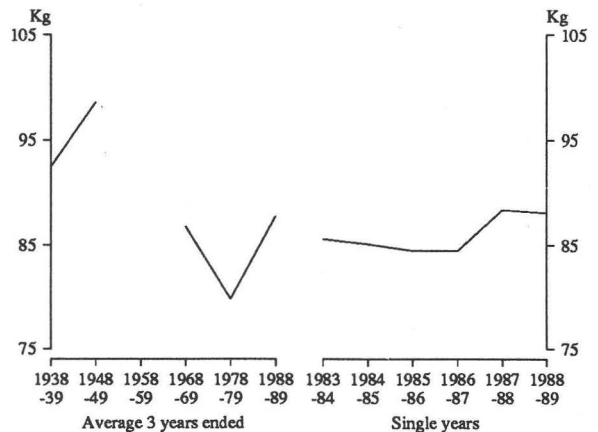


Grain products

Consumption of Grain Products fell slightly in 1988-89, due mainly to a decrease of 2.0 per cent in flour consumption. Increases in the consumption of table rice and breakfast foods of 10.2 per cent and 7.1 per cent respectively were recorded.

Between 1938-39 and 1988-89 Total Grain Products consumption decreased by 5.9 per cent, reflecting the relative stability of consumption over the period. However, consumption of table rice and breakfast foods both increased over the period by 161.1 per cent and 102.1 per cent respectively.

APPARENT PER CAPITA CONSUMPTION OF GRAIN PRODUCTS



Eggs and egg products

Consumption of eggs fell from 135 in 1987-88 to 128 in 1988-89 (5.2% decrease). Since 1983-84 consumption of

eggs has declined steadily with a drop of 12.3 per cent for the period.

Since 1938-39 the consumption of eggs has decreased to a level in 1988-89 of slightly more than half the 1938-39 figure (from 243 to 133).

Oils and fats

Consumption of butter decreased marginally from 3.2 kg in 1987-88 to 3.1 kg in 1988-89, and since 1983-84 has fallen 20.5 per cent from 3.9 kg. During the period 1983-84 to 1988-89 total margarine consumption declined by 6.3 per cent, whilst consumption of all Oils and Fats fell 5.6 per cent.

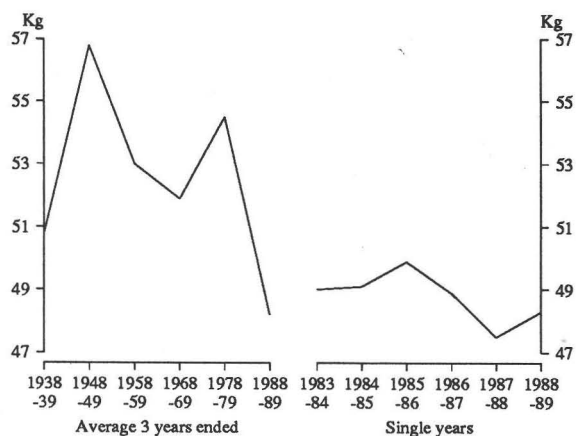
For the period 1938-39 to 1988-89 consumption of Oils and Fats has increased 19.9 per cent to 20.5 kg. The large decrease in butter has been offset by increases in the consumption of margarine and vegetable oils and other fats.

Sugar

Consumption of sugar in manufactured foods increased marginally by 0.9 per cent to 33.4 kg, and consumption of refined sugar increased 2.3 per cent to 9.0 kg in 1988-89. Overall Sugar consumption increased 1.7 per cent to 48.3 kg in 1988-89 compared with 47.5 kg in 1987-88.

Since 1938-39 an increasing proportion of sugar has been consumed in manufactured foods, rising from 32.1 per cent of the total consumption in 1938-39 to 70.3 per cent in 1988-89.

APPARENT PER CAPITA CONSUMPTION OF SUGAR



Beverages

In 1988-89, consumption of tea did not change whilst coffee consumption fell 4.8 per cent to 2.0 kg. Since 1983-84 consumption of tea and coffee has fallen 20.0 per cent and 4.8 per cent respectively.

In the longer time frame, from 1938-39 to 1988-89, consumption of tea fell by 61.3 per cent whereas consumption of coffee has increased almost sevenfold from 0.3 kg to 2.0 kg.

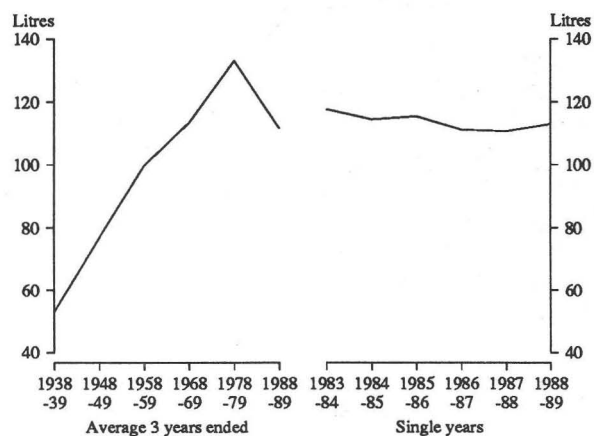
In contrast to the large decrease in tea and the smaller decrease in coffee consumption since 1983-84, consumption of aerated and carbonated waters has increased each year since 1983-84, and in 1988-89 increased 6.7 per cent to 85.6 litres. Over the period 1968-69 to 1988-89, consumption of aerated and carbonated waters increased by 68.9 per cent.

Beer consumption during 1988-89 also increased (to 113.1 litres) over 1987-88. Consumption of low alcohol beer at 16.4 litres in 1988-89, registered a record 35.5 per cent increase whereas consumption of other beer fell for the third successive year, this time by 2.0 per cent to 96.7 litres.

Between 1938-39 and 1988-89, beer consumption rose steadily until 1978-79 (up by a factor of 2.5, or 150.4 per cent on the 1938-39 level) and then fell by 16.1 per cent from 1978-79 to 1988-89.

Consumption of wine continues the downward trend of the past few years falling 7.3 per cent to 19.1 litres in 1988-89 compared with a fall of 1.9 per cent in 1987-88.

APPARENT PER CAPITA CONSUMPTION OF BEER



Nutrient Intake

In 1988-89 the unadjusted estimates of the supply of nutrients (see Table 4) show largest variations for retinol equivalent (9.1% decrease), vitamin C (4.4% increase), and iron (1.6% increase), with other nutrients changing by less than 1 per cent.

Since 1983-84, major changes in the supply of nutrients are for niacin (10.2% increase), calcium (5% increase),

protein (4.2% increase), and retinol equivalent (3.0% decrease).

All nutrients available for consumption are in excess of the estimated recommended dietary intake (RDI's) for the Australian population (see Table 8). However, there is a wide range, from only 8 per cent available in excess of RDI for calcium, 37 per cent for energy and 39 per cent for iron, through to 208 per cent for vitamin C and 274 per cent for retinol equivalent.

SECTION I. SUPPLY AND UTILISATION OF FOODSTUFFS

TABLE I. APPARENT PER CAPITA CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA
(kg per year, except where otherwise stated)

	Average 3 years ended				Current year 1988-89
	1938-39	1948-49	1958-59	1968-69	
MEAT AND MEAT PRODUCTS—					
Carcass meat—					
Beef and veal	63.6	49.5	56.2	40.0	40.1
Lamb	6.8	11.4	13.3	20.5	14.9
Mutton	27.2	20.5	23.1	18.8	7.3
Pigmeat	3.9	3.2	4.6	6.7	17.5
Total carcass meat	101.5	84.6	97.2	85.9	79.8
Offal and meat n.e.i.	3.8	4.0	5.2	5.1	3.4
Total Meat and Meat Products (carcass equivalent weight)	118.5	103.0	112.4	98.8	83.2
Canned meat (canned weight)	1.0	1.2	1.9	2.2	n.a.
Bacon and ham (cured carcass weight)	4.6	5.3	3.2	3.6	7.0
POULTRY—					
Poultry (dressed weight)	n.a.	n.a.	n.a.	8.3	24.3
SEAFOOD—					
Fresh and frozen (edible weight)—					
Fish—					
Australian		2.4	1.4	1.4	1.6
Imported	2.7	0.3	1.4	1.9	1.2
Crustacea and molluscs	0.3		0.4	0.8	0.9
Seafood, otherwise prepared (product weight)(a)—		1.4	0.4	0.4	0.5
Australian					
Imported	1.9				
Fish					
Crustacea and molluscs			0.8	1.0	1.7
Total seafood	4.9	4.1	4.5	5.6	8.0
DAIRY PRODUCTS—					
Market milk (fluid whole)(litres)(b)	106.4	138.7	128.7	128.2	101.8
Condensed, concentrated and evaporated milk—					
Full cream—					
Sweetened		1.6	1.2	1.1	2.2
Unsweetened(c)	2.0	1.8	2.9	3.5	2.2
Skim	n.a.	n.a.	0.6	0.7	1.2
Powdered milk—					
Full cream	1.2	1.5	1.1	0.8	0.9
Skim (incl. buttermilk and mixed skim and buttermilk)		0.3	1.1	4.3	2.7
Infants' and invalids' food	0.5	0.6	1.0	1.3	1.2
Cheese (natural equivalent weight)(d)	2.0	2.5	2.6	3.5	5.3
Total (converted to milk solids fat and non-fat)(e)	17.8	22.3	22.1	25.4	23.4
FRUIT AND FRUIT PRODUCTS—					
Fresh fruit (incl. fruit for fruit juice)—					
Citrus	14.5	16.9	16.1	22.5	34.5
Other	42.6	39.5	35.6	40.8	34.6
Jams, conserves, etc. (product weight)	5.2	5.6	3.9	3.3	2.0
Dried fruit (product weight)	3.8	3.9	2.8	2.5	2.4
Processed fruit (product weight)	3.5	3.4	6.0	9.9	10.5
Total (fresh fruit equivalent)	78.7	80.9	72.2	86.5	91.0
VEGETABLES—					
Potatoes	47.1	56.3	51.7	53.7	62.0
Other root and bulb vegetables(f)	n.a.	19.1	15.9	17.1	19.6
Tomatoes	7.1	11.5	13.0	14.2	19.6
Leafy and green vegetables	n.a.	20.5	17.9	24.3	23.8
Other vegetables	n.a.	22.3	18.6	18.1	22.2
Total (fresh equivalent weight)	n.a.	129.7	117.1	124.3	147.3

