Australian Bureau of Statistics

Apparent Consumption of Foodstuffs and Nutrients Australia 1990-91

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APPARENT CONSUMPTION OF FOODSTUFFS AND NUTRIENTS, AUSTRALIA 1990-91

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SUMMARY OF FINDINGS

Meat and meat products

The apparent consumption of total meat and meat products decreased marginally from 1989-90 to 1990-91, to 84.4 kg per capita. Since 1985-86 the overall consumption of meat has stabilised, with the exception of veal which fell by 28.6 per cent from 2.1 kg to 1.5 kg per capita. Beef remained the most significant individual item in 1990-91, with no change in the per capita consumption compared with the previous year. Domestic consumption of beef and veal was about 699 thousand tonnes, 40 per cent of the total supply. The remaining 60 per cent (about 1.066 million tonnes) was exported. In the longer term the per capita consumption of beef and veal has declined, although it did peak in the 1970's when the average for the three years ended 1978-79 reached 64.8 kg per capita. This represented 63.5 per cent of total meat consumption at that time, whereas consumption of beef and veal in 1990-91 was 48.2 per cent.

The apparent per capita consumption of lamb continues to fall, decreasing by 4.7 per cent in 1990-91. This was largely as a result of reduced production coupled with increasing exports. Mutton consumption decreased by 6.1 per cent in 1990-91, to 7.7 kg per capita, following an increase of 20.6 per cent in the previous year. In 1990-91, some 251 thousand tonnes (or 65.5%) of the total supply of mutton was exported, whilst about 132 thousand tonnes (or 34.5%) went to domestic markets. From the 1930's, when the average consumption for three years ended 1938-39 was 27.2 kg per capita, there was a gradual decline to 1978-79 when it reached a low of 3.6 kg per capita. However, consumption has increased during the early 1980's and since 1985-86 has fluctuated between 6 kg and 8 kg.

The apparent per capita consumption of pigmeat has fluctuated since 1985-86, with intake falling by 2.2 per cent in 1990-91 to 18.0 kg per capita. This compares with an increase of 1.7 per cent in the previous year. The long term trend shows that intake has increased significantly, growing by 76.5 per cent since 1938-39. Consumption of pigmeat products, (bacon and ham) declined in 1990-91, falling by 6.6 per cent to 7.1 kg per capita following an increase of 10.1 per cent in 1989-90. Almost all of the pigmeat produced in Australia accounted for the total supply of about 313 thousand tonnes; about 308 thousand tonnes went to domestic markets, whilst only 5 thousand tonnes or 1.7 per cent was exported.

Offal and meat nei did not follow the same downward movement as other meat products, with intake of offal increasing by 1.1 kg (or 40.7%) to 3.8 kg per capita during 1990-91. This compares with a smaller increase of 8.0 per cent in 1989-90.

Poultry

Poultry intake showed no movement in the three year period, 1987-88 to 1989-90. During 1990-91 however, the apparent per capita consumption increased by 3.3 per cent to 25.4 kg. Per capita consumption has trebled since the 1960's when the average for the three years ended 1968-69 was 8.3 kg.

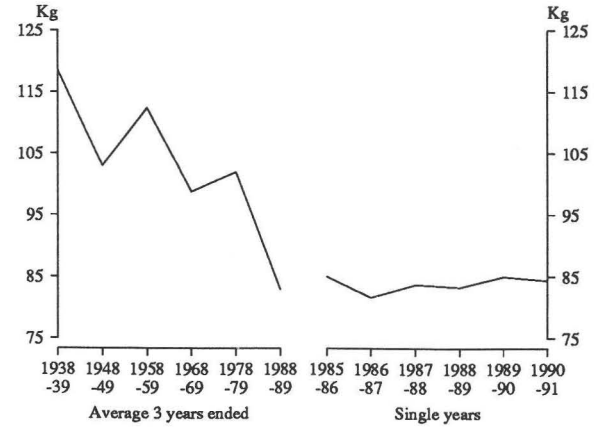
Seafood

Seafood intake increased by 8.0 per cent to 9.5 kg per capita during 1990-91. This was due largely to increased consumption of Australian fish, which rose by 26.7 per cent to 3.8 kg per capita. Conversely, the consumption of imported fish fell marginally in 1990-91 to 1.7 kg per capita. The growth in seafood consumption was the result of increased production of Australian fish, and crustacea and molluscs. Since 1985-86 seafood consumption has increased by 26.7 per cent, from 7.5 kg to 9.5 kg per capita. The longer term trend shows that since 1938-39, seafood intake has almost doubled.

