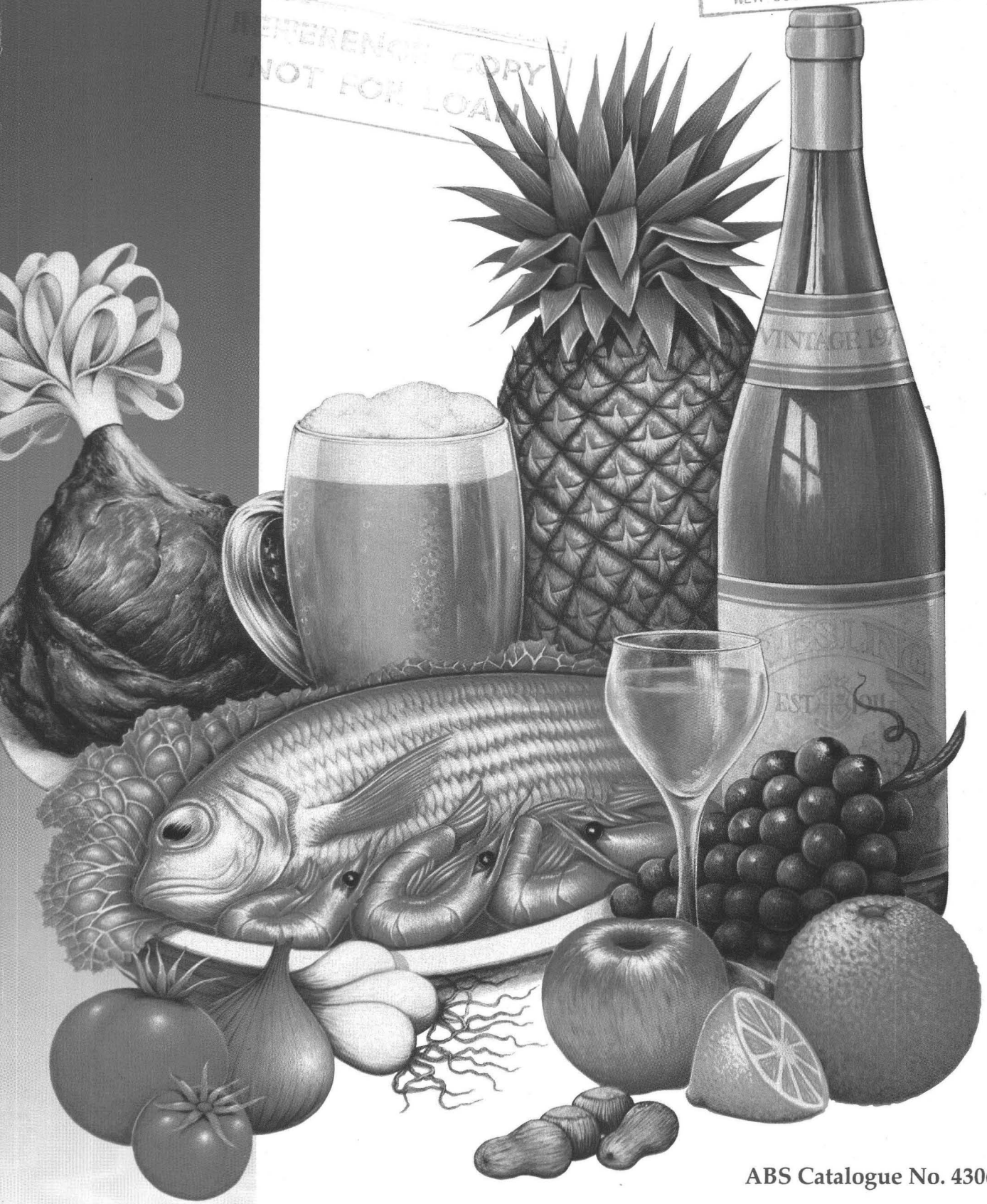
Australian Bureau of Statistics

Apparent Consumption of Foodstuffs and Nutrients Australia 1989-90



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APPARENT CONSUMPTION OF FOODSTUFFS AND NUTRIENTS, AUSTRALIA 1989-90

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SUMMARY OF FINDINGS

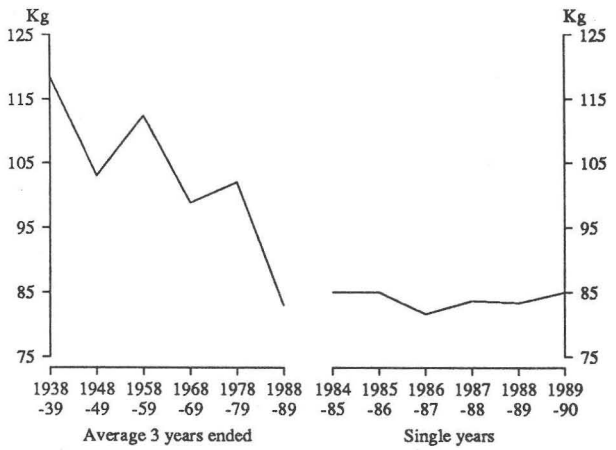
Meat and Meat Products

Over the past six years it has become evident that the long term downward trend in the consumption of total meat and meat products since 1938-39 has levelled. Overall consumption of total meat and meat products increased marginally by 1.6 kg in 1989-90 over the previous year to 85.0 kg per capita, which was the same per capita consumption as 1984-85. Although the per capita consumption of beef (the most important individual component of meat and meat products) did not change significantly in the six years ended 1989-90, the per capita consumption of veal fell by 28.6 per cent, from 2.1 kg per capita in 1984-85 to 1.5 kg in 1989-90.

Conversely mutton consumption increased 24.2 per cent over the same period. In 1989-90, mutton intake increased by 20.6 per cent to 8.2 kg per capita, compared with a fall of 13.9 per cent for the previous year.

Consumption of pigmeat has increased steadily since 1948-49, with Australians eating 18.4 kg of pigmeat per person during 1989-90. Pigmeat products, bacon and ham, were also more popular with per capita consumption increasing 10.4 per cent since 1984-85, to 7.4 kg in 1989-90.

APPARENT PER CAPITA CONSUMPTION OF MEAT AND MEAT PRODUCTS



Consumption of offal increased by 7.7 per cent in 1989-90, after falling 23.5 per cent in 1988-89.

Overall in 1989-90, meat produced in Australia accounted for 99.8 per cent of total meat supply. Whilst 47.0 per cent of that supply went to export markets, the remaining 53.0 per cent was available for domestic consumption.

Poultry consumption appears to have levelled off at 24.6 kg per capita; this represents a marginal decrease of 0.4 per cent on intake in the previous year.

Seafood

Total seafood consumption did not increase in 1989-90. However, per capita consumption of Australian fish rose 12.0 per cent to 2.8 kg. This rise was offset by falls in consumption of fresh and frozen imported fish, and crustacea and molluscs, down 10.5 per cent and 8.3 per cent respectively.

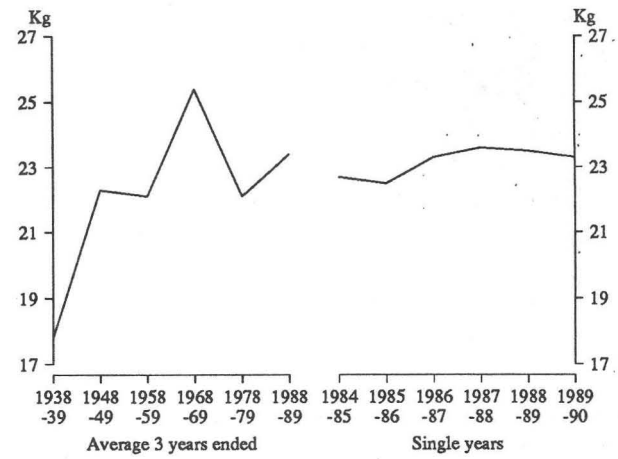
In the six years ended 1989-90, seafood consumption increased from 7.5 kg to 8.6 kg per capita. The most notable change in consumption over that time being consumption of Australian fish, which increased by 55.6 per cent. Since 1938-39 the consumption of seafood in Australia has increased by approximately 75.5 per cent.

Dairy Products

Since 1948-49 the per capita consumption of total dairy products has remained relatively constant. However, in the last decade, while the per capita consumption of market milk has remained stable, the consumption of condensed, skim and powdered milk has decreased. During this period the consumption of cheese has increased by approximately 58.5 per cent.

Since 1938-39 the per capita consumption of infants' and invalids' food has trebled.

APPARENT PER CAPITA CONSUMPTION OF DAIRY PRODUCTS



Fruit

Total fruit consumption during 1989-90 decreased marginally by 1.0 per cent to 112.4 kg per capita compared with a 7.5 per cent increase in 1988-89. It was also 1.9 per cent less than in 1984-85. Since 1938-39 consumption of fruit has increased by approximately 43.0 per cent. The major reason for this has been the 20.0 kg per capita increase in the consumption of citrus fruit (including juice) during this period.

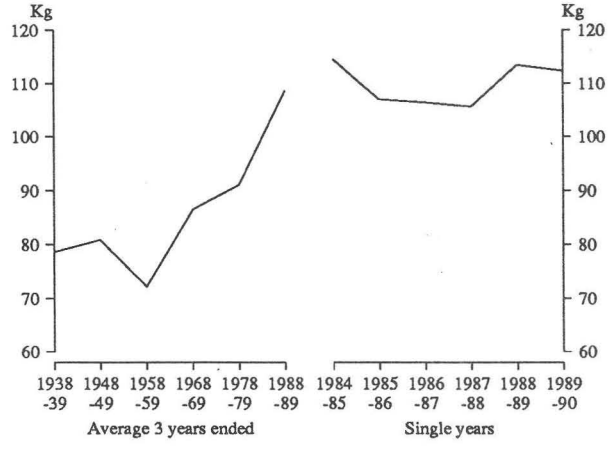
In recent years, however, the consumption of citrus fruit has tended to fluctuate. Consumption in 1989-90 was 34.3 kg per capita, a fall of 6.5 kg or 15.9 per cent when compared with 1988-89. This decrease followed a 19.6 per cent increase in the previous year. More significantly, it is 11.0 kg or 24.3 per cent less than the per capita consumption recorded in 1984-85. These variations can be

attributed largely to annual changes in supply. Conversely, consumption of other fresh fruit during 1989-90 was 6.9 per cent higher at 54.3 kg per capita, and followed a 6.1 per cent increase in 1988-89. Compared with 1984-85, consumption of other fresh fruit rose by 12.9 kg, an increase of 31.2 per cent.

Consumption of dried fruit continued to decline, and in 1989-90 was 4.0 per cent less than consumption in 1988-89 and 20.0 per cent lower than in 1984-85.

Consumption of processed fruit increased by 2.1 kg to 9.5 kg per capita (up 28.4%). Even so, this was 14.4 per cent lower than consumption in 1984-85.