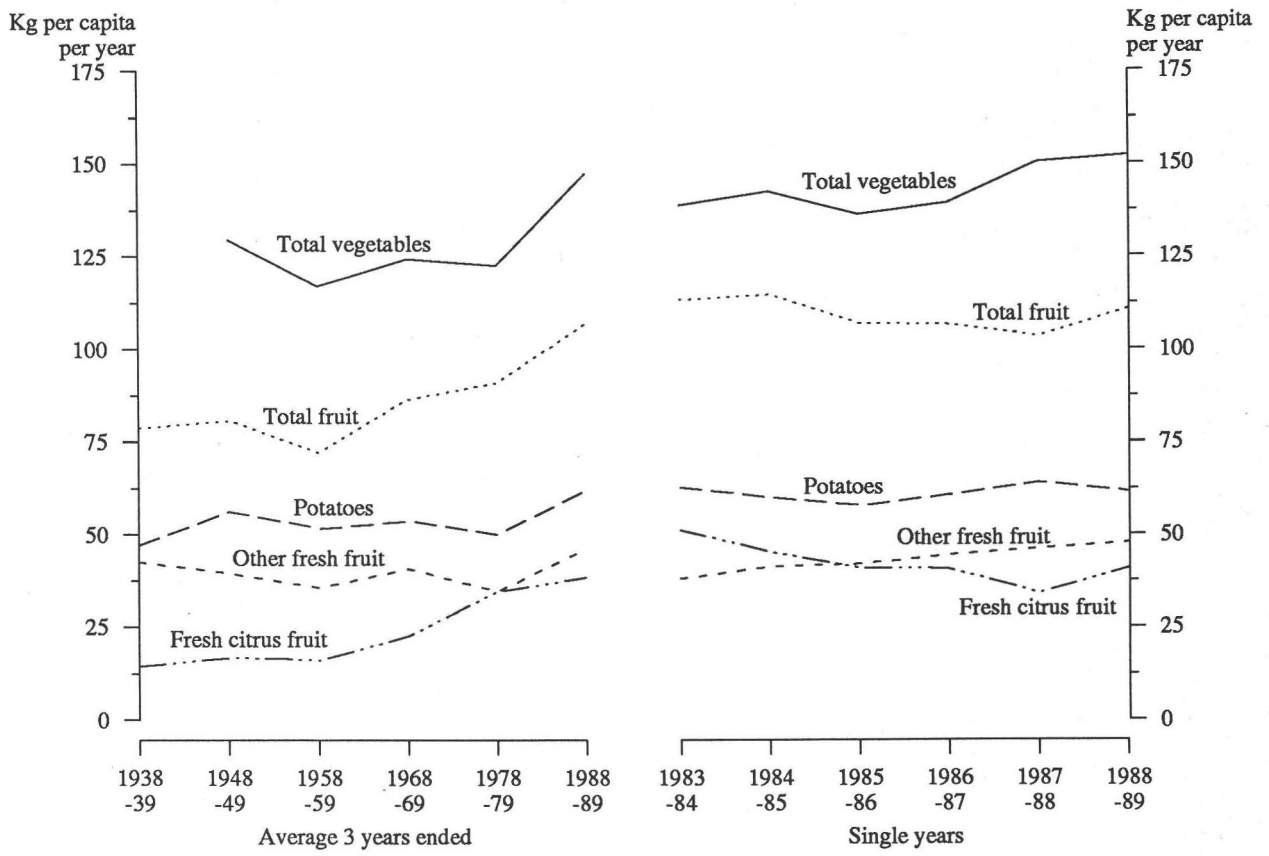
For footnotes see end of table.

TABLE 1. APPARENT PER CAPITA CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA — continued
(kg per year, except where otherwise stated)

	Average 3 years ended					Current year 1988-89
	1938-39	1948-49	1958-59	1968-69	1978-79	
GRAIN PRODUCTS—						
Flour (g)	84.9	91.6	82.3	77.4	69.6	72.6
Breakfast foods	4.8	6.1	6.2	6.8	7.8	9.7
Table rice	1.8	0.4	n.a.	1.9	2.4	4.7
Total	92.5	98.6	n.a.	86.8	79.9	87.0
Bread(h)	49.6	64.0	69.1	59.5	47.7	43.9
EGGS AND EGG PRODUCTS—						
Total	12.1	12.7	10.2	12.6	12.4	n.c.
Equivalent number of eggs (i)	243	255	206	222	220	133
NUTS (in shell)—						
Peanuts	n.a.	4.2	3.1	2.8	2.1	1.8
Tree nuts	n.a.	1.8	3.4	5.8	2.9	3.7
OILS AND FATS—						
Butter	14.9	11.2	12.3	9.8	5.1	3.3
Margarine—						
Table	0.4	0.4	n.a.	1.5	5.4	6.8
Other	1.8	2.4	2.2	3.4	3.1	2.2
Total (fat content) (j)	17.1	14.0	n.a.	14.6	21.6	20.5
SUGAR—						
As refined sugar	32.0	31.2	27.0	21.0	14.9	8.8
In manufactured foods	16.3	23.1	23.6	27.7	34.6	33.9
Total (k)	50.8	56.8	53.0	51.9	54.5	48.2
BEVERAGES—						
Tea	3.1	2.9	2.7	2.3	1.7	1.2
Coffee (l)	0.3	0.5	0.6	1.2	1.6	2.0
Aerated and carbonated waters (litres)	n.a.	n.a.	n.a.	47.3	67.4	79.9
Beer (litres)	53.2	76.8	99.7	113.5	133.2	111.7
Wine (litres)	2.7	5.9	5.0	8.2	14.7	20.2
ALCOHOL (litres alcohol) (m)—						
Beer	2.55	3.58	4.79	5.45	6.40	5.03
Wine	0.35	0.77	0.87	1.15	1.98	2.22
Spirits	0.50	0.80	0.74	0.89	1.21	1.29
Total	3.40	5.15	6.40	7.49	9.59	8.63

(a) Comprises canned seafood only prior to 1972-73. Prepared seafood other than canned was included with 'Fresh and frozen' in this period. (b) Prior to 1978-79 known as Fluid Whole Milk. (c) Included ice-cream mix prior to 1972-73. (d) Combined product and natural equivalent weights prior to 1971-72. (e) Includes an allowance for estimated cream consumption. (f) Sweet potatoes included with 'Other root and bulb vegetables' since 1968-69; formerly included with 'Other vegetables'. (g) Includes flour used for breadmaking. (h) From 1988-89 data only collected triennially. (i) Data from 1982-83 consists only of commercial disposals by State Egg Boards. (j) Includes an estimate for vegetable oils and other fats. Prior to 1975-76 this was estimated at 2kg, from 1975-76 onwards estimated at 10kg. See notes on the Supply and Utilisation of Foodstuffs, page 22. (k) Includes sugar content of syrups, honey and glucose. (l) Coffee and coffee products in terms of roasted coffee. (m) From 1984-85 data makes allowance for low alcohol beers and wines.