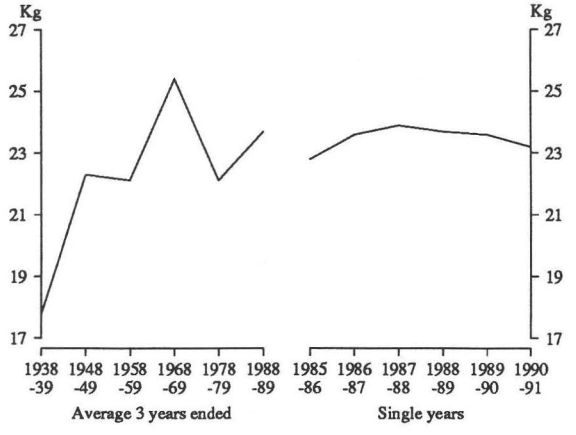
Dairy Products

Consumption of total dairy products remains relatively stable with little variation since 1985-86. The per capita intake of market milk decreased slightly from 102.5 litres in 1985-86 to 101.1 litres in 1990-91. However, consumption of condensed skim milk has doubled over the same period. In 1990-91 it increased by 21.4 per cent to

APPARENT PER CAPITA CONSUMPTION OF MEAT AND MEAT PRODUCTS



APPARENT PER CAPITA CONSUMPTION OF DAIRY PRODUCTS



1.7 kg per capita. Consumption of powdered full cream milk decreased by 30.0 per cent to 0.7 kg per capita in 1990-91.

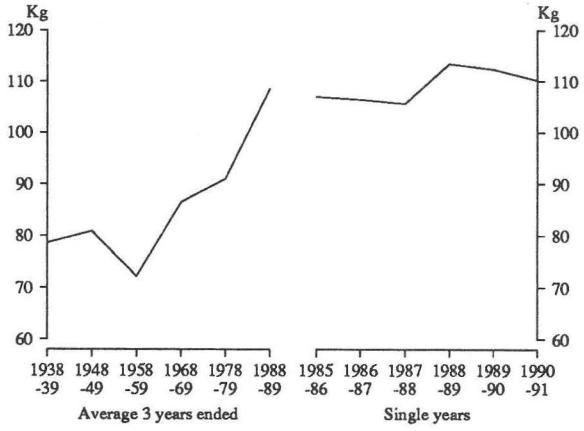
The longer term decline in the consumption of market milk has been offset by growth in the consumption of other dairy products such as cheese. The per capita intake of market milk has fallen by 27.1 per cent since the 1940's, when the average consumption for the three years ended 1948-49 peaked at 138.7 litres per capita. Cheese intake has increased threefold over the same period.

Fruit and fruit products

During 1990-91, total fruit consumption (including fruit for fruit juice) declined marginally to 110.2 kg per capita. Nevertheless, it is still 3.2 kg higher than consumption in 1985-86 and 40.0 per cent greater than in 1938-39. Citrus fruit, which comprises nearly a third of the total fruit available, has been largely responsible for the increase in fruit consumption since the 1930's. Citrus fruit intake rose by 2.0 kg per capita in 1990-91 despite a fall in domestic production. Imports of citrus fruit quadrupled when compared with 1989-90, and accounted for 16.9 per cent of total supply. The per capita consumption of other fresh fruits fell by 3.7 per cent to 52.3 kg after peaking at 54.3 kg in 1989-90. This is 24.2 per cent higher than consumption in 1985-86.

The consumption of jam and dried fruits remains relatively stable. The per capita intake of processed fruit continued to fluctuate, decreasing by 21.1 per cent to 7.5 kg per capita in 1990-91, from 9.5 kg in the previous year.