APPARENT PER CAPITA CONSUMPTION OF FRUIT AND FRUIT PRODUCTS

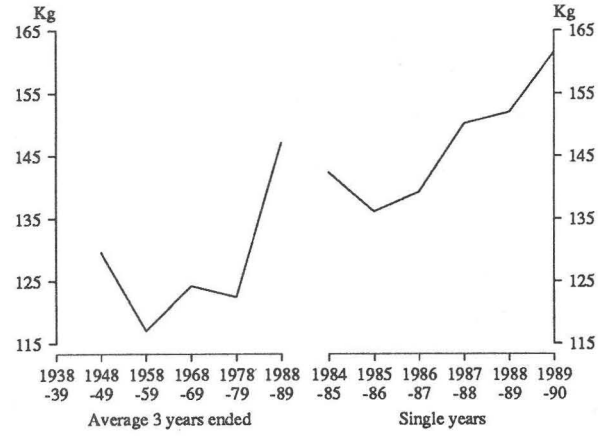


Vegetables

During 1989-90, per capita consumption of total vegetables increased for the fourth successive year to a record high of 161.6 kg (up 6.3%). The most significant rises were in potatoes and tomatoes, which increased by 11.1 per cent and 12.9 per cent respectively when compared with 1988-89. The only vegetable group which did not follow this trend was other root and bulb vegetables, which fell 1.5 kg or 7.1 per cent on the consumption in the previous year; this decrease followed a 14.0 per cent increase in 1988-89. Since 1984-85 total vegetable consumption has increased by 19.2 kg per capita or 13.5 per cent. Since 1948-49 the per capita consumption of tomatoes has doubled to 23.7 kg in 1989-90. This has been due to the large increase in the availability of tomatoes in the southern States in winter.

In 1989-90, total domestic vegetable production accounted for over 93.0 per cent of total supply. The balance came from imported vegetable products, which increased by 56.9 per cent in 1989-90 when compared with imports during the previous year. At 2,740.1 thousand tonnes, total apparent consumption of vegetables accounted for 90.8 per cent of usage of the total supply in 1989-90; 4.3 per cent went to export markets, whilst the remaining 4.9 per cent was accounted for in waste and non-food usage.

APPARENT PER CAPITA CONSUMPTION OF VEGETABLES



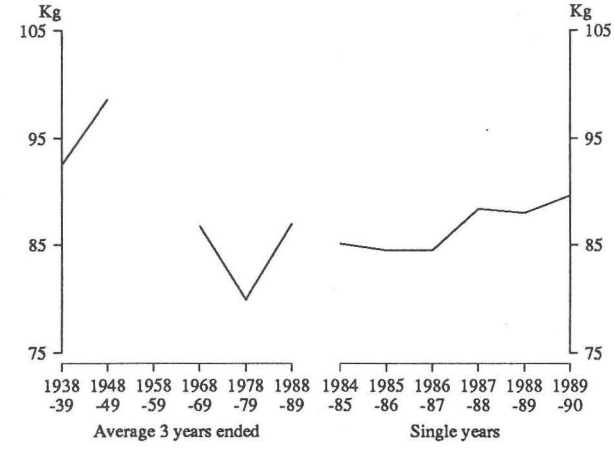
Grain products

During 1989-90 consumption of grain products increased by 1.7 kg to 89.7 kg per capita, a rise of 1.9 per cent. Consumption of grain products in 1989-90 was 5.4 per cent greater than in 1984-85.

The trend towards increasing consumption of table rice continued and since 1986-87 consumption has grown by 2.1 kg to 5.8 kg (up 56.8%). Similarly, breakfast food consumption rose, particularly oatmeal and rolled oats which has increased by 0.6 kg to 1.9 kg (up 46.2%) since 1984-85.

Overall, since 1938-39, the consumption of grain products (excluding bread) has remained virtually stable. What has changed is the emphasis on the individual products. Since 1938-39 consumption of flour has decreased by

APPARENT PER CAPITA CONSUMPTION OF GRAIN PRODUCTS



13.3 per cent while consumption of breakfast foods has increased by 116.7 per cent.

Eggs and Egg Products

Consumption of eggs has fallen each year since 1981-82. During 1989-90 consumption declined by a further 2.3 per cent to 125 eggs per capita.

Nuts

Consumption of tree nuts did not change in 1989-90. However, peanut consumption rose sharply from 1.6 kg in 1988-89 to 2.0 kg. This increase of 25.0 percent followed a 5.9 percent fall in 1988-89. Since 1984-85 peanut consumption has increased by 0.6 kg per capita or 42.9 per cent. The upsurge in the total supply of peanuts was largely a result of increased imports in 1989-90, whilst local production declined for the second successive year.

Oils and Fats

Consumption of oils and fats declined steadily over the six years to 1989-90, and at 19.9 kg was 5.2 per cent less than in 1984-85. Particularly significant is the continuing downward trend in butter intake which fell from 3.9 kg in 1984-85 to 2.9 kg in 1989-90, a fall of 25.6 per cent.

Sugar

Per capita consumption of total sugar has shown a falling trend since 1975-76. During this period per capita consumption of refined sugar has fallen by 31.7 per cent and sugar in manufactured foods by 12.6 per cent. Honey consumption fell 20.0 per cent to 0.8 kg per capita.

APPARENT PER CAPITA CONSUMPTION OF SUGAR

Beverages

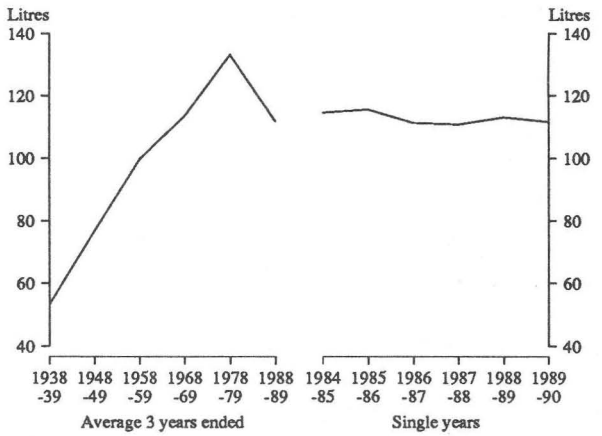
Coffee consumption did not change in 1989-90. The downward trend in consumption of tea continued, falling 8.3 per cent to 1.1 kg per capita. Since 1984-85, consumption of tea has declined by 21.4 per cent and by 64.5 per cent since 1938-39.

Per capita consumption of aerated and carbonated waters increased marginally during 1989-90 (up 1.9%) compared with a 6.7 per cent increase in 1988-89. Since 1984-85 it has risen by 19.9 litres or 29.6 per cent and by 39.9 litres (84.4%) since 1968-69.

Consumption of low alcohol beer has risen steadily each year since 1986-87, and in 1989-90 increased by 2.4 litres to 18.8 litres. This represents a gain of 14.6 per cent and compares with the record increase of 35.5 per cent in the previous year. Whilst demand for low alcohol beer continues to grow, it was offset by a fall in the consumption of other beer which recorded a fourth consecutive year of decline. At 92.8 litres per capita consumption fell 4.0 per cent during 1989-90. Total beer consumption decreased by 1.3 per cent to 111.6 litres in 1989-90, after an increase of 2.1 per cent in 1988-89.

The downward trend in wine continued in 1989-90, and at 18.3 litres consumption is at the same level as it was in 1980-81.

APPARENT PER CAPITA CONSUMPTION OF BEER



Alcohol

During 1989-90, consumption of alcohol (expressed in terms of alcoholic content) continued to decline, falling by 2.0 per cent to 8.37 litres alcohol per capita. However, alcohol consumed as low alcohol beer did not follow this trend increasing by 35.9 per cent during 1989-90. Moreover, since 1984-85 it has increased by 71.0 per cent. In contrast, alcohol consumed as wine fell 14.1 per cent in the six years ended 1989-90.

Nutrient Intake

In 1989-90 the unadjusted estimates of the supply of nutrients (see Table 4) did not vary significantly from the previous year. The largest variation was in retinol equivalent which increased by 3.9 per cent following a decrease of 13.0 per cent the previous year. Since 1984-85 major changes to the unadjusted supply of nutrients included niacin, up 6.1 per cent and iron, up 5.7 per cent.

The changes to the percentage of total energy derived from each commodity group since 1984-85 (see Table 7) has reflected changes in consumption during this period. Energy derived from consumption of grain products, the group contributing most to total energy, increased by 4.2 per cent whereas energy derived from oils and fats decreased by 6.2 per cent.

All nutrients available for consumption continued to be in excess of the recommended dietary intake (RDI's) for the Australian population (see Table 8). The table shows a wide range with the availability of calcium being only 6 per cent in excess of RDI through to Vitamin C and retinol equivalent being 200 and 258 per cent respectively in excess of RDI.