APPARENT PER CAPITA CONSUMPTION OF VEGETABLES AND FRUIT



APPARENT PER CAPITA CONSUMPTION OF SUGAR

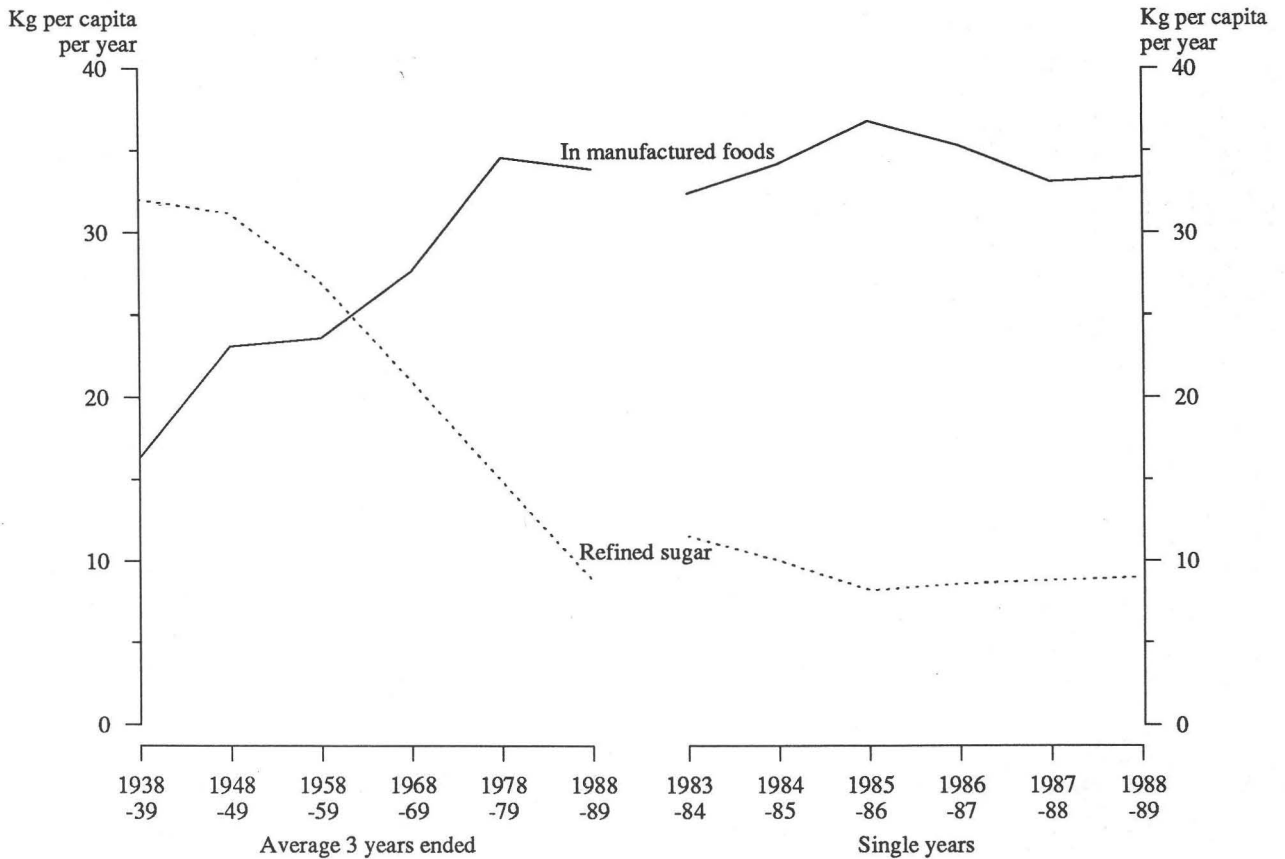


TABLE 2. TOTAL APPARENT CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA

	Available for consumption—					Apparent per capita consumption—						
	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
MEAT AND MEAT PRODUCTS—												
Carcass meat—				— tonnes—						—kg—		
<i>Beef and veal</i>												
Beef	654,024	659,538	655,883	r630,083	r656,178	685,087	42.3	42.1	41.4	r39.2	r40.0	41.0
Veal	617,587	626,244	622,610	r599,394	r626,242	659,750	39.9	40.0	39.3	r37.3	r38.2	39.5
Lamb	36,437	33,294	33,273	r30,689	r29,937	25,337	2.4	2.1	2.1	1.9	1.8	1.5
Mutton	261,400	266,902	268,213	241,015	r243,842	248,626	16.9	17.1	16.9	15.0	14.9	14.9
Pigmeat	81,068	103,920	112,979	118,383	r130,110	112,932	5.2	6.6	7.1	7.4	r7.9	6.8
<i>Total carcass meat</i>	254,241	256,249	268,901	269,877	r288,136	301,987	16.4	16.4	17.0	16.8	17.6	18.1
Offal and meat n.e.i.	1,250,733	1,286,609	1,305,976	r1,259,359	r1,318,266	1,348,632	80.9	82.2	82.3	r78.3	r80.4	80.8
Total Meat and Meat Products	52,470	44,175	42,633	55,083	r59,402	50,725	3.4	2.8	2.7	3.4	3.6	3.0
(carcass equivalent weight)	1,303,203	1,330,784	1,348,609	r1,314,442	r1,377,668	1,399,357	84.3	85.0	85.0	r81.7	r84.0	83.8
Bacon and ham (cured carcass weight)	99,964	105,503	103,693	r107,996	r116,598	117,159	6.5	6.7	6.5	6.7	r7.1	7.0
POULTRY—												
Poultry (dressed weight)	309,039	341,014	365,168	r378,091	405,160	412,002	20.0	21.8	23.0	23.5	24.7	24.7
SEAFOOD—												
Fresh and frozen (edible weight)—												
Fish—												
Australian	26,262	28,796	34,274	36,577	41,046	41,833	1.7	1.8	2.2	2.3	2.5	2.5
Imported	27,819	30,088	28,552	28,936	31,968	30,947	1.8	1.9	1.8	1.8	1.9	1.9
Crustacea and molluscs	13,111	14,556	11,758	13,042	13,786	20,780	0.8	0.9	0.7	0.8	0.8	1.2
Seafood otherwise prepared (product weight)—												∞
Australian	9,037	6,977	7,233	7,855	7,863	8,271	0.6	0.4	0.5	0.5	0.5	0.5
Imported—												
Fish	30,590	29,605	28,729	27,599	25,411	28,358	2.0	1.9	1.8	1.7	1.5	1.7
Crustacea and molluscs	6,955	7,964	8,174	8,527	9,868	12,618	0.4	0.5	0.5	0.5	0.6	0.8
Total seafood	113,774	117,986	118,720	122,536	129,942	142,807	7.4	7.5	7.5	7.6	7.9	8.6
DAIRY PRODUCTS—				—'000 litres—						—litres—		
Market milk (fluid whole)	1,571,916	1,593,752	1,625,485	1,655,000	1,665,600	1,684,700	101.6	101.8	102.5	102.9	101.5	100.9
Condensed, concentrated and evaporated milk—				—tonnes—						—kg—		
Full cream sweetened	10,228	10,531	43,679	39,597	r33,715	36,757	0.7	0.7	2.8	2.5	2.1	2.2
Full cream unsweetened	33,749	31,071	13,467	16,055	20,834	22,242	2.2	2.0	0.8	1.0	1.3	1.3
Skim	13,957	18,978	13,467	16,055	20,834	22,242	0.9	1.2	0.8	1.0	1.3	1.3
Powdered milk—												
Full cream	11,511	11,062	9,358	13,735	15,867	16,031	0.7	0.7	0.6	0.9	1.0	1.0
Skim	35,161	35,743	36,082	43,787	47,997	42,991	2.3	2.3	2.3	2.7	2.9	2.6
Infants' and invalids' food	18,502	15,013	18,829	15,245	21,133	22,732	1.2	1.0	1.2	0.9	1.3	1.4
Cheese (natural equivalent weight)	118,495	126,142	125,498	130,117	135,679	143,627	7.7	8.1	7.9	8.1	8.3	8.6
Total (converted to milk solids, fat and non-fat)	347,511	355,536	357,636	374,820	r386,787	391,541	22.5	22.7	22.5	23.3	23.6	23.5

For footnotes see end of table.

TABLE 2. TOTAL APPARENT CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA — continued

	Available for consumption—					Apparent per capita consumption—						
	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
FRUIT AND FRUIT PRODUCTS—												
Fresh fruit (incl. fruit for fruit juice)—												
Citrus	791,464	709,215	646,703	653,566	558,524	680,878	51.2	45.3	40.8	40.6	34.1	40.8
Other	589,957	648,325	667,852	715,574	r759,679	800,111	38.1	41.4	42.1	44.5	r46.3	47.9
Jams, conserves, etc. (product weight)	27,976	32,790	30,582	30,237	32,414	37,625	1.8	2.1	1.9	1.9	2.0	2.3
Dried fruit (product weight)	37,243	46,194	45,582	37,087	40,703	42,005	2.4	3.0	2.9	2.3	2.5	2.5
Processed fruit (product weight)	151,806	174,056	126,979	131,208	137,995	123,571	9.8	11.1	8.0	8.2	8.4	7.4
Total (fresh fruit equivalent)	1,752,543	1,793,892	1,695,956	1,712,748	r1,693,990	1,847,131	113.3	114.6	106.9	106.4	r103.3	110.6
VEGETABLES—												
Potatoes	967,970	938,409	914,976	975,422	1,049,167	1,027,071	62.6	60.0	57.7	60.6	64.0	61.5
Other root and bulb vegetables	269,301	302,145	299,343	304,549	305,139	353,606	17.4	19.3	18.9	18.9	18.6	21.2
Tomatoes	288,051	307,494	267,739	289,475	326,812	349,825	18.6	19.6	16.9	18.0	19.9	21.0
Leafy and green vegetables	339,233	352,051	361,139	350,560	395,378	426,745	21.9	22.5	22.8	21.8	24.1	25.6
Other vegetables	282,557	329,313	316,838	320,779	389,536	382,996	18.3	21.0	20.0	19.9	23.7	22.9
Total (fresh equivalent weight)	2,147,112	2,229,412	2,160,035	2,240,785	2,466,032	2,540,243	138.8	142.4	136.2	139.3	150.3	152.1
GRAIN PRODUCTS—												
Flour (a)	1,130,830	1,135,583	1,138,270	1,158,778	1,208,389	1,205,375	73.1	72.6	71.8	72.0	73.7	72.2
Breakfast foods—												
Oatmeal and rolled oats	19,609	20,794	24,543	25,301	26,696	31,701	1.3	1.3	1.5	1.6	1.6	1.9
Other (from grain)	122,869	119,167	118,737	115,943	r134,874	144,766	7.9	7.6	7.5	7.2	r8.2	8.7
Total breakfast foods	142,478	139,961	143,280	141,244	r161,570	176,467	9.2	8.9	9.0	8.8	r9.9	10.6
Table rice	50,530	57,138	58,625	60,035	80,185	89,426	3.3	3.7	3.7	3.7	4.9	5.4
Total grain products	1,323,838	1,332,682	1,340,175	1,360,057	r1,450,144	1,471,268	85.6	85.1	84.5	84.5	r88.4	88.1
Bread	705,038	710,919	n.c.	719,025	n.c.	n.c.	45.6	45.4	n.c.	44.7	n.c.	n.c.
EGGS AND EGG PRODUCTS												
Number of eggs (b)	187,538	186,295	185,331	184,473	183,961	178,302	146	143	140	138	135	128
NUTS (in shell)—												
Peanuts	27,422	22,613	25,741	35,084	28,394	27,477	1.8	1.4	1.6	2.2	1.7	1.6
Tree nuts	55,602	59,697	60,836	56,134	59,918	68,170	3.6	3.8	3.8	3.5	3.7	4.1

For footnotes see end of table.

TABLE 2. TOTAL APPARENT CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA — continued

	Available for consumption—						Apparent per capita consumption—					
	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
OILS AND FATS—												
Butter(c)	60,389	61,741	59,550	56,182	51,873	51,862	3.9	3.9	3.8	3.5	3.2	3.1
Total margarine	147,906	139,731	143,463	142,676	r148,093	149,640	9.6	8.9	9.0	8.9	r9.0	9.0
Table margarine	105,991	103,622	109,576	108,854	r112,267	113,278	6.9	6.6	6.9	6.8	r6.8	6.8
Other margarine	41,915	36,109	33,887	33,822	35,826	36,362	2.7	2.3	2.1	2.1	2.2	2.2
Total (fat content)(d)	332,864	328,742	332,258	331,096	r335,397	339,681	21.5	21.0	20.9	20.6	r20.4	20.3
SUGAR—												
As refined sugar	178,282	156,713	130,841	138,246	144,002	150,228	11.5	10.0	8.2	8.6	8.8	9.0
In manufactured foods	501,207	535,659	583,276	568,300	542,422	558,197	32.4	34.2	36.8	35.3	33.1	33.4
Total	679,489	692,372	714,117	706,546	686,424	708,425	43.9	44.2	45.0	43.9	41.8	42.4
Honey	13,873	11,063	12,341	14,679	16,851	16,285	0.9	0.7	0.8	0.9	1.0	1.0
Total(e)	757,985	768,475	790,899	786,628	779,132	806,509	49.0	49.1	49.9	48.9	47.5	48.3
BEVERAGES—												
Tea	22,691	21,175	21,502	20,928	r19,804	19,587	1.5	1.4	1.4	1.3	1.2	1.2
Coffee(f)	32,330	31,405	25,392	28,859	r34,733	33,583	2.1	2.0	1.6	1.8	2.1	2.0
Aerated and carbonated waters												
Beer—	974,171	1,052,930	1,157,189	1,183,676	r1,315,523	1,428,894	63.0	67.3	73.0	73.6	r80.2	85.6
Low alcohol	n.a.	201,339	201,044	185,009	198,592	273,596	n.a.	12.9	12.7	11.5	12.1	16.4
Other beer	n.a.	1,590,745	1,630,970	1,605,987	1,618,095	1,614,416	{	101.6	102.8	99.8	98.7	96.7
Total beer	1,821,438	1,792,084	1,832,014	1,790,996	1,816,687	1,888,012	117.8	114.5	115.5	111.3	110.8	113.1
Wine	315,238	332,749	343,112	337,588	338,701	318,888	20.4	21.3	21.6	21.0	20.6	19.1
ALCOHOL—												
Beer—	n.a.	4,832	4,825	4,440	4,766	6,566	n.a.	0.31	0.30	0.28	0.29	0.39
Low alcohol	n.a.	76,356	78,287	77,087	77,669	77,492	{	4.88	4.94	4.79	4.74	4.64
Other beer	87,429	81,188	83,112	81,527	82,435	84,058	5.65	5.19	5.24	5.07	5.03	5.03
Total beer	39,714	38,887	39,879	39,233	39,287	37,009	2.57	2.48	2.51	2.44	2.40	2.22
Wine	17,311	18,764	20,147	18,997	20,275	21,488	1.12	1.20	1.27	1.18	1.24	1.29
Spirits	144,454	138,839	143,138	139,757	141,997	142,555	9.34	8.87	9.02	8.69	8.66	8.54
Total												

(a) Includes flour used for breadmaking. (b) Includes commercial disposals only. (c) Includes butter equivalent of butter oil, butter concentrate and ghee. (d) Includes an estimate for vegetable oils and other fats. (e) Includes sugar content of syrups and glucose. (f) Coffee and coffee products in terms of roasted coffee.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1988-89