APPARENT PER CAPITA CONSUMPTION OF FRUIT AND FRUIT PRODUCTS

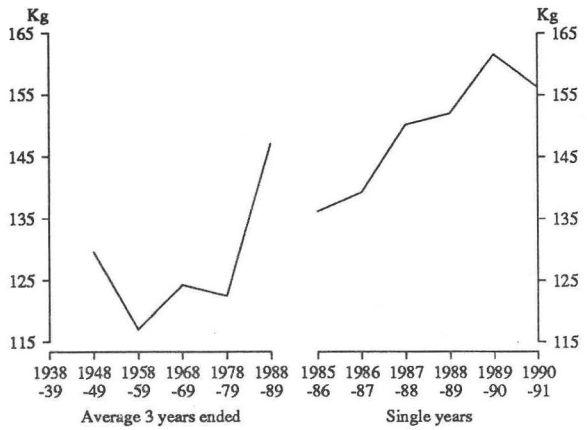


Vegetables

The apparent per capita consumption of vegetables declined by 3.3 per cent in 1990-91 following an increase of 6.3 per cent in 1989-90. The consumption of potatoes fell by 4.8 kg (7.0%) to 63.5 kg per capita, but remains 10.1 per cent higher than intake in 1985-86. The fall in potato intake was primarily due to declining commercial production and decreased imports, coupled with increased exports. The intake of other root and bulb vegetables rose during the year by 1.3 kg to 21.0 kg per capita and by 11.1 per cent since 1985-86. Consumption of leafy and green vegetables fell by 2.0 kg to 24.1 kg per capita in 1990-91 but is still 5.7 per cent higher than intake in 1985-86.

Since 1985-86 the consumption of vegetables has increased by 20.1 kg per capita (or 14.8%). The most significant increase has been for tomatoes, up 52.7 per cent to 25.8 kg per capita, due mainly to growth in production and increased imports over the period 1985-86 to 1990-91.

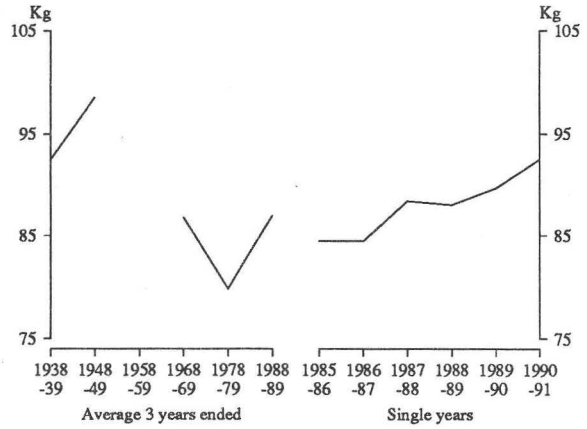
APPARENT PER CAPITA CONSUMPTION OF VEGETABLES



Grain Products

The consumption of grain products increased by 2.8 kg (3.1%) to 92.5 kg per capita in 1990-91. This represents a 9.5 per cent growth in consumption of these foods since 1985-86, with increases in all products. In the longer term, the consumption of grain products is now at the same level as it was in 1938-39, although the mix is somewhat different, with breakfast foods and rice increasing significantly while flour has declined.

APPARENT PER CAPITA CONSUMPTION OF GRAIN PRODUCTS



Flour consumption increased marginally in 1990-91, whereas breakfast food consumption showed significant gains. Since 1985-86 breakfast food intake has increased by 3.2 kg (35.5%) to 12.2 kg per capita. During the past year, breakfast cereals increased by 17.3 per cent, with proportionally similar increases in both oat and grain based cereals. Rice consumption increased for the fourth successive year, and at 6.0 kg per capita is now 2.3 kg (62.2%) greater than consumption in 1985-86.

Eggs and egg products

The consumption of eggs rose marginally in 1990-91. This compares with a 2.3 per cent fall in the previous year and stems the downward trend in egg consumption. Nevertheless, at 126 eggs per capita in 1990-91, consumption is 10.0 per cent less than the intake in 1985-86.

Nuts

The per capita consumption of peanuts declined marginally in 1990-91 to 1.9 kg. Peanut intake remains stable, with increased imports, which account for 63.6 per cent of the total supply. The consumption of tree nuts also fell, by 4.9 per cent to 3.9 kg per capita. Like peanuts, imports account for most of the total supply.