NUTRIENTS AVAILABILITY: PERCENTAGE DIFFERENCE BETWEEN RECOMMENDED DIETARY ALLOWANCE AND AVAILABILITY

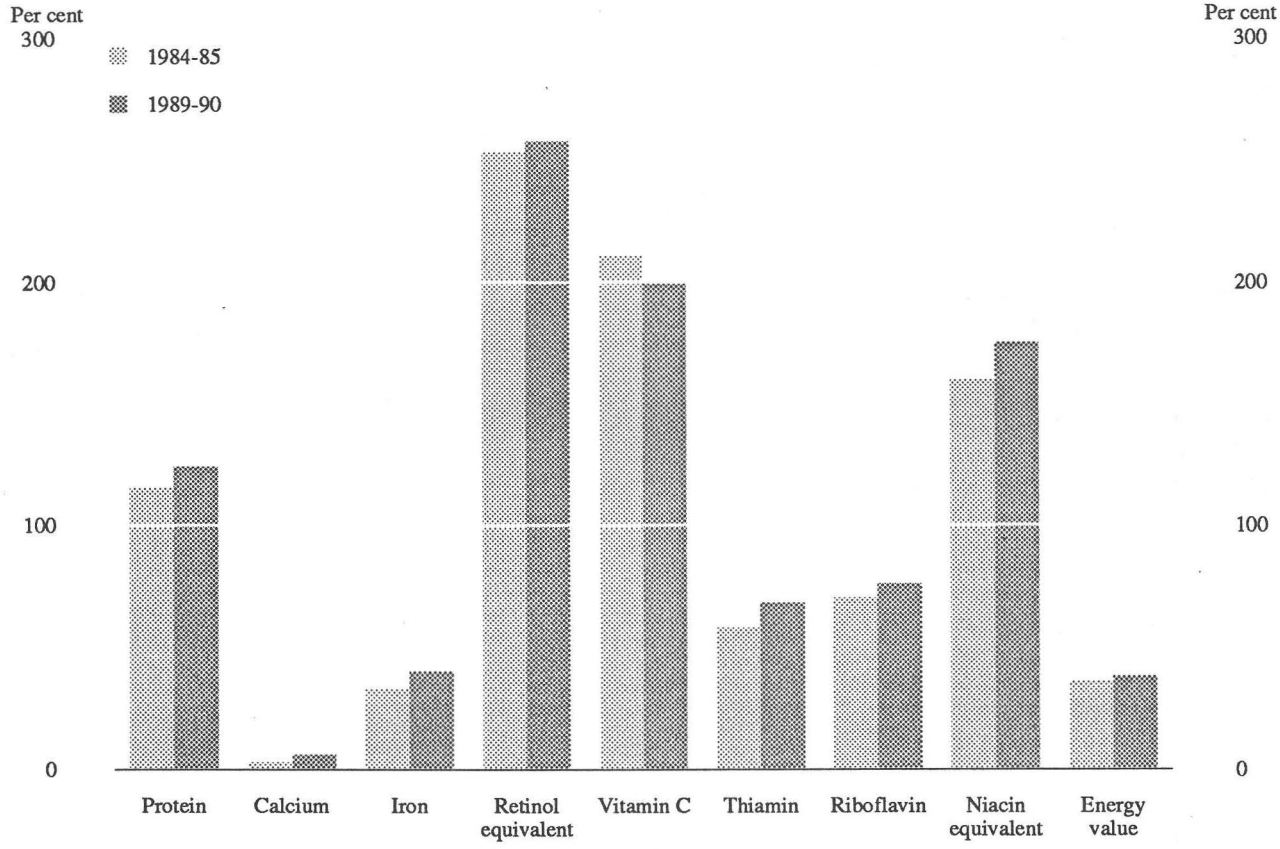


TABLE 1. APPARENT PER CAPITA CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA
(kg per year, except where otherwise stated)

	Average 3 years ended						Current year
	1938-39	*1948-49*	*1958-59*	*1968-69*	*1978-79*	*1988-89*	*1989-90*
MEAT AND MEAT PRODUCTS—							
Carcass meat—							
Beef and veal	63.6	49.5	56.2	40.0	64.8	40.1	40.8
Lamb	6.8	11.4	13.3	20.5	14.4	14.9	14.8
Mutton	27.2	20.5	23.1	18.8	3.6	7.3	8.2
Pigmeat	3.9	3.2	4.6	6.7	13.3	17.5	18.4
Total carcass meat	*101.5*	*84.6*	*97.2*	*85.9*	*96.1*	*79.8*	*82.2*
Offal and meat n.e.i.	3.8	4.0	5.2	5.1	5.9	r3.1	2.8
Total Meat and Meat Products (carcass equivalent weight)	**118.5**	**103.0**	**112.4**	**98.8**	**102.0**	**r83.0**	**85.0**
Canned meat (canned weight)	1.0	1.2	1.9	2.2	1.6	n.a.	n.a.
Bacon and ham (cured carcass weight)	4.6	5.3	3.2	3.6	6.0	6.9	7.4
POULTRY—							
Poultry (dressed weight)	n.a.	n.a.	n.a.	8.3	17.1	24.3	24.6
SEAFOOD—							
Fresh and frozen (edible weight)—							
Fish—							
Australian	2.7	2.4	1.4	1.4	1.6	2.4	2.8
Imported			1.4	1.9	1.2	1.9	1.7
Crustacea and molluscs	0.3	0.3	0.4	0.8	0.9	0.9	1.1
Seafood, otherwise prepared (product weight)(a)—							
Australian	1.9	1.4	0.4	0.4	0.5	0.5	0.5
Imported—							
Fish			0.8	1.0	1.8	1.7	1.8
Crustacea and molluscs					0.4	0.6	0.7
Total seafood	**4.9**	**4.1**	**4.5**	**5.6**	**6.4**	**8.0**	**8.6**
DAIRY PRODUCTS—							
Market milk (fluid whole)(litres)(b)	106.4	138.7	128.7	128.2	100.5	101.8	100.7
Condensed, concentrated and evaporated milk—							
Full cream—							
Sweetened	2.0	1.6	1.2	1.1	0.8	2.2	2.4
Unsweetened(c)		1.8	2.9	3.5	2.5		
Skim	n.a.	n.a.	0.6	0.7	1.6	1.2	1.4
Powdered milk—							
Full cream	1.2	1.5	1.1	0.8	1.3	0.9	1.0
Skim (incl. buttermilk and mixed skim and buttermilk)	—	0.3	1.1	4.3	2.7	2.7	2.4
Infants' and invalids' food	0.5	0.6	1.0	1.3	1.2	1.2	1.6
Cheese (natural equivalent weight)(d)	2.0	2.5	2.6	3.5	5.3	8.3	8.4
Total (converted to milk solids fat and non-fat)(e)	**17.8**	**22.3**	**22.1**	**25.4**	**22.1**	**23.4**	**23.3**
FRUIT AND FRUIT PRODUCTS—							
Fresh fruit (incl. fruit for fruit juice)—							
Citrus	14.5	16.9	16.1	22.5	34.5	38.5	34.3
Other	42.6	39.5	35.6	40.8	34.6	r47.7	54.3
Jams, conserves, etc. (product weight)	5.2	5.6	3.9	3.3	2.0	2.1	2.3
Dried fruit (product weight)	3.8	3.9	2.8	2.5	2.0	2.4	2.4
Processed fruit (product weight)	3.5	3.4	6.0	9.9	10.5	r8.2	9.5
Total (fresh fruit equivalent)	**78.7**	**80.9**	**72.2**	**86.5**	**91.0**	**r108.6**	**112.4**
VEGETABLES—							
Potatoes	47.1	56.3	51.7	53.7	50.1	62.0	68.3
Other root and bulb vegetables(f)	n.a.	19.1	15.9	17.1	16.7	19.6	19.7
Tomatoes	7.1	11.5	13.0	14.2	13.6	19.6	23.7
Leafy and green vegetables	n.a.	20.5	17.9	21.3	24.3	r23.7	26.1
Other vegetables	n.a.	22.3	18.6	18.1	17.9	22.2	23.9
Total (fresh equivalent weight)	**n.a.**	**129.7**	**117.1**	**124.3**	**122.5**	**r147.2**	**161.6**

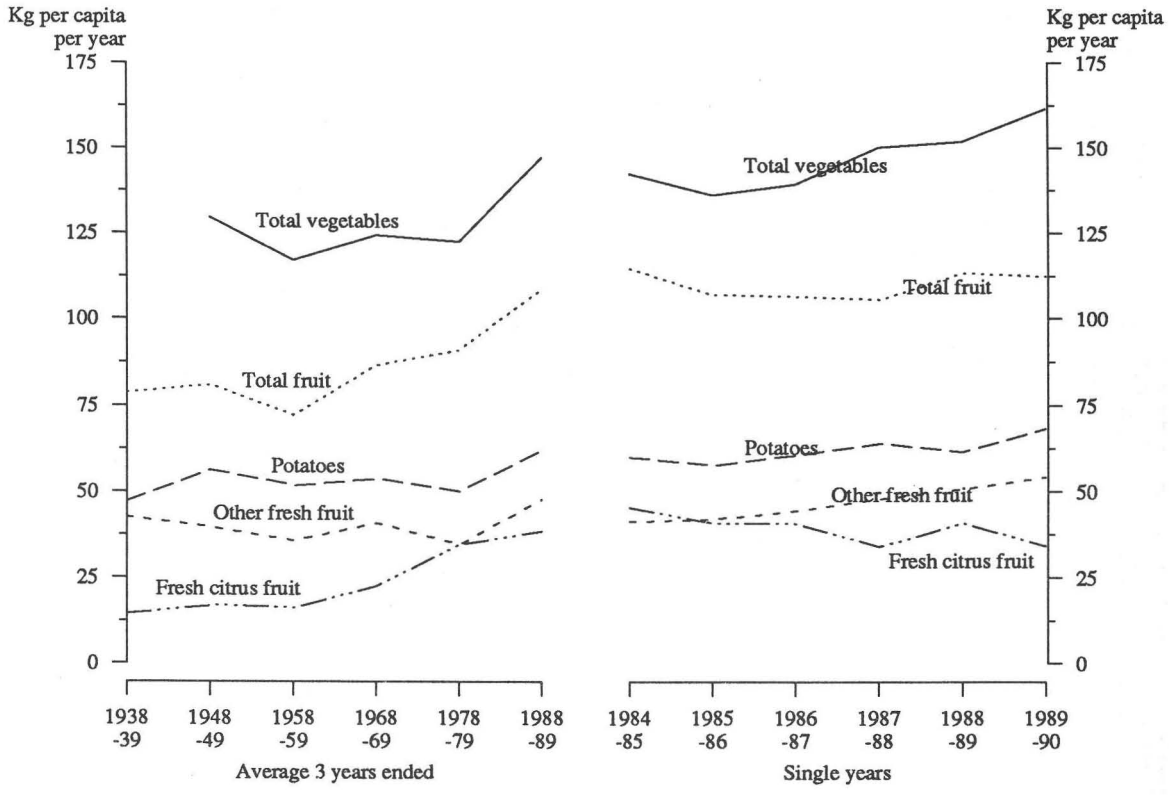
For footnotes see end of table.

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

	Average 3 years ended						*Current year*
	1938-39	*1948-49*	*1958-59*	*1968-69*	*1978-79*	*1988-89*	*1989-90*
GRAIN PRODUCTS—							
Flour(g)	84.9	91.6	82.3	77.4	69.6	72.6	73.6
Breakfast foods	4.8	6.1	6.2	6.8	7.8	9.7	10.4
Table rice	1.8	0.4	n.a.	1.9	2.4	4.7	5.8
Total	**92.5**	**98.6**	**n.a.**	**86.8**	**79.9**	**87.0**	**89.7**
Bread(h)	49.6	64.0	69.1	59.5	47.7	43.9	n.y.a.
EGGS AND EGG PRODUCTS—							
Total	**12.1**	**12.7**	**10.2**	**12.6**	**12.4**	**n.c.**	**n.c.**
Equivalent number of eggs(i)	243	255	206	222	220	133	125
NUTS (in shell)—							
Peanuts	n.a.	4.2	3.1	2.8	2.1	1.8	2.0
Tree nuts	n.a.	1.8	3.4	5.8	2.9	3.7	4.1
OILS AND FATS—							
Butter	14.9	11.2	12.3	9.8	5.1	r3.2	2.9
Margarine—							
Table	0.4	0.4	n.a.	1.5	5.4	6.8	6.5
Other	1.8	2.4	2.2	3.4	3.1	2.2	2.2
Total (fat content)(j)	**17.1**	**14.0**	**n.a.**	**r14.3**	**21.6**	**r20.4**	**19.9**
SUGAR—							
As refined sugar	32.0	31.2	27.0	21.0	14.9	8.8	11.0
In manufactured foods	16.3	23.1	23.6	27.7	34.6	33.9	30.6
Total(k)	**50.8**	**56.8**	**53.0**	**51.9**	**54.5**	**48.2**	**48.2**
BEVERAGES—							
Tea	3.1	2.9	2.7	2.3	1.7	1.2	1.1
Coffee(l)	0.3	0.5	0.6	1.2	1.6	2.0	2.0
Aerated and carbonated waters (litres)	n.a.	n.a.	n.a.	47.3	67.4	79.9	87.2
Beer (litres)	53.2	76.8	99.7	113.5	133.2	111.7	111.6
Wine (litres)	2.7	5.9	5.0	8.2	14.7	20.2	18.3
ALCOHOL (litres alcohol)(m)—							
Beer	2.55	3.58	4.79	5.45	6.40	5.04	4.97
Wine	0.35	0.77	0.87	1.15	1.98	2.35	2.13
Spirits	0.50	0.80	0.74	0.89	1.21	1.24	1.28
Total	**3.40**	**5.15**	**6.40**	**7.49**	**9.59**	**8.63**	**8.37**

(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 1986-87 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 21. (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. From 1989-90 onwards data for beer have been compiled on the basis of excise data.