	Supply				Utilisation				Per capita per year	
	Net change in stocks	Production		Imports	Total supply	Exports	Non-food use, waste, etc.	For processed food		Total
		Commercial	Estimated home production								kg
MEAT AND MEAT PRODUCTS—										
Carcass meat(a)—										
Beef and veal										
Beef	(+3,829)	1,491,478	—	7,215	1,494,864	809,777	..	..	685,087	41.0
Veal	(+3,714)	1,459,371	—	5,772	1,461,429	801,679	..	..	659,750	39.5
Lamb	(+1,115)	32,107	—	1,443	33,435	8,098	..	(b)	25,337	1.5
Mutton	(+749)	289,596	—	9	288,856	40,230	..	..	248,626	14.9
Pigmeat	(+1,871)	253,827	—	2,058	254,014	141,082	..	..	112,932	6.8
Total carcass meat	(-1,190)	308,143	—	3	309,336	7,349	..	..	301,987	18.1
Offal and meat n.e.i.(a)	(+5,259)	2,343,044	—	9,285	2,347,070	998,438	..	..	1,348,632	80.8
Total Meat and Meat Products(carcass equivalent weight)	(+1,489)	107,789	—	1,943	108,243	54,518	3,000	..	50,725	3.0
Bacon and ham (cured carcass weight)	(+6,748)	2,450,833	—	11,228	2,455,313	1,052,956	3,000	..	1,399,357	83.8
Poultry (dressed weight)	(+83)	121,566	—	1	121,484	39	..	4,286	117,159	7.0
Poultry (dressed weight)	(-2,309)	406,700	3,785	251	413,045	1,043	..	n.a.	412,002	24.7
SEAFOOD—										
Fresh and frozen (edible weight)—										
Fish—										
Australian	n.a.	53,201	5,320	..	58,521	7,438	n.a.	9,250	41,833	2.5
Imported	n.a.	..	..	31,179	31,179	232	n.a.	..	30,947	1.9
Crustacea and molluscs	n.a.	33,119	—	4,678	37,797	14,959	n.a.	2,058	20,780	1.2
Seafood, otherwise prepared (product weight)—										
Australian	(+251)	11,308	—	..	11,057	2,786	..	..	8,271	0.5
Imported—										
Fish	n.a.	..	..	28,450	28,450	92	..	..	28,358	1.7
Crustacea and molluscs	n.a.	..	..	12,691	12,691	73	..	..	12,618	0.8
DAIRY PRODUCTS—										
Market milk (fluid whole)	..	..	..	..	..	..	..	..	(c)1,684,700	litres 100.9
Condensed, concentrated and evaporated milk—										
Full cream Sweetened	(-1,750)	36,326	—	615	38,691	1,934	..	..	36,757	2.2
Full cream Unsweetened	(+50)	28,178	—	835	28,963	6,721	..	..	22,242	1.3
Skim	..	..	..	..	..	..	..	..	(c)16,031	1.0
Powdered milk—										
Full cream	..	..	..	..	..	..	..	..	(c)42,991	2.6
Skim (incl. buttermilk and mixed skim and buttermilk)	..	..	..	..	..	..	..	..	22,732	1.4
Infants' and invalids' food	(-106)	28,961	—	1,406	30,473	7,741	..	..	(c)143,627	8.6
Cheese (natural equivalent weight)	..	..	..	..	..	..	..	..	..	..

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1988-89 — continued

	Supply				Utilisation			Per capita per year			
	Net change in stocks	Production		Imports	Total supply	Exports	Non-food use, waste, etc.		For processed food	Total	Apparent consumption in Australia as human food
		Commercial	Estimated home production									kg
FRUIT AND FRUIT PRODUCTS—											
Fresh fruit (incl. fruit for fruit juice)—											
Oranges	..	409,779	20,489	191,886	622,154	66,325	8,196	n.a.	n.a.	547,633	32.8
Other citrus fruit	..	106,668	5,333	27,449	139,450	6,205	n.a.	n.a.	n.a.	133,245	8.0
Other fresh fruit—											
Apples	(d)(+)	328,164	—	6	290,155	18,477	n.a.	30,244	30,244	241,434	14.5
Apricots	..	31,199	—	201	31,400	755	n.a.	7,195	7,195	23,450	1.4
Bananas	..	204,986	—	19	205,005	236	n.a.	—	—	204,769	12.3
Grapes	..	47,549	—	53	47,602	10,873	n.a.	..	..	36,729	2.2
Melons, cantaloupes etc.	..	109,739	—	1	109,740	4,186	n.a.	..	..	105,554	6.3
Peaches	..	55,348	—	2,062	57,410	21,673	n.a.	27,222	27,222	8,515	0.5
Pears	(d)(+)	146,772	—	2	145,546	48,723	n.a.	34,448	34,448	62,375	3.7
Pineapples	..	159,265	—	—	159,265	7,701	n.a.	62,348	62,348	89,216	5.3
Plums and prunes	..	21,057	—	7	21,064	1,562	n.a.	n.a.	n.a.	19,502	1.2
Total	(d)(+)	1,170,644	15,000	30,799	1,177,200	116,876	n.a.	260,213	260,213	800,811	47.9
Jams, conserves, etc. (product weight)	(-)	34,127	1,000	4,167	39,858	2,233	..	..	..	37,625	2.3
Dried vine fruit (product weight)—											
Currants	..	..	..	..	..	..	..	..	..	(e)4,701	0.3
Raisins	..	..	..	..	..	..	..	..	..	(e)3,359	0.2
Sultanas	..	..	..	..	..	..	..	..	..	(e)23,077	1.4
Dried tree fruit (product weight)—											
Apricots	..	..	..	..	..	..	..	..	..	(f)2,335	0.1
Prunes	..	..	..	..	..	..	..	..	..	(f)3,078	0.2
Other	..	..	..	..	..	..	..	..	..	(f)5,455	0.3
Processed fruit (product weight)—											
Apples	(-)	14,266	—	6	14,413	13	..	..	..	14,400	0.9
Apricots	(+)	9,573	150	842	7,385	1,500	..	..	..	5,885	0.4
Mixed fruits (incl. fruit salad)	(+)	32,645	—	—	24,133	15,700	..	..	..	8,433	0.5
Peaches	(-)	28,505	150	1,801	30,589	18,000	..	..	..	12,589	0.8
Other	(+)	73,876	200	36,405	101,420	19,156	..	..	..	82,264	4.9

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1988-89 — continued

	Supply			Utilisation				Per capita per year kg		
	Net change in stocks	Production		Imports	Total supply	Exports	Non-food use, waste, etc.		For pro- cessed food	Apparent consumption in Australia as human food
		Commercial	Estimated home production								Total supply	Total
VEGETABLES—					— tonnes —					
Potatoes	n.a.	1,071,251	25,400	12,601	1,109,252	4,871	77,310		1,027,071	
Other root and bulb vegetables—										
Beetroot	(-908)	26,891	1,882	—	29,681	104	269		29,308	
Carrots	(-525)	154,296	7,715	—	162,536	13,925	4,628		143,983	
Onions	(-400)	199,593	9,980	7,234	217,207	49,383	5,988		161,836	
Parsnips	n.a.	6,540	327	—	6,867	351	131		6,385	
Sweet potatoes	n.a.	6,630	—	9	6,639	—	133		6,506	
White turnips and swedes	n.a.	7,202	216	—	7,418	1,686	144		5,588	
Total	(-1,833)	401,152	20,120	7,243	430,348	65,449	11,293		353,606	
Tomatoes	(-3,707)	299,769	29,977	36,200	369,653	4,840	14,988		349,825	
Leafy and green veg. (incl. legumes)—										
Beans	(+2,364)	50,819	7,623	4,650	60,728	1,340	1,016		58,372	
Cabbages and other greens	(+8)	100,907	5,046	1,036	106,981	3,792	5,046		98,143	
Celery	n.a.	47,697	2,385	—	50,082	281	2,385		47,416	
Lettuce	n.a.	91,065	9,107	587	100,759	2,365	6,375		92,019	
Peas	(-6,388)	108,971	16,346	11,501	143,206	3,693	8,718		130,795	
Total	(-4,016)	399,459	40,507	17,774	461,756	11,471	23,540		426,745	
Other vegetables—										
Asparagus	n.a.	6,140	614	5,302	12,056	2,087	..		9,969	
Cauliflowers	n.a.	81,491	4,075	43	85,609	6,779	5,704		73,126	
Cucumbers (incl. gherkins)	(+510)	17,168	858	3,920	21,436	322	515		20,599	
Marrows, squashes and zucchinis	n.a.	10,945	547	—	11,492	281	n.a.		11,211	
Pumpkins	n.a.	82,320	4,116	—	86,436	281	n.a.		86,155	
Sweet corn	(-4,482)	65,946	3,297	13,849	87,574	290	1,319		85,965	
Other	(-4,634)	75,167	—	32,773	112,574	16,603	n.a.		95,971	
Total	(-8,606)	339,177	13,507	55,887	417,177	26,643	7,538		382,996	
Total all vegetables	(-18,162)	2,510,808	129,511	129,705	2,788,186	113,274	134,669		2,540,243	
GRAIN PRODUCTS—										
Flour (incl. flour for breadmaking)	(+3,013)	1,281,597	..	16,466	1,295,050	89,675	..		1,205,375	
Breakfast foods—										
Oatmeal and rolled oats	n.a.	36,584	..	1,787	38,371	6,670	..		31,701	
Other (from grain)	(+1,005)	161,952	..	5,279	166,226	21,460	..		144,766	
Table rice	n.a.	67,150	..	22,276	89,426	..	..		89,426
Total grain products	(+4,018)	1,547,283	..	45,808	1,589,073	117,805	..		1,471,268	
Bread (g)	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	
EGGS AND EGG PRODUCTS—										
Number of eggs	..	..	..	..	..	..	..	..	'000 doz. (b)178,302
NUTS (in shell)—										
Peanuts	(-6,546)	13,045	n.a.	15,702	35,293	4,696	..	3,150	27,477	
Tree nuts	n.a.	15,836	n.a.	55,191	71,027	2,857	n.a.	n.a.	68,170	

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1988-89 — continued

	Supply			Utilisation				Apparent consumption in Australia as human food
	Net change in stocks	Production		Total supply	Exports	Non-food use, waste, etc.	For processed food	
		Commercial	Estimated home production						Imports	Per capita per year
				— tonnes —				kg
OILS AND FATS—								
Butter	..	..	..	..	..	..	(c)51,862	3.1
Total margarine	(+)1,140	162,277	222	161,359	11,719	..	149,640	9.0
Table margarine	(+)1,256	119,165	222	118,131	4,853	..	113,278	6.8
Other margarine	(-)116	43,112	—	43,228	6,866	..	36,362	2.2
SUGAR—								
As refined sugar	(-)12,148	755,776	253	768,177	2,149	..	150,228	9.0
In manufactured foods	—	615,800	55,749	671,549	113,352	..	558,197	33.4
Honey	—	29,394	431	29,825	13,540	—	16,285	1.0
BEVERAGES—								
Tea	n.a.	767	19,017	19,784	218	..	19,566	1.2
Coffee	n.a.	—	36,585	36,585	3,052	..	33,533	2.0
				— '000 litres —				litres
Aerated and carbonated waters	n.a.	1,447,832	30,100	1,477,932	49,038	..	1,428,894	85.6
Beer—								
Low alcohol	..	..	(i) 520	..	..	..	(j) 273,596	16.4
Other beer	..	..	10,793	..	..	..	1,614,416	96.7
Total beer	..	..	11,313	..	..	..	1,888,012	113.1
Wine—								
Dessert wine	..	..	(i) 209	..	..	..	(k) 19,020	1.1
Sherry	..	..	109	..	..	..	14,584	0.9
Sparkling and carbonated wine	..	..	n.p.	..	..	..	n.p.	n.p.
Table wine	..	..	6,087	..	..	..	243,822	14.6
Vermouth	..	..	262	..	..	..	2,437	0.1
Other wine, n.e.i.	..	..	n.p.	..	..	..	n.p.	n.p.
Total wine	..	..	9,759	..	..	..	318,888	19.1
				— '000 litres alcohol —				litres alcohol
Spirits—								
Brandy	..	..	(i) 635	..	..	..	(j) 2,316	0.14
Gin	..	..	674	..	..	..	945	0.06
Liqueurs (incl. flavoured spirits)	..	..	2,069	..	..	..	2,208	0.13
Rum	..	..	668	..	..	..	3,007	0.18
Vodka	..	..	497	..	..	..	1,008	0.06
Whisky	..	..	10,336	..	..	..	10,439	0.63
Other, n.e.i. (incl. bitters)	..	..	441	..	..	..	1,565	0.09
Total spirits	..	..	15,320	..	..	..	21,488	1.29