Oils and fats

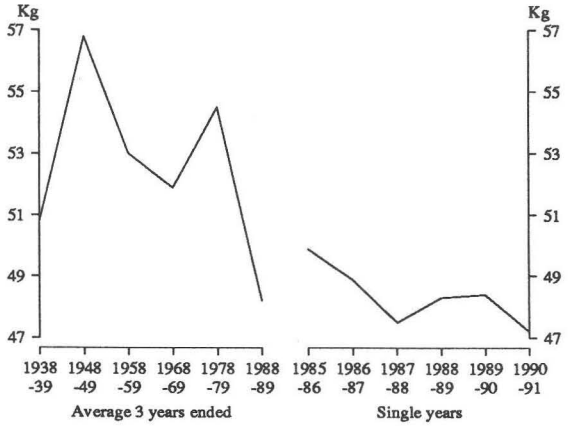
The level of fats in the food supply did not change in 1990-91. Since 1985-86, consumption of fats and oils has decreased by 5.3 per cent from 20.9 kg to 19.8 kg per capita. Butter intake continued to fall, whereas the consumption of total margarine has stabilised and remains the dominant fat spread. Since 1985-86 butter intake has fallen by 1.0 kg (26.3%) to 2.8 kg per capita whereas margarine has fallen by 0.4 kg (4.4%) to 8.6 kg per capita. This trend is also reflected in the longer term with a shift away from butter towards margarine, vegetable oils and other fats.

Sugars

Total sugar consumption declined in 1990-91, by 1.2 kg (2.5%) to 47.2 kg per capita. Since 1985-86 it has decreased by 5.4 per cent. However, there were greater shifts between sugar products during this period. Total cane sugar fell by 6.9 per cent from 45.0 kg to 41.9 kg per capita, whilst honey fluctuated between 0.8 kg and 1.0 kg per capita. The decline in the demand for sugar in manufactured foods since 1985-86 can be attributed in part to decreased demand for sugar by the brewing industry, consistent with the fall in beer consumption.

Some 78.5 per cent of the cane sugar available is used in the manufacture of foods, with the remainder available for use in the home as refined sugar.

APPARENT PER CAPITA CONSUMPTION OF SUGAR



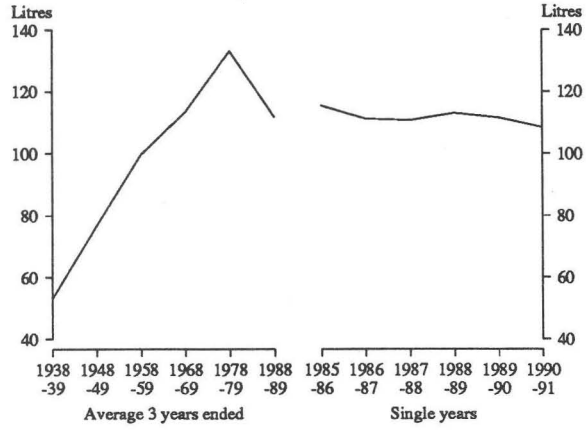
Beverages

The consumption of tea has declined gradually since 1985-86, with the total available for consumption falling 20.3 per cent to about 17 thousand tonnes. In per capita terms, this represents a fall of 28.6 per cent from 1.4 kg to 1.0 kg per capita. This was offset by an increase in the consumption of coffee, by 31.3 per cent to 2.1 kg per capita. Most of the supply of both tea and coffee comes from overseas.

The consumption of aerated and carbonated waters is also increasing, with intake up by 21.6 per cent since 1985-86 from 79.5 litres to 96.7 litres per capita in 1990-91.

Recent trends in beer consumption continued in 1990-91, with low alcohol beer increasing 4.8 per cent to 19.7 litres per capita and other beer falling 4.4 per cent to 88.7 litres per capita. Since 1985-86 the per capita consumption of low alcohol beer increased by 7.0 litres (55.1%), whilst consumption of other beer fell by 14.1 litres (13.7%). The downward trend in wine consumption also continued in 1990-91, with wine intake falling for the fifth successive year to 17.8 litres per head. This is 17.6 per cent less than consumption in 1985-86.

APPARENT PER CAPITA CONSUMPTION OF BEER



Alcohol

Overall, consumption of alcohol has declined steadily since 1985-86, falling by 10.9 per cent to 8.04 litres. The trend away from consumption of other beer to low alcohol beer is reflected in alcohol consumption data for 1990-91.