APPARENT PER CAPITA CONSUMPTION OF VEGETABLES AND FRUIT



APPARENT PER CAPITA CONSUMPTION OF SUGAR

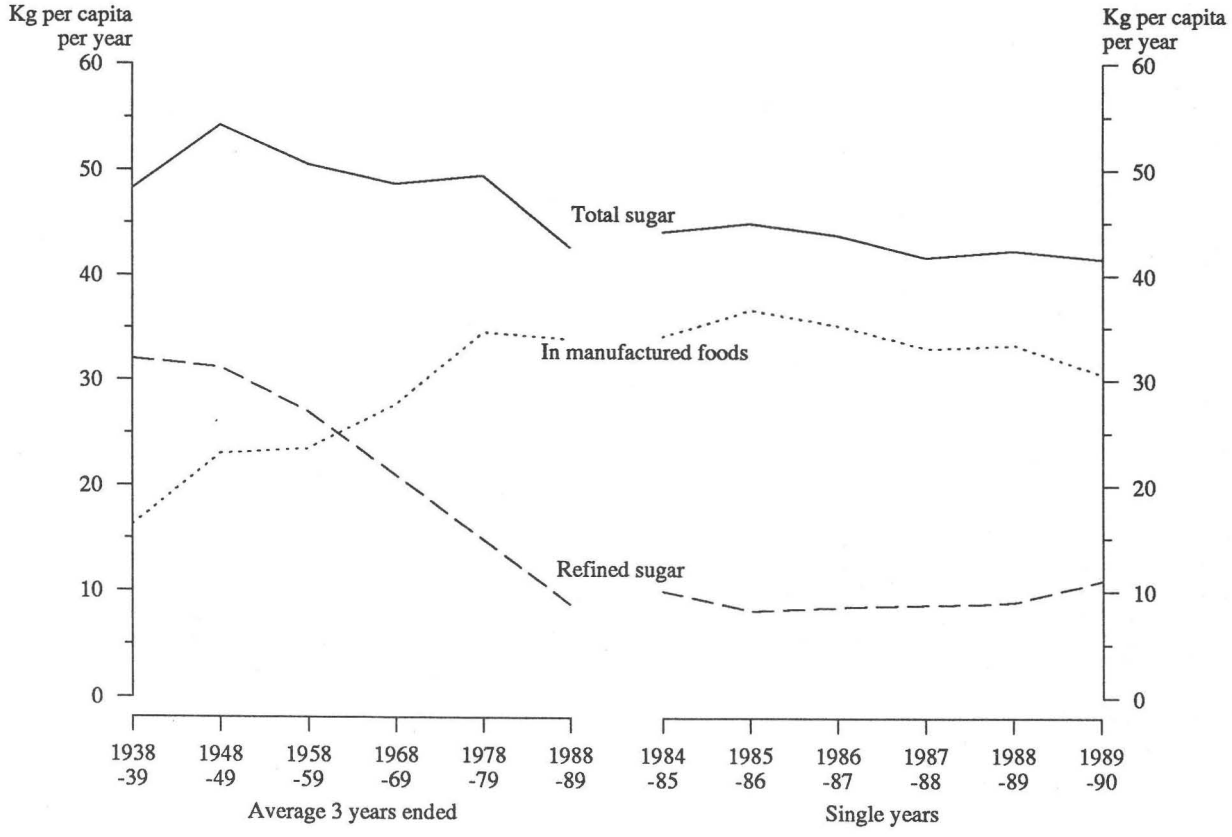


TABLE 2. TOTAL APPARENT CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA

	Available for consumption—						*Apparent per capita consumption—*					
	1984-85	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1984-85*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*
MEAT AND MEAT PRODUCTS—			— tonnes—							—kg—		
Carcass meat—												
Beef and veal	*659,538*	*655,883*	*630,083*	*656,178*	*685,087*	*691,319*	*42.1*	*41.4*	*39.2*	*40.0*	*41.0*	*40.8*
Beef	626,244	622,610	599,394	626,242	659,750	665,421	40.0	39.3	37.3	38.2	39.5	39.2
Veal	33,294	33,273	30,689	29,937	25,337	25,898	2.1	2.1	1.9	1.8	1.5	1.5
Lamb	266,902	268,213	241,015	243,842	248,626	251,456	17.1	16.9	15.0	14.9	14.9	14.8
Mutton	103,920	112,979	118,383	130,110	r112,942	139,224	6.6	7.1	7.4	7.9	6.8	8.2
Pigmeat	256,249	268,901	269,877	288,136	301,987	312,297	16.4	17.0	16.8	17.6	18.1	18.4
Total carcass meat	*1,286,609*	*1,305,976*	*1,259,359*	*1,318,266*	*r1,348,642*	*1,394,296*	*82.2*	*82.3*	*78.3*	*80.4*	*80.8*	*82.2*
Offal and meat n.e.i.	44,175	42,633	55,083	r55,321	r43,545	47,395	2.8	2.7	3.4	r3.4	r2.6	2.8
Total Meat and Meat Products (carcass equivalent weight)	**1,330,784**	**1,348,609**	**1,314,442**	**r1,373,587**	**r1,392,187**	**1,441,691**	**85.0**	**85.0**	**81.7**	**r83.7**	**r83.4**	**85.0**
Bacon and ham (cured carcass weight)	105,503	103,693	107,996	r116,191	r115,970	124,662	6.7	6.5	6.7	7.1	r6.9	7.4
POULTRY—												
Poultry (dressed weight)	341,014	365,168	378,091	r405,182	r411,921	417,010	21.8	23.0	23.5	24.7	24.7	24.6
SEAFOOD—												
Fresh and frozen (edible weight)—												
Fish—												
Australian	28,796	34,274	36,577	41,046	41,833	47,555	1.8	2.2	2.3	2.5	2.5	2.8
Imported	30,088	28,552	28,936	31,968	30,947	29,590	1.9	1.8	1.8	1.9	1.9	1.7
Crustacea and molluscs	14,556	11,758	13,042	13,786	20,780	17,951	0.9	0.7	0.8	0.8	1.2	1.1
Seafood otherwise prepared (product weight)—												
Australian	6,977	7,233	7,855	7,863	r8,243	7,999	0.4	0.5	0.5	0.5	0.5	0.5
Imported—												
Fish	29,605	28,729	27,599	25,411	28,358	29,668	1.9	1.8	1.7	1.5	1.7	1.7
Crustacea and molluscs	7,964	8,174	8,527	9,868	12,618	12,697	0.5	0.5	0.5	0.6	0.8	0.7
Total seafood	**117,986**	**118,720**	**122,536**	**129,942**	**r142,779**	**145,460**	**7.5**	**7.5**	**7.6**	**7.9**	**8.6**	**8.6**
DAIRY PRODUCTS—			—'000 litres—							—litres—		
Market milk (fluid whole)	1,593,752	1,625,485	1,655,000	1,665,600	1,684,700	1,706,900	101.8	102.5	102.9	101.5	100.9	100.7
Condensed, concentrated and evaporated milk—			—tonnes—							—kg—		
Full cream sweetened	10,531	43,679	39,597	33,715	36,757	40,484	0.7	2.8	2.5	2.1	2.2	2.4
Full cream unsweetened	31,071						2.0					
Skim	18,978	13,467	16,055	20,834	22,242	24,093	1.2	0.8	1.0	1.3	1.3	1.4
Powdered milk—												
Full cream	11,062	9,358	13,735	15,867	16,031	17,100	0.7	0.6	0.9	1.0	1.0	1.0
Skim	35,743	36,082	43,787	47,997	42,991	41,418	2.3	2.3	2.7	2.9	2.6	2.4
Infants' and invalids' food	15,013	18,829	15,245	21,133	22,732	27,481	1.0	1.2	0.9	1.3	1.4	1.6
Cheese (natural equivalent weight)	126,142	125,498	130,117	135,679	143,627	141,844	8.1	7.9	8.1	8.3	8.6	8.4
Total (converted to milk solids, fat and non-fat)	**355,536**	**357,636**	**374,820**	**386,787**	**391,541**	**395,421**	**22.7**	**22.5**	**23.3**	**23.6**	**23.5**	**23.3**

For footnotes see end of table.