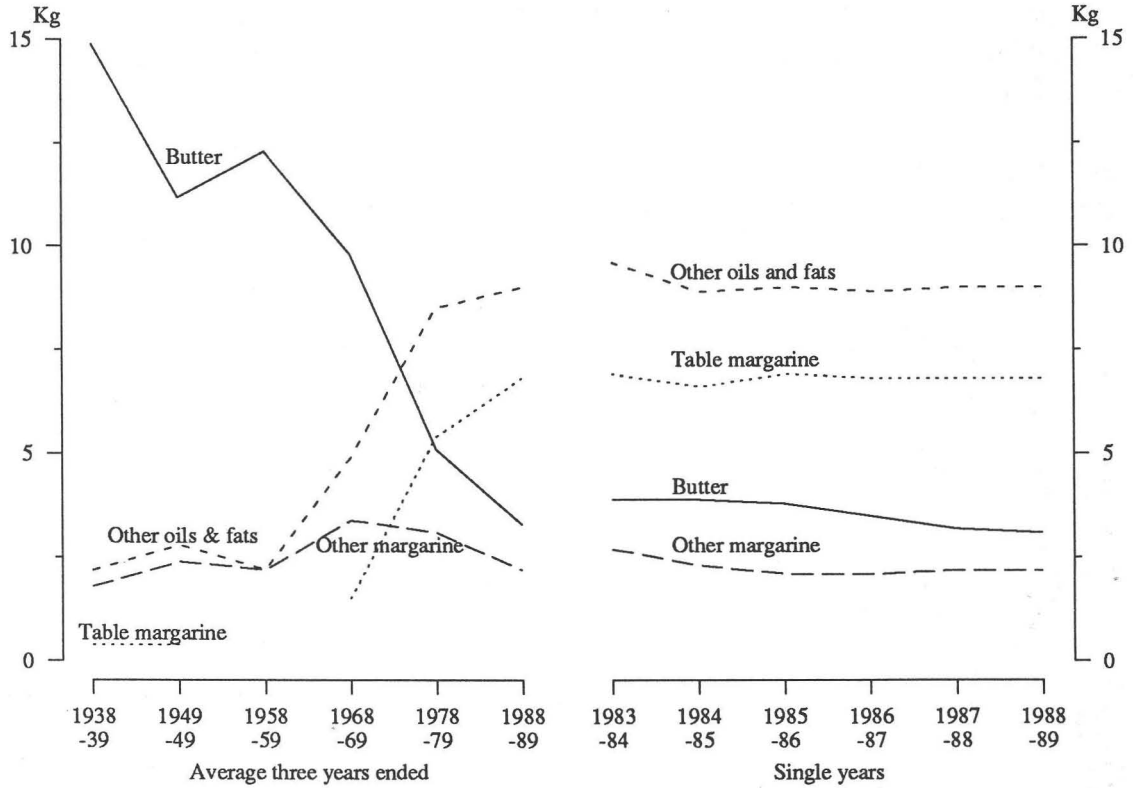
(a) Stocks supplied by the Australian Meat and Livestock Corporation. (b) Processed foods are not shown separately but are included in production and apparent consumption. (c) Domestic sales supplied by the Australian Dairy Corporation. (d) Cold store stocks of apples and pears. (e) Comprises deliveries year ended 30 June as recorded by the Australian Dried Fruits Association, and imports. (f) Comprises deliveries and imports for consumption in Australia. (g) Data collected triennially and not available for 1988-89. (h) See Technical Notes. (i) Imports cleared for consumption in Australia. (j) Comprises quantities upon which excise duty was paid and imports cleared for consumption in Australia. (k) Comprises quantity of sales by winemakers and imports cleared for consumption in Australia.

TABLE 4. ESTIMATED SUPPLY OF NUTRIENTS, UNADJUSTED, AUSTRALIA(a) — continued
(per capita per day)

Commodity group	Protein g	Fat g	Carbo- hydrate g	Calcium mg	Iron mg	Retinol equivalent (b) µg	Vitamin C mg	Thiamin mg	Ribo- flavin mg	Niacin mg	Energy value kJ
Meat and meat products	28.8	r24.8	0.2	12	3.0	1,631	2	0.28	0.56	6.1	r1,408
Poultry	7.4	5.3	—	3	0.4	16	—	0.02	0.04	1.4	319
Seafood	4.0	1.1	—	20	0.3	5	—	0.01	0.02	0.8	114
Dairy products(c)	19.8	21.3	20.7	677	0.5	r216	4	0.21	0.79	0.4	1,459
Fruit and fruit products	1.9	0.2	r24.9	40	0.8	r37	r55	0.12	0.07	0.6	r458
Vegetables and vegetable products	6.1	0.4	24.1	41	1.8	r455	66	0.22	0.14	3.0	537
Grain products	24.6	3.2	167.6	44	4.5	—	—	0.75	0.59	8.3	3,387
Eggs and egg products	2.4	1.9	0.1	7	0.3	30	—	0.01	0.08	—	110
Nuts r	1.9	4.5	0.6	14	0.3	—	—	0.04	0.07	0.8	210
Oils and fats r	0.2	54.8	0.3	4	—	320	—	—	0.01	0.1	2,035
Sugar r	—	—	125.6	5	0.1	—	—	—	—	—	2,009
Beverages(alcoholic)(d) r	1.0	—	7.1	16	0.1	—	7	—	0.01	1.3	719
Total r	98.1	117.7	371.2	882	12.0	2,708	135	1.66	2.37	22.8	12,766
1987-88											
Meat and meat products	r29.6	r25.5	0.2	12	r3.1	1,726	2	0.29	0.58	6.3	r1,448
Poultry	7.7	5.5	—	3	0.4	16	—	0.02	0.05	1.5	335
Seafood	4.1	1.1	—	20	0.3	5	—	0.01	0.02	0.9	115
Dairy products(c)	20.3	21.6	21.5	691	0.6	222	5	0.22	0.80	0.4	1,490
Fruit and fruit products	1.8	0.2	r25.1	37	0.8	37	50	0.11	0.07	0.6	r458
Vegetables and vegetable products	6.7	0.5	25.6	43	2.0	r455	72	0.24	0.16	3.2	575
Grain products r	25.7	3.4	175.3	46	4.8	—	—	0.79	0.64	8.9	3,540
Eggs and egg products	2.3	1.8	0.1	7	0.3	29	—	0.01	0.07	—	108
Nuts r	1.8	4.2	0.5	14	0.3	—	—	0.04	0.07	0.7	195
Oils and fats r	0.2	54.4	0.3	4	—	314	—	—	0.01	0.1	2,018
Sugar r	—	—	122.0	5	0.1	—	—	—	—	—	1,951
Beverages(alcoholic)(d) r	10	—	7.1	16	0.1	—	7	—	0.01	1.3	714
Total r	101.1	118.3	377.6	898	12.6	2,805	136	1.72	2.47	23.8	12,947
1988-89											
Meat and meat products	29.4	25.4	0.2	12	3.0	1,439	2	0.29	0.53	6.2	1,439
Poultry	7.7	5.5	—	3	0.4	16	—	0.02	0.05	1.5	335
Seafood	4.5	1.2	—	22	0.3	6	—	0.01	0.03	0.9	125
Dairy products(c)	20.2	21.9	21.2	687	0.6	226	5	0.21	0.79	0.4	1,494
Fruit and fruit products	2.0	0.2	26.5	41	0.9	39	57	0.13	0.07	0.6	486
Vegetables and vegetable products	6.8	0.5	25.6	45	2.0	485	71	0.24	0.16	3.2	575
Grain products	25.5	3.4	174.7	46	4.9	—	—	0.79	0.65	9.0	3,531
Eggs and egg products	2.2	1.8	0.1	7	0.3	28	—	0.01	0.07	—	103
Nuts	1.8	4.4	0.5	15	0.3	—	—	0.03	0.08	0.7	204
Oils and fats	0.2	54.1	0.2	4	—	312	—	—	0.01	0.1	2,010
Sugar	—	—	124.3	5	0.1	—	—	—	—	—	1,988
Beverages(alcoholic)(d)	1.0	—	7.2	16	0.1	—	7	—	0.01	1.3	710
Total	101.3	118.5	380.5	904	12.8	2,551	142	1.74	2.44	23.8	13,001

(a) Adjustments have not been made for the loss of nutrients in cooking, or the extra niacin obtained from the metabolism of protein. See Table 5 for adjustments for specific vitamin availabilities. (b) Expressed as the sum of retinol content and one sixth of the carotene equivalent. (c) Excludes butter, which is included in 'Oils and fats'. (d) Comprises beer, wine and spirits, the energy value of which includes the contribution made by alcohol.

**APPARENT PER CAPITA CONSUMPTION OF BUTTER, MARGARINE AND OTHER OILS AND FATS
(In terms of fat content)**



**INTAKE OF VITAMIN C
(adjusted for losses in cooking)**

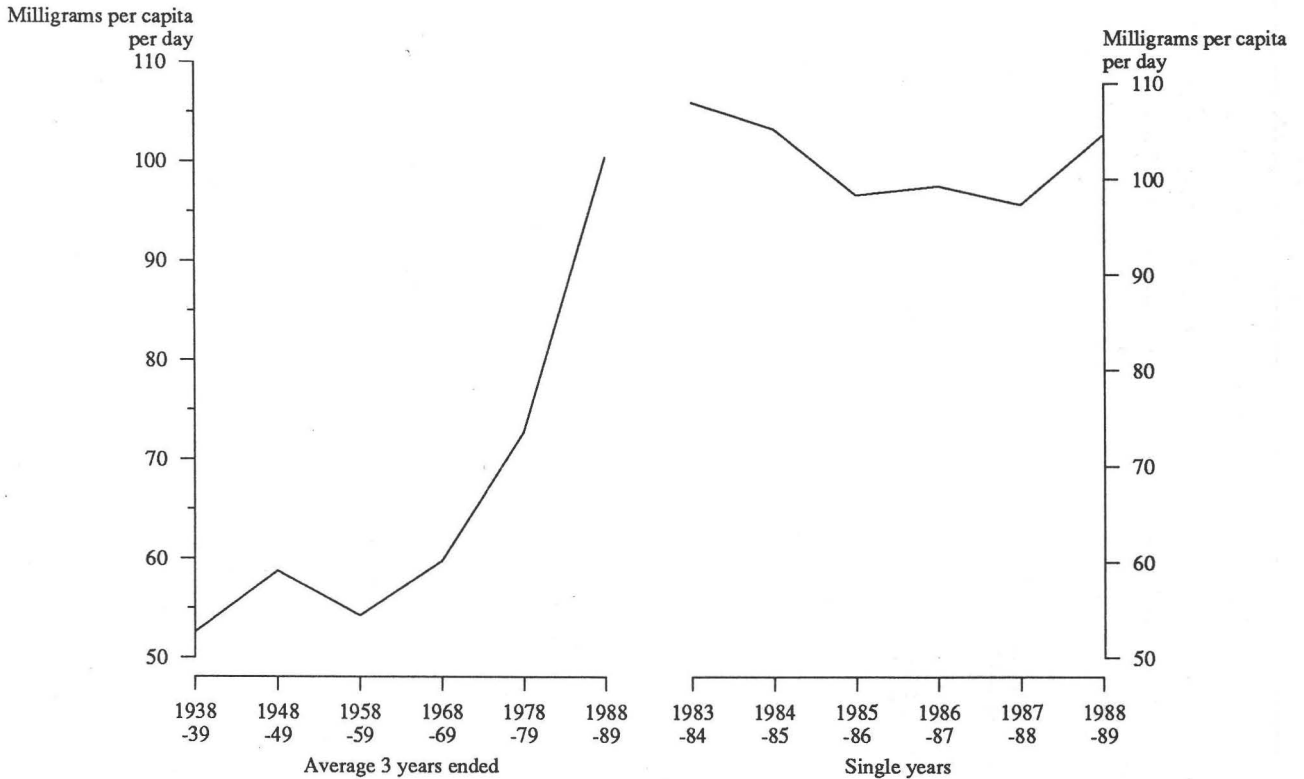


TABLE 5. ADJUSTMENTS TO THE AVAILABILITY OF SPECIFIC VITAMINS, AUSTRALIA(a)
(milligrams per capita per day)

Nutrient	1983-84		1984-85		1985-86		1986-87		1987-88		1988-89	
	Cal- culated value	Amount avail- able	Cal- culated value	Amount avail- able	Cal- culated value	Amount avail- able	Cal- culated value	Amount avail- able	Cal- culated value	Amount avail- able	Cal- culated value	Amount avail- able
Vitamin C—												
Dairy products—												
Fluid whole milk	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Other milk products	1.6	1.6	1.4	1.4	1.6	1.6	1.3	1.3	1.8	1.8	1.9	1.9
Meat and meat products	2.2	(b)	1.9	(b)	1.9	(b)	2.1	(b)	2.2	(b)	2.0	(b)
Fish	0.2	(b)	0.2	(b)	0.2	(b)	0.2	(b)	0.3	(b)	0.3	(b)
Beverages, alcoholic	7.2	7.2	7.2	7.2	7.2	7.2	7.0	7.0	6.8	6.8	7.0	7.0
Fruit and fruit products—												
Fresh, canned and dried r	12.1	11.2	13.2	12.1	13.2	11.9	13.7	12.8	15.2	14.0	15.7	14.3
Cooked	0.3	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2
Citrus	52.4	52.4	46.2	46.2	41.5	41.5	41.3	41.3	34.7	34.7	41.3	41.3
Vegetables and vegetable products—												
Fresh tomatoes	9.1	4.7	9.6	r4.4	8.2	r3.4	8.8	r3.9	9.7	r4.6	10.2	4.8
Lettuce	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Canned vegetables r	6.7	2.6	8.4	5.4	8.1	5.3	9.8	6.0	9.7	5.9	9.3	6.2
Cooked potatoes and other vegetables r	50.0	25.0	49.9	25.0	47.8	23.9	46.8	23.4	51.9	25.9	50.8	25.4
Total vitamin C r	144.8	108.1	141.6	105.3	133.4	98.4	134.7	99.3	136.0	97.4	142.2	104.6
Thiamin r	1.70	1.45	1.67	1.42	1.65	1.41	1.66	1.41	1.72	1.47	1.74	1.48
Niacin equivalent(c) r	21.6	38.3	22.8	39.8	22.7	39.7	22.8	39.8	23.8	41.3	23.8	41.4

(a) Losses in cooking have been estimated for vitamin C and thiamin only; losses of other nutrients are not likely to be significant. (b) Little vitamin C would be retained in these foods. (c) The niacin equivalent of a diet is computed from dietary niacin plus 0.16 times the dietary protein in grams, expressed in milligrams.

TABLE 6. ESTIMATED NUTRIENTS AVAILABLE FOR CONSUMPTION, ADJUSTED, AUSTRALIA(a)(per capita per day)

Nutrient	Unit	Average 3 years ended—											
		1938-39	1948-49	1958-59	1968-69	1978-79	1988-89	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Protein—													
Animal	g	58.7	57.4	59.6	64.2	69.3	63.4	61.3	62.1	62.4	62.3	64.0	64.0
Vegetable	g	30.9	35.3	32.3	35.5	32.2	36.8	35.9	36.1	35.6	35.8	37.2	37.3
Total	g	89.6	92.7	91.9	99.7	101.5	100.2	97.2	98.2	98.0	98.1	101.1	101.3
Fat (from all sources)	g	133.5	121.7	131.7	123.2	152.6	118.2	118.8	118.4	119.0	117.7	118.3	118.5
Carbohydrate	g	377.4	424.8	416.7	406.8	396.2	376.4	375.4	375.4	373.5	371.2	377.6	380.5
Calcium	mg	642	785	817	968	874	895	861	870	862	882	898	904
Iron	mg	15.4	15.1	14.0	14.7	15.7	12.5	12.4	12.2	12.1	12.0	12.6	12.8
Retinol equivalent	µg	1,472	1,389	1,370	1,348	1,602	2,688	2,631	2,412	2,338	2,708	2,805	2,551
Vitamin C	mg	52.6	58.8	54.3	59.8	72.7	100.4	105	105	98	99	97	105
Thiamin	mg	1.2	1.3	1.1	1.4	1.50	1.45	1.45	1.42	1.41	1.41	1.47	1.48
Riboflavin	mg	1.7	1.9	1.8	2.7	2.74	2.43	2.41	2.32	2.29	2.37	2.47	2.44
Niacin equivalent	mg	33.0	32.4	33.3	36.2	40.8	40.8	38.3	39.8	39.7	39.8	41.3	41.4
Energy value	kJ	13,048	13,584	13,801	13,835	14,635	12,905	12,959	12,891	12,871	12,766	12,947	13,001

(a) Adjustments have been made for the loss of nutrients in cooking and the extra niacin obtained from the metabolism of protein. See paragraphs 1 to 6 of Section II for information on the effect on data comparisons of changes to nutrient tables used.

TABLE 7. PERCENTAGE OF TOTAL ENERGY DERIVED FROM EACH COMMODITY GROUP, AUSTRALIA

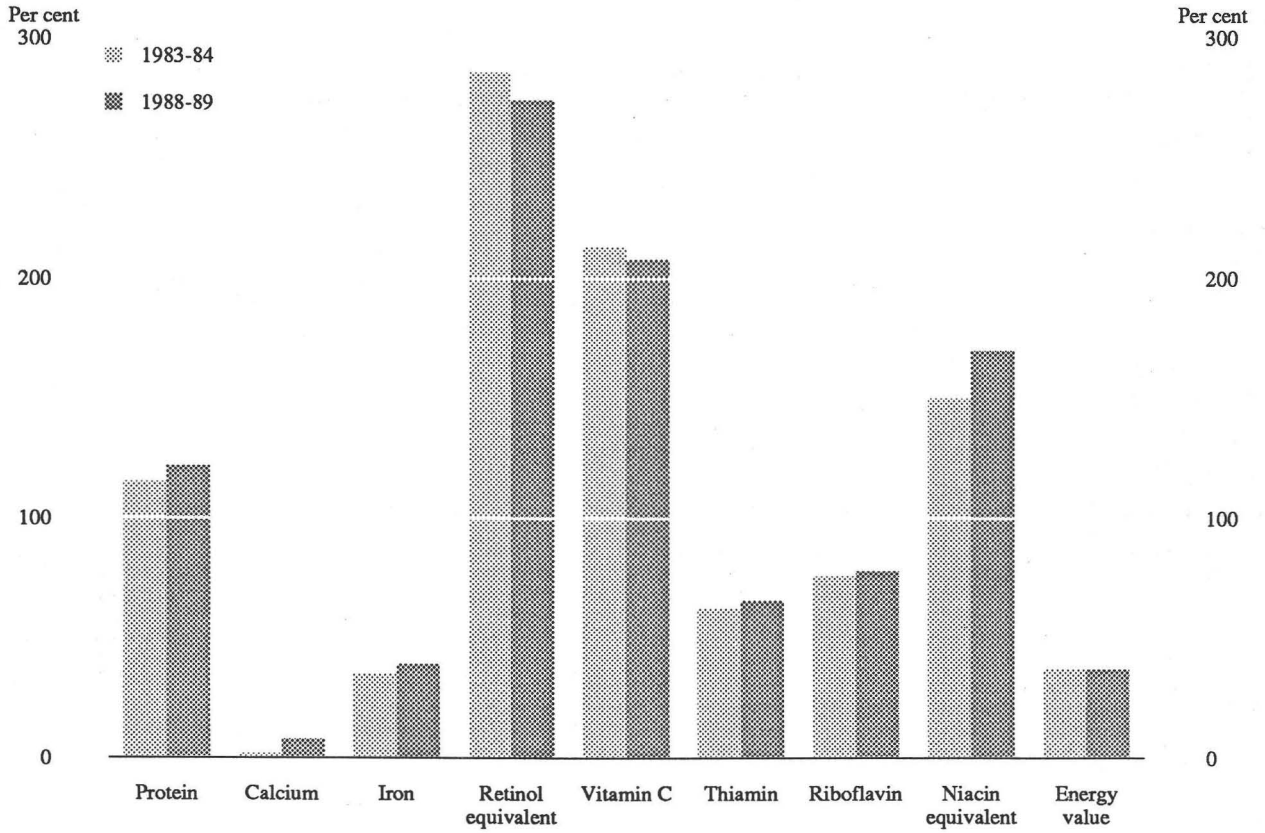
	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Meat and meat products r	11.1	11.3	11.4	11.0	11.2	11.1
Poultry	2.1	2.3	2.4	2.5	2.6	2.6
Seafood	0.9	0.9	0.9	0.9	0.9	1.0
Dairy products	11.0	11.1	11.1	11.4	r11.5	11.5
Fruit and fruit products	3.6	3.8	r3.6	3.6	3.5	3.7
Vegetables and vegetable products	4.2	4.2	4.0	4.2	4.4	4.4
Grain products r	26.5	26.5	26.3	26.5	27.3	27.2
Eggs and egg products	0.9	0.9	0.9	0.9	0.8	0.8
Nuts r	1.4	1.4	1.5	1.6	1.5	1.6
Oils and fats r	16.5	16.0	16.1	15.9	15.6	15.5
Sugar r	16.0	15.8	16.0	15.7	15.1	15.3
Beverages(alcoholic) r	5.9	5.8	5.8	5.6	5.5	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 8. NUTRIENTS AVAILABLE FOR CONSUMPTION(a) IN AUSTRALIA COMPARED WITH RECOMMENDED DIETARY INTAKES (RDI)