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

	Available for consumption—						*Apparent per capita consumption—*					
	1984-85	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1984-85*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*
FRUIT AND FRUIT PRODUCTS—			—tonnes—						—kg—			
Fresh fruit (incl. fruit for fruit juice)—												
Citrus	709,215	r647,991	653,566	558,524	680,878	581,116	45.3	40.8	40.6	34.1	40.8	34.3
Other	648,325	667,852	715,574	r785,293	r847,566	921,446	41.4	42.1	44.5	r47.9	r50.8	54.3
Jams, conserves, etc. (product weight)	32,790	30,582	30,237	32,414	37,625	38,412	2.1	1.9	1.9	2.0	2.3	2.3
Dried fruit (product weight)	46,194	45,582	37,087	40,703	42,005	40,006	3.0	2.9	2.3	2.5	2.5	2.4
Processed fruit (product weight)	174,056	r126,758	131,208	r146,839	r123,481	161,280	11.1	8.0	8.2	r9.0	7.4	9.5
Total (fresh fruit equivalent)	**1,793,892**	**r1,697,194**	**1,712,748**	**r1,731,601**	**r1,895,363**	**1,905,909**	**114.6**	**r107.0**	**106.4**	**r105.6**	**r113.5**	**112.4**
VEGETABLES—												
Potatoes	938,409	914,976	975,422	1,049,167	1,027,071	1,157,491	60.0	57.7	60.6	64.0	61.5	68.3
Other root and bulb vegetables	302,145	299,343	304,549	305,139	r353,457	333,985	19.3	18.9	18.9	18.6	21.2	19.7
Tomatoes	307,494	267,739	289,475	326,812	349,825	401,983	19.6	16.9	18.0	19.9	21.0	23.7
Leafy and green vegetables	352,051	361,139	350,560	r392,340	r424,788	441,790	22.5	22.8	21.8	r23.9	r25.4	26.1
Other vegetables	329,313	316,838	320,779	389,536	r381,970	404,806	21.0	20.0	19.9	23.7	22.9	23.9
Total (fresh equivalent weight)	**2,229,412**	**2,160,035**	**2,240,785**	**r2,462,994**	**r2,537,111**	**2,740,055**	**142.4**	**136.2**	**139.3**	**r150.2**	**r152.0**	**161.6**
GRAIN PRODUCTS—												
Flour(a)	1,135,583	1,138,270	1,158,778	1,208,389	r1,205,837	1,247,853	72.6	71.8	72.0	73.7	72.2	73.6
Breakfast foods—												
Oatmeal and rolled oats	20,794	24,543	25,301	r26,759	r31,550	32,128	1.3	1.5	1.6	1.6	1.9	1.9
Other (from grain)	119,167	118,737	115,943	r134,544	r143,151	143,982	7.6	7.5	7.2	8.2	r8.6	8.5
Total breakfast foods	*139,961*	*143,280*	*141,244*	*r161,303*	*r174,701*	*176,110*	*8.9*	*9.0*	*8.8*	*r9.8*	*r10.5*	*10.4*
Table rice	57,138	58,625	60,035	80,185	89,426	97,561	3.7	3.7	3.7	4.9	5.4	5.8
Total grain products	**1,332,682**	**1,340,175**	**1,360,057**	**r1,449,877**	**r1,469,964**	**1,521,524**	**85.1**	**84.5**	**84.5**	**88.4**	**r88.0**	**89.7**
Bread	710,919	n.c.	719,025	n.c.	n.c.	n.y.a.	45.4	n.c.	44.7	n.c.	n.c.	n.y.a.
EGGS AND EGG PRODUCTS			—'000 dozen—						—number—			
Number of eggs(b)	186,295	185,331	184,473	183,961	178,302	176,368	143	140	138	135	128	125
NUTS (in shell)—			—tonnes—						—kg—			
Peanuts	22,613	25,741	35,084	28,394	27,477	33,270	1.4	1.6	2.2	1.7	1.6	2.0
Tree nuts	59,697	60,836	56,134	59,918	68,170	69,650	3.8	3.8	3.5	3.7	4.1	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—*					
	1984-85	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1984-85*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*
OILS AND FATS—			—tonnes—							—kg—		
Butter(c)	61,741	59,550	56,182	r50,201	r48,794	48,789	3.9	3.8	3.5	r3.1	r2.9	2.9
Total margarine	*139,731*	*143,463*	*142,676*	*148,093*	*149,640*	*147,019*	*8.9*	*9.0*	*8.9*	*9.0*	*9.0*	*8.7*
Table margarine	103,622	109,576	108,854	112,267	113,278	109,639	6.6	6.9	6.8	6.8	6.8	6.5
Other margarine	36,109	33,887	33,822	35,826	36,362	37,380	2.3	2.1	2.1	2.2	2.2	2.2
Total (fat content)(d)	**r328,710**	**332,258**	**331,096**	**r334,026**	**r337,165**	**337,500**	**21.0**	**20.9**	**20.6**	**20.4**	**r20.2**	**19.9**
SUGAR—												
As refined sugar	156,713	130,841	138,246	144,002	150,228	185,813	10.0	8.2	8.6	8.8	9.0	11.0
In manufactured foods	535,659	583,276	568,300	542,422	558,197	519,779	34.2	36.8	35.3	33.1	33.4	30.6
Total	*692,372*	*714,117*	*706,546*	*686,424*	*708,425*	*705,592*	*44.2*	*45.0*	*43.9*	*41.8*	*42.4*	*41.6*
Honey	11,063	12,341	14,679	16,851	16,285	14,050	0.7	0.8	0.9	1.0	1.0	0.8
Total(e)	**768,475**	**790,899**	**786,628**	**779,132**	**806,509**	**816,958**	**49.1**	**49.9**	**48.9**	**47.5**	**48.3**	**48.2**
BEVERAGES—												
Tea	21,175	21,502	20,928	19,804	19,587	18,228	1.4	1.4	1.3	1.2	1.2	1.1
Coffee(f)	31,405	25,392	28,859	34,733	33,583	33,081	2.0	1.6	1.8	2.1	2.0	2.0
			—'000 litres—							—litres—		
Aerated and carbonated waters	1,052,930	1,157,189	1,183,676	1,315,523	1,428,894	1,479,219	67.3	73.0	73.6	80.2	85.6	87.2
Beer—												
Low alcohol	201,339	201,044	185,009	198,592	273,596	318,114	12.9	12.7	11.5	12.1	16.4	18.8
Other beer	1,590,745	1,630,970	1,605,987	1,618,095	1,614,416	1,574,015	101.6	102.8	99.8	98.7	96.7	92.8
Total beer	*1,792,084*	*1,832,014*	*1,790,996*	*1,816,687*	*1,888,012*	*1,892,129*	*114.5*	*115.5*	*111.3*	*110.8*	*113.1*	*111.6*
Wine	332,749	343,112	337,588	338,701	318,888	311,063	21.3	21.6	21.0	20.6	19.1	18.3
ALCOHOL—			—'000 litres alcohol—						—litres alcohol —			
Beer(g)—												
Low alcohol	4,832	4,825	4,440	4,766	6,566	9,046	0.31	0.30	0.28	0.29	0.39	0.53
Other beer	76,356	78,287	77,087	77,669	77,492	75,219	4.88	4.94	4.79	4.74	4.64	4.44
Total beer	*81,188*	*83,112*	*81,527*	*82,435*	*84,058*	*84,265*	*5.19*	*5.24*	*5.07*	*5.03*	*5.03*	*4.97*
Wine	38,887	39,879	39,233	39,287	37,009	36,118	2.48	2.51	2.44	2.40	2.22	2.13
Spirits	18,764	20,147	18,997	20,275	21,488	21,629	1.20	1.27	1.18	1.24	1.29	1.28
Total	**138,839**	**143,138**	**139,757**	**141,997**	**142,555**	**142,012**	**8.87**	**9.02**	**8.69**	**8.66**	**8.54**	**8.37**

(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. (g) From 1989-90 onwards, data for beer have been compiled on the basis of excise data.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1989-90

	Supply					*Utilisation*				
		Production							*Apparent consumption in Australia as human food*	
	Net change in stocks	*Commercial*	*Estimated home production*	*Imports*	*Total supply*	*Exports*	*Non-food use, waste, etc.*	*For processed food*	*Total*	*Per capita per year*
MEAT AND MEAT PRODUCTS—					— tonnes —					kg
Carcass meat(a)—										
Beef and veal	-301	1,676,726	—	2,823	1,679,850	988,531	..		691,319	40.8
Beef	-292	1,641,517	—	2,258	1,644,067	978,646	..		665,421	39.2
Veal	-9	35,209	—	565	35,783	9,885	..		25,898	1.5
Lamb	2,754	295,015	—	31	292,292	40,836	..	(b)	251,456	14.8
Mutton	17,098	332,782	—	314	315,998	176,774	..		139,224	8.2
Pigmeat	-662	317,117	—	—	317,779	5,482	..		312,297	18.4
Total carcass meat	*18,889*	*2,621,640*	—	*3,168*	*2,605,919*	*1,211,623*	..		*1,394,296*	*82.2*
Offal and meat n.e.i.(a)	2,172	119,383	—	2,169	119,380	68,984	3,000	..	47,395	2.8
Total Meat and Meat Products(carcass equivalent weight)	**21,061**	**2,741,023**	**—**	**5,387**	**2,725,299**	**1,280,607**	**3,000**	**..**	**1,441,691**	**85.0**
Bacon and ham (cured carcass weight)	372	131,331	—	—	130,959	846	..	5,451	124,662	7.4
POULTRY—										
Poultry (dressed weight)	5,274	419,506	3,845	393	418,469	1,459	..	n.a.	417,010	24.6
SEAFOOD—										
Fresh and frozen (edible weight)—										
Fish—										
Australian	n.a.	64,229	6,423	..	70,652	14,916	n.a.	8,181	47,555	2.8
Imported	n.a.	..	..	30,115	30,115	525	n.a.	..	29,590	1.7
Crustacea and molluscs	n.a.	29,545	—	4,894	34,439	14,264	n.a.	2,224	17,951	1.1
Seafood, otherwise prepared (product weight)—										
Australian	7	10,405	—	..	10,398	2,399	..	..	7,999	0.5
Imported—										
Fish	n.a.	..	..	29,765	29,765	97	..	..	29,668	1.7
Crustacea and molluscs	n.a.	..	..	12,757	12,757	60	..	..	12,697	0.7
DAIRY PRODUCTS—					— '000 litres —					litres
Market milk (fluid whole)	..	..	..	..	..	..	..	..	(c)1,706,900	100.7
Condensed, concentrated and evaporated milk—					— tonnes —					kg
Full cream sweetened / Full cream unsweetened	1,018	43,465	—	432	42,879	2,395	..	..	40,484	2.4
Skim	-200	33,465	—	1,189	34,854	10,761	..	..	24,093	1.4
Powdered milk—										
Full cream	..	..	..	..	..	..	..	..	(c)17,100	1.0
Skim (incl. buttermilk and mixed skim and buttermilk)	..	..	..	..	..	..	..	..	(c)41,418	2.4
Infants' and invalids' food	144	34,375	—	1,975	36,206	8,725	..	..	27,481	1.6
Cheese (natural equivalent weight)	..	..	..	..	..	..	..	..	(c)141,844	8.4

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1989-90 — *continued*

	Supply					*Utilisation*				
		Production							*Apparent consumption in Australia as human food*	
	Net change in stocks	*Commercial*	*Estimated home production*	*Imports*	*Total supply*	*Exports*	*Non-food use, waste, etc.*	*For processed food*	*Total*	*Per capita per year*
FRUIT AND FRUIT PRODUCTS—					— tonnes —					kg
Fresh fruit (incl. fruit for fruit juice)—										
Oranges	..	500,028	25,014	17,437	542,479	71,369	10,001	n.a.	461,109	27.2
Other citrus fruit	..	114,176	5,709	7,479	127,364	7,357	n.a.	n.a.	120,007	7.1
Other fresh fruit—										
Apples	(d)-6,468	324,464	—	—	330,932	23,403	n.a.	25,285	282,244	16.6
Apricots	..	33,142	—	538	33,680	222	n.a.	10,229	23,229	1.4
Bananas	..	193,527	—	3	193,530	91	n.a.	—	193,439	11.4
Grapes	..	44,168	—	—	44,168	10,323	n.a.	..	33,845	2.0
Melons, cantaloupes etc.	..	141,612	—	—	141,612	4,365	n.a.	..	137,247	8.1
Peaches	..	61,833	—	2,228	64,061	467	n.a.	37,095	26,499	1.6
Pears	(d)3,962	169,625	—	56	165,719	30,086	n.a.	34,642	100,991	6.0
Pineapples	..	146,028	—	—	146,028	1,182	n.a.	49,588	95,258	5.6
Plums and prunes	..	21,120	—	5	21,125	2,628	n.a.	n.a.	18,497	1.1
Total	*(d)-2,506*	*1,200,858*	*15,000*	*26,352*	*1,244,716*	*77,456*	*n.a.*	*245,814*	*921,446*	*54.3*
Jams, conserves, etc. (product weight)	-594	31,325	1,000	7,132	40,051	1,639	..	..	38,412	2.3
Dried vine fruit (product weight)—										
Currants	..	..	..	..	..	..	..	..	(e)4,190	0.2
Raisins	..	..	..	..	..	..	..	..	(e)2,662	0.2
Sultanas	..	..	..	..	..	..	..	..	(e)22,828	1.3
Dried tree fruit (product weight)—										
Apricots	..	..	..	..	..	..	..	..	(f)2,651	0.2
Prunes	..	..	..	..	..	..	..	..	(f)2,941	0.2
Other	..	..	..	..	..	..	..	..	(f)4,734	0.3
Processed fruit (product weight)—										
Apples	1,231	11,927	—	—	10,696	11	..	..	10,685	0.6
Apricots	-814	8,441	150	1,095	10,500	828	..	..	9,672	0.6
Mixed fruits (incl. fruit salad)	-4,516	30,522	—	749	35,787	13,116	..	..	22,671	1.3
Peaches	2,187	38,897	150	3,834	40,694	10,404	..	..	30,290	1.8
Other	-12,434	65,991	200	37,861	116,486	28,524	..	..	87,962	5.2

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1989-90 — *continued*

	Supply					*Utilisation*				
		Production							*Apparent consumption in Australia as human food*	
	Net change in stocks	*Commercial*	*Estimated home production*	*Imports*	*Total supply*	*Exports*	*Non-food use, waste, etc.*	*For processed food*	*Total*	*Per capita per year*
VEGETABLES—					— tonnes —					kg
Potatoes	n.a.	1,202,038	25,400	23,641	1,251,079	7,757	85,831		1,157,491	68.3
Other root and bulb vegetables—										
Beetroot	-968	26,462	1,852	—	29,282	79	265		28,938	1.7
Carrots	817	155,708	7,785	—	162,676	15,791	4,671		142,214	8.4
Onions	1,220	195,776	9,789	4,942	209,287	57,787	5,873		145,627	8.6
Parsnips	n.a.	6,226	311	—	6,537	412	125		6,000	0.4
Sweet potatoes	n.a.	6,574	—	31	6,605	—	131		6,474	0.4
White turnips and swedes	n.a.	6,645	199	—	6,844	1,979	133		4,732	0.3
Total	*1,069*	*397,391*	*19,936*	*4,973*	*421,231*	*76,048*	*11,198*		*333,985*	*19.7*
Tomatoes	26,726	329,036	32,904	85,740	420,954	2,519	16,452		401,983	23.7
Leafy and green veg. (incl. legumes)—										
Beans	2,842	49,683	7,452	4,796	59,089	1,342	99.4		56,753	3.3
Cabbages and other greens	5	97,452	4,873	1,602	103,922	4,122	4,873	(b)	94,927	5.6
Celery	n.a.	48,516	2,426	—	50,942	330	2,426		48,186	2.8
Lettuce	n.a.	112,073	11,207	2,788	126,068	1,752	7,845		116,471	6.9
Peas	7,135	115,990	17,399	12,664	138,918	4,186	9,279		125,453	7.4
Total	*9,982*	*423,714*	*43,357*	*21,850*	*478,939*	*11,732*	*25,417*		*441,790*	*26.1*
Other vegetables—										
Asparagus	n.a.	5,923	592	6,515	13,030	1,884	. .		11,146	0.7
Cauliflowers	n.a.	90,818	4,541	46	95,405	7,629	6,357		81,419	4.8
Cucumbers (incl. gherkins)	-368	19,553	978	3,496	24,395	129	587		23,679	1.4
Marrows, squashes and zucchinis	n.a.	12,779	639	—	13,418	330	n.a.		13,088	0.8
Pumpkins	n.a.	93,808	4,690	—	98,498	330	n.a.		98,168	5.8
Sweet corn	1,245	66,733	3,337	14,303	83,128	2,009	1,335		79,784	4.7
Other	6,177	79,195	—	42,945	115,963	18,441	n.a.		97,522	5.8
Total	*7,054*	*368,809*	*14,777*	*67,305*	*443,837*	*30,752*	*8,279*		*404,806*	*23.9*
Total all vegetables	44,831	2,720,988	136,374	203,509	3,016,040	128,808	147,177		2,740,055	161.6
GRAIN PRODUCTS—										
Flour (incl. flour for breadmaking)	6,623	1,292,792	. .	18,963	1,305,132	57,279	. .	. .	1,247,853	73.6
Breakfast foods—										
Oatmeal and rolled oats	n.a.	38,029	. .	193	38,222	6,094	. .	. .	32,128	1.9
Other (from grain)	2,240	170,244	. .	4,652	172,656	28,674	. .	. .	143,982	8.5
Table rice	n.a.	73,510	. .	24,051	97,561	. .	. .	. .	97,561	5.8
Total grain products	8,863	1,574,575	. .	47,859	1,613,571	92,047	. .	. .	1,521,524	89.7
Bread(g)	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.
EGGS AND EGG PRODUCTS—									'000 doz.	number
Number of eggs	. .	. .	. .	. .	. .	. .	. .	. .	(h)176,368	125
NUTS (in shell)—					— tonnes —					kg
Peanuts	-3,952	19,950	n.a.	22,981	46,883	2,216	. .	11,397	33,270	2.0
Tree nuts	n.a.	15,970	n.a.	57,418	73,388	3,738	n.a.	n.a.	69,650	4.1

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1989-90 — *continued*

	Supply					*Utilisation*				
		Production							*Apparent consumption in Australia as human food*	
	Net change in stocks	*Commercial*	*Estimated home production*	*Imports*	*Total supply*	*Exports*	*Non-food use, waste, etc.*	*For processed food*	*Total*	*Per capita per year*
OILS AND FATS—					— tonnes —					kg
Butter	..	..	..	..	..	..	..	..	(c)48,789	2.9
Total margarine	*-153*	*157,461*	—	*760*	*158,374*	*11,355*	..	..	*147,019*	*8.7*
Table margarine	-720	112,533	—	760	114,013	4,374	..	..	109,639	6.5
Other margarine	567	44,928	—	—	44,361	6,981	..	..	37,380	2.2
SUGAR—										
As refined sugar	18,270	774,882	—	1,004	757,616	7,890	..	563,913	185,813	11.0
In manufactured foods	—	563,913	..	66,276	630,189	110,410	..	..	519,779	30.6
Honey	—	27,548	—	55	27,603	13,553	—	—	14,050	0.8
BEVERAGES—										
Tea	n.a.	721	—	17,885	18,606	378	..	..	18,228	1.1
Coffee	n.a.	93	—	36,316	36,409	3,328	..	..	33,081	2.0
					— '000 litres —					litres
Aerated and carbonated waters	n.a.	1,469,513	n.a.	48,852	1,518,365	39,146	..	..	1,479,219	87.2
Beer—				(i)					(j)	
Low alcohol	..	..	..	939	..	..	..	..	318,114	18.8
Other beer	..	..	..	12,236	..	..	..	..	1,574,015	92.8
Total beer	..	..	..	*13,175*	..	..	..	..	*1,892,129*	*111.6*
Wine—				(i)					(k)	
Dessert wine	..	..	..	103	..	..	..	..	19,291	1.1
Sherry	..	..	..	82	..	..	..	..	13,990	0.8
Sparkling and carbonated wine	..	..	..	n.p.	..	..	..	..	n.p.	n.p.
Table wine	..	..	..	6,551	..	..	..	..	236,508	13.9
Vermouth	..	..	..	232	..	..	..	..	2,093	0.1
Other wine, n.e.i.	..	..	..	n.p.	..	..	..	..	n.p.	n.p.
Total wine	..	..	..	*10,454*	..	..	..	..	*311,063*	*18.3*
Spirits—					— '000 litres alcohol —					litres alcohol
				(i)					(j)	
Brandy	..	..	..	793	..	..	..	..	2,406	0.14
Gin	..	..	..	656	..	..	..	..	901	0.05
Liqueurs (incl. flavoured spirits)	..	..	..	2,095	..	..	..	..	2,235	0.13
Rum	..	..	..	577	..	..	..	..	2,862	0.17
Vodka	..	..	..	782	..	..	..	..	1,185	0.07
Whisky	..	..	..	10,374	..	..	..	..	10,435	0.62
Other, n.e.i. (incl. bitters)	..	..	..	413	..	..	..	..	1,605	0.09
Total spirits	..	..	..	*15,690*	..	..	..	..	*21,629*	*1.28*