	Protein g	Calcium mg	Iron mg	Retinol equivalent µg	Vitamin C mg	Thiamin mg	Ribo- flavin mg	Niacin equivalent mg	Energy value kJ
1983-84—									
RDI	45.2	842	9.2	681	34	0.89	1.37	15.3	9,453
Nutrients—									
Available	97.2	861	12.4	2,631	r108	1.45	2.41	38.3	12,959
In excess of RDI (%)	115	2	35	286	r213	63	76	150	37
1984-85—									
RDI	45.6	842	9.2	682	34	0.90	1.37	15.3	9,458
Nutrients—									
Available r	98.2	870	12.2	2,412	105	1.42	2.32	39.8	12,891
In excess of RDI (%) r	115	3	33	254	210	58	69	160	36
1985-86—									
RDI	45.6	842	9.2	682	34	0.88	1.37	15.3	9,463
Nutrients—									
Available r	98.0	862	12.1	2,338	98	1.41	2.29	39.7	12,871
In excess of RDI (%) r	115	2	31	243	189	60	67	159	36
1986-87—									
RDI	45.8	842	9.2	684	34	0.90	1.37	15.3	9,481
Nutrients—									
Available r	98.1	882	12.0	2,708	100	1.41	2.37	39.8	12,766
In excess of RDI (%) r	114	5	31	296	194	57	73	160	35
1987-88—									
RDI	45.7	840	9.2	683	34	0.89	1.37	15.3	9,471
Nutrients—									
Available r	101.1	898	12.6	2,805	97	1.47	2.47	41.3	12,947
In excess of RDI (%) r	121	7	37	311	187	65	80	170	37
1988-89—									
RDI	45.7	840	9.2	683	34	0.89	1.37	15.3	9,471
Nutrients—									
Available	101.3	904	12.8	2,551	105	1.48	2.44	41.4	13,001
In excess of RDI (%)	122	8	39	274	208	66	78	170	37

(a) Adjustments have been made for the loss of nutrients in cooking and the extra niacin obtained from the metabolism of protein. See paragraph 13 of Section II for the source of Recommended Dietary Intakes (RDI) used and the determination of population RDIs. Protein, thiamin, riboflavin, niacin and iron are calculated on the mid value for the RDI range given for each age group. Energy calculated from mid value of the range up to 18 years. Energy for 18 years onwards is based on BMRX1.5 and weights from NHF Risk Factor Prevalence Study 1983.

**NUTRIENTS AVAILABILITY: PERCENTAGE DIFFERENCE BETWEEN
RECOMMENDED DIETARY ALLOWANCE AND AVAILABILITY**



EXPLANATORY NOTES

Introduction

This publication contains detailed statistics of the consumption of foodstuffs and nutrient intake in Australia for 1988-89 as well as comparative data for earlier years. Section I deals with the supply and utilisation of foodstuffs, while Section II deals primarily with the level of nutrient intake in Australia. These levels are compiled by officers of the Nutrition Section of the Commonwealth Department of Health, Housing and Community Services to whom thanks are extended. Preliminary statistics for 1990-91 covering major food items have been published in *Apparent Consumption of Selected Foodstuffs, Australia, 1990-91, Preliminary* (4315.0), which is available from any ABS office.

Related publications

2. Users may also wish to refer to the following priced publications which are available on request:

Summary of Crops, Australia, 1989-90 (7330.0)

Livestock and Livestock Products, Australia, 1989-90 (7221.0)

Manufacturing Commodities, Principal Articles Produced, Australia, 1986-87 (8303.0)

Foreign Trade, Australia, Exports, 1989-90 (5436.0)

Foreign Trade, Australia, Imports, 1989-90 (5437.0)

Manufacturing Production, Australia, Food, Drink Tobacco, Stock and Poultry Food (8359.0) — issued monthly

Sales of Australian Wine and Brandy by Winemakers (8504.0) — issued monthly

3. The ABS has more detailed agricultural statistics on magnetic tape, microfiche and floppy disk. Agstats on floppy disk offers a wider range of data, aggregated at smaller geographic areas than those generally available in printed publications.

4. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. *Statistics Weekly* (1318.0), issued on Thursdays, describes the highlights from publications released during the week. The *Catalogue* and *Publications Advice* are available from any ABS office.

5. The figures shown in this publication have been revised where necessary and as a consequence may not agree with similar data shown in previous publications.

6. The derivation of Apparent Consumption includes the addition of imports and the subtraction of exports of foodstuffs available for consumption. A new system for classifying imports and exports, The Australian Harmonised Commodity Classification, was introduced on 1 January 1987 and may have some impact on the data from 1987-88 onwards, when compared with data for previous years.

7. Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Symbols and other usages

n.a.	not available
..	not applicable
—	nil or rounded to zero
n.e.i.	not elsewhere included
n.c.	not collected
|	break in series
n.p.	not available for separate publication but included in totals where applicable.

Abbreviations

kg	kilograms
g	grams
mg	milligrams
µg	micrograms
kJ	kilojoules

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Floppy disk service

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TECHNICAL NOTES

I. SUPPLY AND UTILISATION OF FOODSTUFFS

In general, the method employed in this publication to estimate consumption in Australia of each of the various foodstuffs is as follows:

Apparent consumption = (Commercial production + Estimated home production + Imports + Opening stocks) minus (Exports + Usage for processed food + Non-food usage + Wastage + Closing stocks).

Per capita consumption = Apparent consumption divided by the mean population for that period.

2. The following mean population figures (year ended 30 June basis) have been used in this publication:

Average 3 years ended—		Individual years—	
1938-39	6,870,261	1983-84	15,466,675
1948-49	7,651,558	1984-85	15,651,653
1958-59	9,741,073	1985-86	15,861,410
1968-69	11,919,046	1986-87	16,089,900
1978-79	14,275,870	1987-88	16,402,017
1988-89	16,396,205	1988-89	16,696,699

3. In interpreting the figures shown in this publication the following factors should be noted:

- (a) Changes in the composition of the population have a bearing on trends in the patterns of consumption (particularly on estimates of consumption per capita). The most significant change since 1945, which has almost certainly had some effect on the consumption pattern, is the increasing proportion of the population born overseas and resident for only a comparatively short period in Australia (e.g. the proportion of the population born overseas was 9.8 per cent in 1947, 14.3 per cent in 1954, 16.9 per cent in 1961, 18.4 per cent in 1966, 20.2 per cent in 1971, 20.1 per cent in 1976, 20.6 per cent in 1981 and 21.2 per cent in 1986).
- (b) Another similar factor is the age distribution of the population which may also affect data relating to per capita consumption. For example, while per capita consumption of infants' and invalids' food has been calculated on the basis of the mean Australian population for the years concerned, these commodities are clearly consumed by a relatively small proportion of people. The effective per capita consumption by these consumers would therefore be considerably higher than the figures shown in relevant tables¹. The overall ageing of the population will also have an effect on the patterns of consumption.
- (c) In general, the statistics in the publication are for financial years. However, where there is a marked seasonal pattern in the production or marketing of certain crops, the statistics in practice refer to crop

years. For example, statistics relating to commercial production of citrus fruit are on the basis of the year ending 31 March.

4. In estimating apparent consumption, four significant components in the general equation should be noted.

- (a) *Consumption*. Because of qualifications in respect of stocks and wastage (described below), the term 'consumption' is used in a specialised sense, since the quantities actually measured are broadly the quantities available for consumption at a particular level in the process of distribution, i.e. ex-market, ex-store or ex-factory, depending on the method of marketing and/or processing. It is considered that in most cases these foodstuffs will find their way to the ultimate individual consumers with a minimum time lag. The figures therefore represent fairly accurately total consumption, as defined above, in the year to which they relate.

The general consumption equation is not used in those instances where certain components of the equation are not available, or where a more appropriate technique for estimating consumption is available. In this publication the equation is not used for milk, some milk products, cheese, rice, bread, butter, eggs, beer, wine, spirits and dried fruits.

- (b) *Commercial production and estimated home production*. Available production statistics are confined mainly to commercial production. Calculations of the extent of production by householders for their own use are not always available. This applies particularly in the case of vegetables, fruit, poultry and fish. However, in all these cases estimates of non-commercial production have been included, based on somewhat inadequate information obtained from a household expenditure survey conducted in 1944 and other investigations conducted by government departments during the 1939-45 War. The ABS is currently updating this information. Production statistics are derived from sources such as the annual Agricultural Census and other annual or monthly collections for the year in question. Where these are unavailable, outside sources or reliable estimates have been used.
- (c) *Stocks*. Statistics of stocks refer to in-store (i.e. those held by marketing authorities) and factory stocks. With minor exceptions no details are available of wholesalers', retailers' or householders' stocks. For perishable commodities this point is of little importance since the very nature of the commodity precludes the accumulation of stocks. This is not the case, however, with nonperishable foods, and estimates derived for consumption of

such foodstuffs for individual years may not state the position correctly particularly in the case of canned foodstuffs which have a long shelf life.

- (d) *Wastage.* In many cases, allowance is not made for wastage before the foodstuffs are consumed. The importance of this factor is difficult to estimate, but in some seasons gluts result in considerable destruction of perishable foodstuffs. The effect of ignoring wastage is ultimately to overstate the consumption figures. In recent years, however, it is likely that there has been less wastage of foodstuffs than previously, because of more efficient methods of distribution and storage including refrigerated transport, air freight and household refrigeration.

Additional information

5. Additional information related to some of the individual food groups in Tables 1, 2 and 3 is as follows:

Sugar. Sugar consumption represents apparent consumption in terms of disposals of sugar by refineries and the sugar content of disposals of sugar products by manufacturers. In general stocks are not taken into account. At one time, however, sugar used in the brewing industry was, in energy contribution terms, being counted twice, i.e. as sugar in manufactured foods and as alcohol in beer. Once the effect of the double count was removed in 1980-81, there resulted an apparent decrease in the potential energy contribution in sugar (in sugar forms). Data from 1975-76 have been corrected.

Vegetables. Vegetables are shown in terms of fresh or fresh equivalent, that is, the statistics in effect relate to the pre-processing stage. For example, the consumption of tomatoes includes fresh tomatoes consumed plus the fresh equivalent of tomatoes consumed as tomato products (canned tomatoes, tomato juice, etc.). Stocks, imports and exports of processed tomatoes are converted to fresh equivalent for this purpose. Separate data on processed vegetables (product weight) and fresh vegetables are no longer available for publication; some data are available on request by contacting the ABS on Canberra (06) 252 5329 or by writing to PO Box 10, Belconnen, ACT 2616.

Alcoholic beverages. The increased market share of 'low alcohol' beers and wines had led to a revision in the methodology of calculating litres of alcohol consumption. From 1984-85, alcohol consumption data show the apparent decrease resulting from the inclusion of low alcoholic beverages.

Fruit. Fruit is shown in terms of fresh or fresh equivalent and, as in the case of vegetables, relates to the pre-processing stage. Stocks, imports and exports are converted to fresh equivalent for this purpose. Data are also shown for some fruit as product weight. Melons and cantaloupes, included in vegetables in earlier issues of this publication, are now included in fruit.

Meat. The methodology for calculating meat consumption has been revised from 1975-76 and now shows meat consumption in carcass weight equivalent terms. Canned meat as such is not available. Carcass weight is defined as ex-abattoir (i.e. bone-in). Owing to diverse cutting practices by butchers and the difficulty in clearly defining 'retail weight of meat' it is considered impractical to derive a factor for the purpose of expressing estimated meat consumption in terms of retail weight. Estimates of retail weight as a percentage of carcass weight range from 70 per cent for beef, 80 to 85 per cent for lamb and 80 per cent for pork.