(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)
(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*
					1984-85						
Meat and meat products	29.7	25.6	0.1	12	3.0	1,344	2	0.28	0.51	6.2	1,453
Poultry	6.8	4.9	—	3	0.3	14	—	0.02	0.04	1.3	296
Seafood	3.9	1.1	—	20	0.3	5	—	0.01	0.02	0.8	111
Dairy products(c)	19.3	21.2	20.1	659	0.6	213	4	0.20	0.76	0.4	1,435
Fruit and fruit products	2.0	0.2	r27.1	43	0.9	r38	60	r0.14	0.07	0.6	r497
Vegetables and vegetable products	6.3	0.5	24.1	41	1.8	437	68	0.23	0.15	3.1	540
Grain products	24.8	3.2	169.0	44	4.6	—	—	0.76	0.61	8.5	3,413
Eggs and egg products	2.5	2.0	0.1	8	0.3	31	—	0.01	0.08	—	115
Nuts	1.7	4.0	0.5	14	0.3	—	—	0.03	0.08	0.6	185
Oils and fats	0.2	55.7	0.3	4	—	330	—	—	0.01	0.1	2,068
Sugar	—	—	127.1	5	0.1	—	—	—	—	—	2,032
Beverages(alcoholic)(d)	1.1	—	7.4	r16	0.1	—	7	—	r0.01	1.4	r732
Total	**98.2**	**118.4**	**r375.6**	**870**	**12.2**	**r2,413**	**142**	**1.67**	**r2.33**	**r22.9**	**r12,876**
					1985-86						
Meat and meat products	29.7	25.8	0.1	12	3.0	1,296	2	0.28	0.51	6.2	1,461
Poultry	7.2	5.2	—	3	0.4	15	—	0.02	0.04	1.4	312
Seafood	4.0	1.1	—	21	0.3	5	—	0.01	0.02	0.8	113
Dairy products(c)	19.2	21.1	20.2	655	0.6	213	4	0.21	0.76	0.4	1,433
Fruit and fruit products	1.9	0.2	r25.8	r41	0.8	37	55	r0.13	0.06	0.6	r472
Vegetables and vegetable products	6.1	0.4	23.3	40	1.8	411	65	0.22	0.14	2.9	521
Grain products	24.6	3.2	167.5	44	4.6	—	—	0.75	0.60	8.4	3,385
Eggs and egg products	2.4	1.9	0.1	7	0.3	30	—	0.01	0.08	—	112
Nuts	1.7	4.2	0.5	14	0.3	—	—	0.03	0.08	0.7	194
Oils and fats	0.2	55.7	0.3	4	—	330	—	—	0.01	0.1	2,068
Sugar	—	—	128.4	5	0.1	—	—	—	—	—	2,054
Beverages(alcoholic)(d)	1.1	—	7.4	16	0.1	—	7	—	0.01	1.4	747
Total r	**98.0**	**119.0**	**373.7**	**863**	**12.1**	**2,339**	**134**	**1.66**	**2.29**	**22.8**	**12,874**
					1986-87						
Meat and meat products	28.8	24.8	0.2	12	3.0	1,631	2	0.28	0.56	6.1	1,408
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	216	4	0.21	0.79	0.4	1,459
Fruit and fruit products	1.9	0.2	r25.0	40	0.8	37	55	0.12	0.07	0.6	r461
Vegetables and vegetable products	6.1	0.4	24.1	41	1.8	455	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	1.9	4.5	0.6	14	0.3	—	—	0.04	0.07	0.8	210
Oils and fats	0.2	54.8	0.3	4	—	320	—	—	0.01	0.1	2,035
Sugar	—	—	125.6	5	0.1	—	—	—	—	—	2,009
Beverages(alcoholic)(d)	1.0	—	7.1	16	0.1	—	7	—	0.01	1.3	719
Total	**98.1**	**117.7**	**r371.3**	**882**	**12.0**	**r2,709**	**135**	**1.66**	**2.37**	**22.8**	**r12,768**

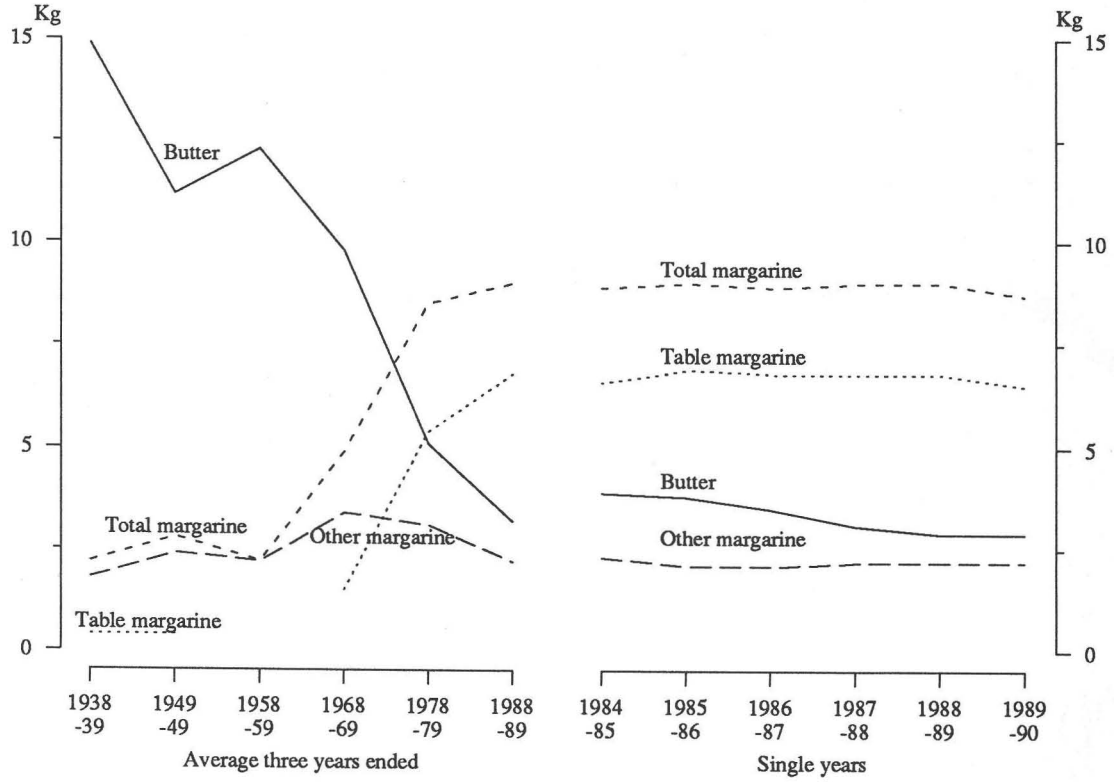
For footnotes see end of table.

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*
					1987-88						
Meat and meat products	r29.4	25.5	0.2	12	r3.0	r1,631	2	0.29	r0.56	6.3	r1,444
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	r25.3	37	0.8	37	50	0.11	0.07	0.6	r463
Vegetables and vegetable products	6.7	0.5	25.6	43	2.0	455	72	0.24	0.16	3.2	r574
Grain products	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	1.8	4.2	0.5	14	0.3	—	—	0.04	0.07	0.7	195
Oils and fats	0.2	r54.1	r0.2	4	—	r312	—	—	0.01	0.1	r2,010
Sugar	—	—	122.0	5	0.1	—	—	—	—	—	1,951
Beverages(alcoholic)(d)	r1.0	—	7.1	16	0.1	—	7	—	0.01	1.3	714
Total r	**101.0**	**118.0**	**377.8**	**898**	**12.6**	**2,707**	**136**	**1.72**	**2.45**	**23.7**	**12,938**
					1988-89						
Meat and meat products r	29.1	25.3	0.1	12	2.9	1,248	2	0.29	0.49	6.1	1,431
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	r42	0.9	39	r58	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	r174.6	46	4.9	—	—	0.79	0.65	r8.0	r3,527
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	r53.7	0.2	4	—	r307	—	—	0.01	0.1	r1,993
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 r	**101.0**	**118.0**	**380.3**	**903**	**12.7**	**2,355**	**142**	**1.74**	**2.40**	**23.7**	**12,973**
					1989-90						
Meat and meat products	29.6	25.9	0.1	12	3.0	1,344	2	0.29	0.51	6.2	1,464
Poultry	7.7	5.5	—	3	0.4	16	—	0.02	0.05	1.5	334
Seafood	4.5	1.2	—	22	0.3	6	—	0.01	0.03	0.9	124
Dairy products(c)	20.0	21.9	21.3	680	0.7	227	5	0.21	0.79	0.5	1,491
Fruit and fruit products	1.9	0.2	26.0	38	0.8	41	52	0.11	0.07	0.6	475
Vegetables and vegetable products	7.2	0.5	27.5	46	2.1	487	76	0.26	0.17	3.5	618
Grain products	26.0	3.5	178.1	47	4.9	—	—	0.80	0.65	9.0	3,596
Eggs and egg products	2.2	1.7	0.1	7	0.3	27	—	0.01	0.07	—	101
Nuts	2.0	4.8	0.6	16	0.3	—	—	0.04	0.08	0.8	221
Oils and fats	0.2	53.0	0.2	4	—	299	—	—	0.01	0.1	1,968
Sugar	—	—	122.3	5	0.1	—	—	—	—	—	1,955
Beverages(alcoholic)(d)	1.0	—	7.1	15	0.1	—	7	—	0.01	1.3	694
Total	**102.2**	**118.3**	**383.3**	**894**	**12.9**	**2,447**	**141**	**1.76**	**2.42**	**24.3**	**13,043**

(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 AND MARGARINE



INTAKE OF VITAMIN C
(adjusted for losses in cooking)

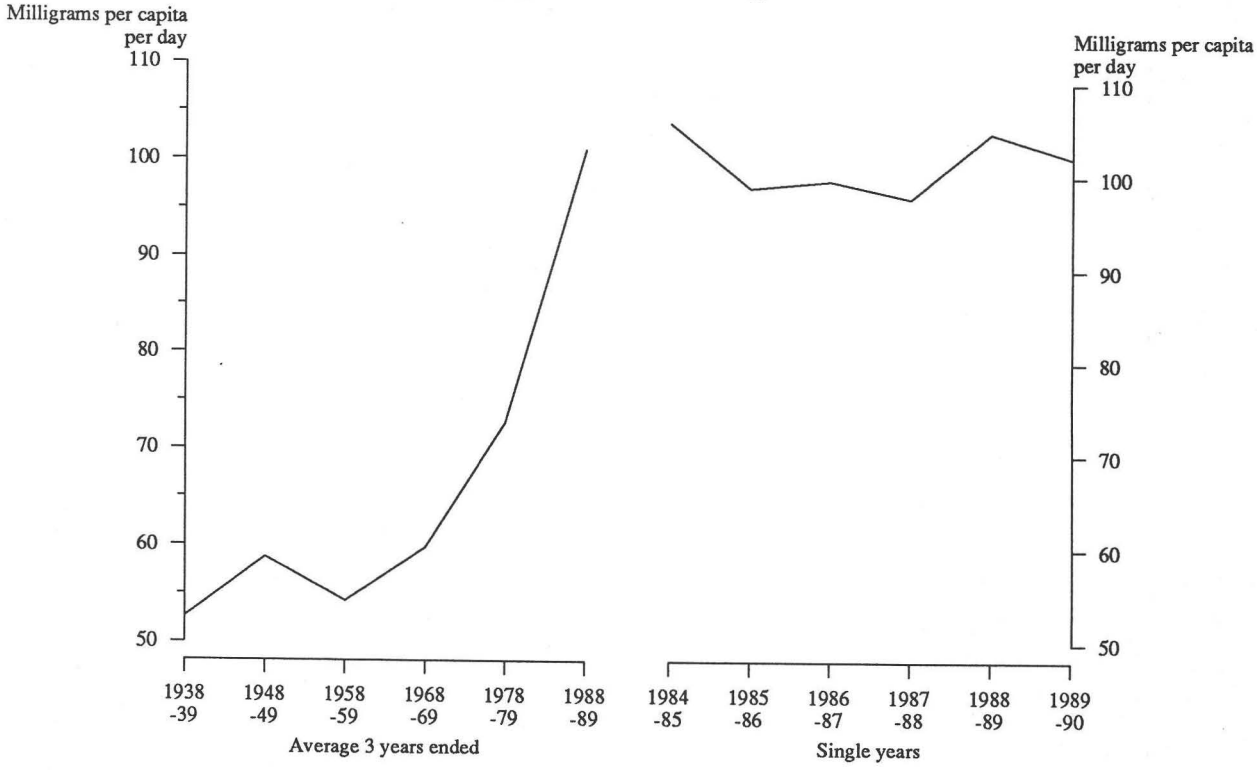


TABLE 5. ADJUSTMENTS TO THE AVAILABILITY OF SPECIFIC VITAMINS, AUSTRALIA(a)
(milligrams per capita per day)

	1984-85		1985-86		1986-87		1987-88		1988-89		1989-90	
Nutrient	*Calculated value*	*Amount available*	*Calculated value*	*Amount available*	*Calculated value*	*Amount available*	*Calculated value*	*Amount available*	*Calculated value*	*Amount available*	*Calculated value*	*Amount available*
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	1.4	1.4	1.6	1.6	1.3	1.3	1.8	1.8	1.9	1.9	2.1	2.1
Meat and meat products	1.9	(b)	1.9	(b)	2.1	(b)	r2.1	(b)	r1.8	(b)	1.9	(b)
Fish	0.2	(b)	0.2	(b)	0.2	(b)	0.3	(b)	0.3	(b)	0.3	(b)
Beverages, alcoholic r	7.1	7.1	7.2	7.2	6.9	6.9	6.9	6.9	7.0	7.0	6.9	6.9
Fruit and fruit products—												
Fresh, canned and dried r	13.4	12.4	13.3	12.1	13.8	12.9	15.4	14.1	15.8	14.5	16.6	15.4
Cooked	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2
Citrus	46.2	46.2	r41.6	r41.6	41.3	41.3	34.7	34.7	41.3	41.3	34.7	34.7
Vegetables and vegetable products—												
Fresh tomatoes	9.6	4.4	8.2	3.4	8.8	3.9	9.7	4.6	10.2	4.8	11.6	5.3
Lettuce	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7
Canned vegetables r	7.8	5.4	7.6	5.3	9.2	6.0	9.2	5.9	9.4	6.2	9.7	6.8
Cooked potatoes and other vegetables r	50.6	25.3	48.3	24.2	47.4	23.7	52.4	26.2	50.7	25.3	53.9	27.0
Total vitamin C r	**141.8**	**105.9**	**133.6**	**98.9**	**134.8**	**99.7**	**136.1**	**97.8**	**142.1**	**104.8**	**141.4**	**102.1**
Thiamin	1.67	1.42	r1.66	1.41	1.66	1.41	1.72	r1.46	1.74	1.48	1.76	1.49
Niacin equivalent(c) r	22.9	39.8	22.8	39.7	22.8	39.8	23.7	41.2	23.7	41.2	24.3	42.1

(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)

		Average 3 years ended—						*Individual Year*					
Nutrient	*Unit*	*1938-39*	*1948-49*	*1958-59*	*1968-69*	*1978-79*	*1988-89*	*1984-85*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*
Protein—							r				r	r	
Animal	g	58.7	57.4	59.6	64.2	69.3	63.3	62.1	62.4	62.3	63.8	63.7	63.9
Vegetable	g	30.9	35.3	32.3	35.5	32.2	36.8	36.1	35.6	35.8	37.2	37.3	38.2
Total	*g*	*89.6*	*92.7*	*91.9*	*99.7*	*101.5*	*100.0*	*98.2*	*98.0*	*98.1*	*101.0*	*101.0*	*102.2*
Fat (from all sources)	g	133.5	121.7	131.7	123.2	152.6	117.9	118.4	119.0	117.7	118.0	118.0	118.3
Carbohydrate	g	377.4	424.8	416.7	406.8	396.2	376.5	r375.6	r373.7	r371.3	377.8	380.3	383.3
Calcium	mg	642	785	817	968	874	894	870	r863	882	898	903	894
Iron	mg	15.4	15.1	14.0	14.7	15.7	12.4	12.2	12.1	12.0	12.6	12.7	12.9
Retinol equivalent	µg	1,472	1,389	1,370	1,348	1,602	2,590	r2,413	r2,339	r2,709	2,707	2,355	2,447
Vitamin C	mg	52.6	58.8	54.3	59.8	72.7	101.0	r106	r99	r100	98	105	102
Thiamin	mg	1.2	1.3	1.1	1.4	1.50	1.45	1.42	1.41	1.41	1.46	1.48	1.49
Riboflavin	mg	1.7	1.9	1.8	2.7	2.74	2.41	r2.33	2.29	2.37	2.45	2.40	2.42
Niacin equivalent	mg	33.0	32.4	33.3	36.2	40.8	40.7	39.8	39.7	39.8	41.2	41.2	42.1
Energy value	kJ	13,048	13,584	13,801	13,835	14,635	12,893	r12,876	r12,874	r12,768	12,938	12,973	13,043

(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

	1984-85	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*
Meat and meat products	11.3	11.4	11.0	11.2	r11.0	11.2
Poultry	2.3	2.4	2.5	2.6	2.6	2.6
Seafood	0.9	0.9	0.9	0.9	1.0	1.0
Dairy products	11.1	11.1	11.4	11.5	11.5	11.4
Fruit and fruit products r	3.9	3.7	3.6	3.6	3.7	3.6
Vegetables and vegetable products	4.2	4.0	4.2	4.4	4.4	4.7
Grain products	26.5	26.3	26.5	r27.4	27.2	27.6
Eggs and egg products	0.9	0.9	0.9	0.8	0.8	0.8
Nuts	1.4	1.5	1.6	1.5	1.6	1.7
Oils and fats r	16.1	16.1	15.9	15.5	15.4	15.1
Sugar	15.8	16.0	15.7	15.1	15.3	15.0
Beverages(alcoholic)	r5.7	5.8	5.6	5.5	5.5	5.3
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*
1984-85—									
RDI	45.6	842	9.2	682	34	0.90	1.37	15.3	9,458
Nutrients—									
Available	98.2	870	12.2	r2,413	r106	1.42	r2.33	39.8	r12,876
In excess of RDI (%)	115	3	33	254	r211	58	r70	160	36
1985-86—									
RDI	45.6	842	9.2	682	34	0.88	1.37	15.3	9,463
Nutrients—									
Available	98.0	r863	12.1	r2,339	r99	1.41	2.29	39.7	r12,874
In excess of RDI (%)	115	2	r32	243	r191	60	67	159	36
1986-87—									
RDI	45.8	842	9.2	684	34	0.90	1.37	15.3	9,481
Nutrients—									
Available	98.1	882	12.0	r2,709	100	1.41	2.37	39.8	r12,768
In excess of RDI (%)	114	5	31	296	r193	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	101.0	898	12.6	2,707	98	1.46	2.45	41.2	12,938
In excess of RDI (%) r	121	7	37	296	188	64	79	169	37
1988-89—									
RDI	45.7	840	9.2	683	34	0.89	1.37	15.3	9,471
Nutrients—									
Available r	101.0	903	12.7	2,355	105	1.48	2.40	41.2	12,973
In excess of RDI (%) r	121	8	38	245	208	66	75	169	37
1989-90—									
RDI	45.7	840	9.2	683	34	0.89	1.37	15.3	9,471
Nutrients—									
Available	102.2	894	12.9	2,447	102	1.49	2.42	42.1	13,043
In excess of RDI (%)	124	6	40	258	200	68	76	175	38

(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.

EXPLANATORY NOTES

Introduction

This publication contains detailed statistics of the consumption of foodstuffs and nutrient intake in Australia for 1989-90 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, 1990-91 (7330.0)

Livestock and Livestock Products, Australia, 1990-91 (7221.0)

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

Foreign Trade, Australia: Merchandise Exports, Detailed Commodity Tables 1990-91 (5436.0)

Foreign Trade, Australia: Merchandise Imports, Detailed Commodity Tables 1990-91 (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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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	1984-85	15,651,653
1948-49	7,651,558	1985-86	15,861,410
1958-59	9,741,073	1986-87	16,089,900
1968-69	11,919,046	1987-88	16,402,017
1978-79	14,275,870	1988-89	16,696,699
1988-89	16,396,205	1989-90	16,958,654

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 tables[1]. 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 non-perishable foods, and estimates derived for consumption of

1. See Technical Note III.

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 preprocessing 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 for those states without Egg Boards 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. The Manufacturing Census was not conducted in 1985-86, and in 1987-88 and 1988-89 commodity data were not collected. In 1989-90 Bread statistics were collected as part of the Manufacturing Census. These data will be published when they become available.

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 1989-90 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 1984-85 to 1989-90 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 1989 and 1990 are based on the results of the Australian Population Census of 6 August 1991. These revised estimates take account of new information provided by preliminary census counts and estimates of census underenumeration.

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 1989 AND 1990

Age group (years)	*Number*		*Per cent of total population*		*Number*		*Per cent of total popuation*	
	1989	*1990*	*1989*	*1990*	*1989*	*1990*	*1989*	*1990*
	MALES				FEMALES			
0-4	636,971	643,888	3.79	3.78	607,505	613,038	3.62	3.60
5-9	636,938	647,395	3.79	3.80	605,366	616,750	3.60	3.62
10-14	635,802	632,952	3.78	3.71	605,170	602,351	3.60	3.53
15-19	718,669	713,100	4.28	4.18	693,248	686,830	4.13	4.03
20-24	677,425	687,633	4.03	4.03	660,951	673,438	3.93	3.95
25-29	719,674	717,905	4.28	4.21	706,756	706,836	4.21	4.15
30-34	682,162	700,347	4.06	4.11	677,958	695,478	4.03	4.08
35-39	648,692	656,029	3.86	3.85	644,447	654,817	3.84	3.84
40-44	618,965	639,341	3.68	3.75	594,526	616,990	3.54	3.62
45-49	480,907	501,347	2.86	2.94	453,833	475,487	2.70	2.79
50-54	405,922	420,415	2.42	2.47	388,953	400,461	2.31	2.35
55-59	371,542	367,014	2.21	2.15	360,725	358,566	2.15	2.10
60-64	365,190	368,594	2.17	2.16	370,465	370,859	2.20	2.18
65-69	306,257	312,770	1.82	1.84	341,254	346,099	2.03	2.03
70-74	212,530	218,517	1.26	1.28	265,562	270,526	1.58	1.59
75-79	148,874	153,473	0.89	0.90	212,911	218,250	1.27	1.28
80-84	76,519	79,979	0.46	0.47	132,883	137,906	0.79	0.81
85 and over	38,986	40,044	0.23	0.23	98,527	99,226	0.59	0.58
All ages	*8,382,025*	*8,500,743*	*49.88*	*49.87*	*8,421,040*	*8,543,908*	*50.12*	*50.13*

Source: Australian Demographic Statistics, September and December Quarter 1991 (3101.0) published by the ABS on 9 June 1992.

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1990-91

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