Eggs and egg products. Data prior to 1982-83 for eggs are based on Egg Boards' records of output from areas under their control, plus estimates of production for uncontrolled areas and for 'back-yard' poultry keepers based on information obtained from other sources. Because of the inadequacy of data covering the volume of uncontrolled production, the data shown from 1982-83 to 1987-88 consists of commercial disposals, by State Egg Boards, of areas under their control. Estimates of egg production in NSW for 1988-89 were obtained from other sources as were estimates for North Queensland and the Northern Territory. Care should therefore be taken in comparing current egg consumption with data from earlier years.

Grain and grain products. Bread statistics are derived from the annual Manufacturing Census sales and transfers out of bread by manufacturing establishments which employ four or more employees. Consequently, bread statistics are understated due to establishments with less than four employees being out-of-scope. The Manufacturing Census was not conducted in 1985-86, and in 1987-88 and 1988-89 commodity data were not collected, hence, bread and some breakfast foods statistics are not available for these years.

Fish. For the purpose of estimating supplies of fish available for consumption in this publication, an allowance of 10 per cent of commercial production has been made for the non-commercial catch of fish. No such allowances have been made for crustacea or molluscs. Fresh and frozen seafood is expressed in edible weight (i.e. the edible portion of the fish or shellfish).

Oils and fats (including butter). In assessing consumption of all oils and fats no allowance is made for fats consumed in association with carcass meat. The quantities of carcass meat shown in Table 3 include fats which remain in the carcass after slaughtering and which may or may not be subsequently removed for boiling down, etc., prior to retailing of the meat. No duplication occurs for fats removed from the carcass at the slaughtering stage. It has, however, been necessary to estimate the availability of other edible oils and fats. Source limitations have always made this difficult to update but a new method for estimating the availability of these foods was determined in 1980-81. Data from 1975-76 have been revised accordingly and these revisions have increased the apparent per capita consumption of fat by about 27 per cent.

II. LEVEL OF NUTRIENT INTAKE

In order to determine whether the quantities of the various foodstuffs available for consumption are likely to be sufficient for adequate nutrition of the population, it is necessary to calculate the amount of nutrients the foods provide.

2. The analysis in this section is based on the statistics collected by the Australian Statistician as set out elsewhere in this publication and is therefore subject to the same qualifications. Data in this publication have been revised where necessary and as a consequence may not agree with similar data shown in previous publications. Where data have been rounded, discrepancies may occur between sums of the component items and totals.

3. The basis for the calculations of estimated supplies of nutrients available for consumption in Australia from the 1987-88 publication onwards is *Composition of Foods, Australia* (COFA) Cashel, English & Lewis 1989; English, Lewis & Cashel 1990; Lewis & English 1990 (AGPS, Canberra). The factors used for converting foods from 'as described weight' to 'edible weight' are now taken directly from COFA or determined from data available through the Australian food analytical program. COFA provides a complete replacement of *Metric Tables of Composition of Australian Foods* (TCAF) with conversion factors and nutrients values based on a food analytical program begun in the early 1980s. The basis for the calculations of estimated supplies of nutrients available for consumption in Australia was previously changed after Bulletin No. 23 (1967-68) and from then to 1986-87 was dependent on conversion factors calculated from TCAF, S. Thomas and M. Corden, (AGPS Canberra, 1977). The previously used tables were those compiled by Anita Osmond and Winifred Wilson, 1954. While comparison with figures published for previous years is no longer entirely valid, the differences in most of the conversion factors are not so great as to negate the value of all such comparisons. To assist the user to assess the effect of the change in factors and nutrient table, beginning with the 1987-88 bulletin, the tables in Section II have been recalculated from 1983-84 onwards using the revised factors.

4. Revised factors and nutrients have been applied to all food groups in the 1988-89 publication except nuts. Revised Australian data on nuts are not expected to be significantly different from those available on TCAF. A more detailed level of data on alcoholic beverages has also been used from the 1987-88 publication onwards.

5. The biggest impact of the change in calculation bases has been on the meat and poultry data. For meat, a significant proportion of this has been due to the change to factors used to estimate 'raw edible weight of available retail meat' from carcass equivalent weight. The increase in available vitamin A has been due to the revised data on offal content of this nutrient.

6. Following a recommendation of the joint FAO - WHO Expert Group which reported on the *Requirements*

of Vitamin A, Thiamine, Riboflavin and Niacin (FAO Rome, 1967) the total vitamin A of the diet is stated in micrograms of vitamin A (retinol) activity. Strict comparisons between vitamin A activity values published since 1968-69 cannot be made with previous values.

7. *Nutrients available for consumption.* Details of the estimated supplies of nutrients passing into consumption in the years 1983-84 to 1988-89 are shown in Table 4. All nutrient determinations are based on the fresh equivalent edible weight of the foods with an allowance for natural wastage, i.e. from skins, seeds, bones, etc. The exceptions are foods such as cheese, powdered and canned milks, dried fruit, canned fish and alcoholic beverages.

8. Losses in total food available for consumption due to processing have been allowed for by way of an adjustment to the conversion factors used for processed and preserved foods. No allowances have been made for losses of nutrients (other than vitamins) due to the effect of storage and cooking; losses of vitamins are referred to in the following paragraphs. The figures in Tables 6 and 8 are adjusted for losses of vitamins in cooking and for the additional niacin obtained from the metabolism of protein (see Table 5 for these adjustments).

9. *Loss of vitamins in cooking.* As a result of storage and cooking, certain foods, particularly fruit and vegetables, lose some of their nutritive value. Estimates of possible loss of vitamin C and thiamin in cooking are set out in Table 5. Losses in cooking of other nutrients do occur but not in amounts likely to be significant. Losses due to storage have not been estimated.

10. Losses of vitamin C cover a wide range, from almost nil to 100 per cent. On average, 60 per cent of vitamin C in leafy green vegetables is lost through cooking, while losses for skinned potatoes, other vegetables and stewed fruit are approximately 50 per cent. There is also a significant loss of thiamin in the cooking of meat and vegetables, the amount of loss depending on the method and duration of cooking. In a normal mixed diet it is accurate enough for statistical purposes to allow 15 per cent deduction from the total thiamin available. The estimates in Table 5 are calculated assuming average conditions and methods of cooking. Losses could be reduced to less than these figures by careful cooking. Losses from uncooked fruits and vegetables are assumed to be negligible.

Trends in the consumption of nutrients

11. All nutrients available for consumption are in excess of the estimated recommended dietary intakes (RDIs) for the Australian population. With the statistics shown on page 19 of this publication, it should be noted that revised RDIs for all nutrients are now being applied. This use of revised data began with the 1982-83 publication. The previous revision was in 1977-78. This change in the time series suggests 'lowered' availability for some of these nutrients relative to earlier years but is explained by the change in the basis of comparison. Calcium has been one

of the most affected, now being available marginally in excess of the estimated recommended dietary intake for the population.

12. The combined effect of reduced available energy and iron for consumption and an increase in the reference energy and iron has been to nearly halve the energy and iron available in excess of the population reference. A reduction in the reference protein has markedly increased the protein available in excess of the population reference.

Dietary intakes

13. The nutritive value of food available for consumption may be compared with an arbitrary reference such as the *Recommended Dietary Intakes for Australians*, formulated by the Nutrition Committee of the National Health and Medical Research Council. There has been a revision of the RDIs with serial publication of revised references. This comparison has been made in Table 8, where the quantity of nutrients available for consumption in the Australian diet (as shown in Table 4), less estimated cooking loss for some vitamins, is compared with desirable quantities recommended by the Council. From the 1987-88 publication, all comparisons in Table 8 are made against the revised RDIs. The RDIs shown in Table 8 are population averages weighted according to the various age

and sex groups in the population based on information from the publication *Estimated Age Distribution of the Population* (3201.0). For this publication they have been determined on the data for each individual year.

14. The comparisons in these tables are useful as an indication of trends in food consumption, although it must be emphasised that the RDIs do not necessarily represent nutrient requirement; rather they were devised for the planning of practical diets within the average Australian food pattern. Precise information concerning human requirements of certain nutrients is far from complete, and no conclusion regarding the nutritional status of the community should be drawn from these comparisons. A deviation from the allowances of the order of 10-15 per cent is not regarded as a serious deficiency. Even if the nutrient intake is more than 15 per cent below the reference, a nutritional deficiency cannot be assumed without clinical verification. The calculated figures, being averages, give no information on the food consumption of individuals or of specific groups within the population. Also the figures represent food available for consumption, which is not the same as foods consumed. The Food and Agriculture Organisation of the United Nations has estimated that in communities with a plentiful food supply, up to 15 per cent of the food available may be wasted.

III. PER CAPITA STATISTICS

The following age-group distributions of the Estimated Resident Australian Male and Female Population at 30 June 1988 and 1989 are based on the results of the Australian Population Census of 30 June 1986 brought forward by reference to natural increase derived from records of births and recorded age at death, and details of overseas migration.

Data may be used in conjunction with information in Tables 2 and 3 to vary apparent per capita consumption according to the user's specific interest.

ESTIMATED RESIDENT POPULATION BY AGE GROUPS, AUSTRALIA, 30 JUNE 1988 AND 1989

Age group (years)	Number		Per cent of total population		Number		Per cent of total population	
	1988	1989	1988	1989	1988	1989	1988	1989
	MALES				FEMALES			
0-4	627,128	634,547	3.79	3.77	598,678	604,921	3.62	3.59
5-9	624,509	635,942	3.78	3.78	592,120	604,082	3.58	3.59
10-14	640,221	633,390	3.87	3.76	607,911	601,726	3.68	3.57
15-19	721,490	724,741	4.36	4.31	690,356	691,952	4.17	4.11
20-24	674,272	682,201	4.08	4.05	649,893	657,231	3.93	3.90
25-29	709,726	717,358	4.29	4.26	694,311	702,376	4.20	4.17
30-34	665,373	687,154	4.02	4.08	660,426	678,090	3.99	4.03
35-39	641,312	651,140	3.88	3.87	634,916	647,999	3.84	3.85
40-44	599,470	622,865	3.62	3.70	571,182	595,306	3.45	3.54
45-49	461,794	486,115	2.79	2.89	435,902	459,329	2.64	2.73
50-54	394,521	405,586	2.39	2.41	377,030	387,825	2.28	2.30
55-59	375,549	372,202	2.27	2.21	362,590	360,893	2.19	2.14
60-64	359,938	362,850	2.18	2.16	369,404	368,365	2.23	2.19
65-69	292,740	307,901	1.77	1.83	330,324	345,478	2.00	2.05
70-74	212,637	211,366	1.29	1.26	267,913	264,926	1.62	1.57
75-79	144,082	151,622	0.87	0.90	207,629	218,587	1.26	1.30
80-84	73,934	77,191	0.45	0.46	129,449	133,987	0.78	0.80
85 and over	38,354	40,630	0.23	0.24	101,069	105,211	0.61	0.63
All ages	8,257,050	8,404,801	49.93	49.94	8,281,103	8,428,284	50.07	50.06

Source: *Australian Demographic Statistics, March Quarter 1991* (3101.0) published by the ABS on 11 September 1991.



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