Alcohol consumed as low alcohol beer has almost doubled since 1985-86, whereas alcohol consumed as other beer decreased by 14.2 per cent. Likewise, alcohol consumed as wine fell (by 17.9%) to 2.06 litres alcohol per capita in 1990-91. The consumption of alcohol as beer is now at a similar level as it was in the 1950's, when the average for the three years ended 1958-59 for beer was 4.79 litres alcohol per capita. Despite these longer term trends which reflect the introduction of low alcohol beer, the consumption of alcohol as wine and spirits is now considerably greater.

Nutrient Intake

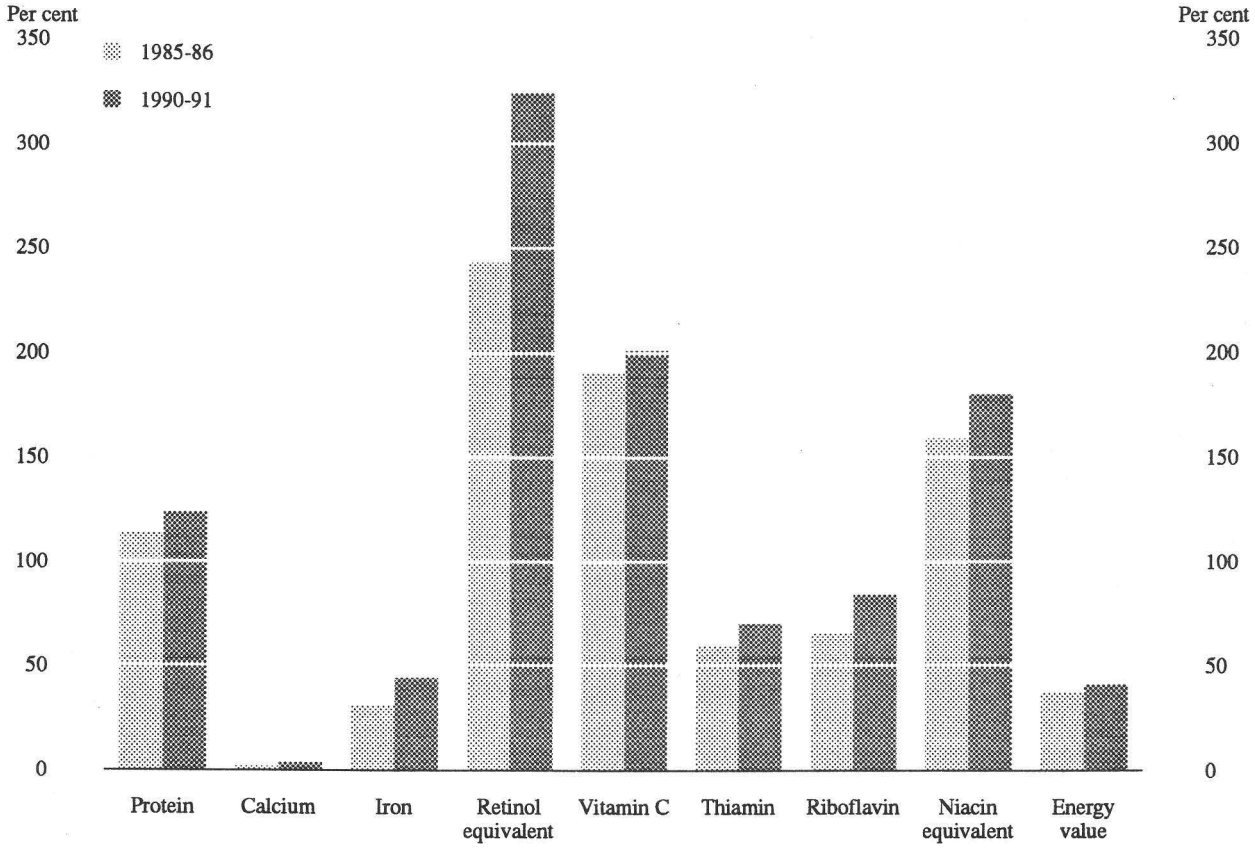
In 1990-91, the unadjusted estimates of the available nutrients (see Table 4) varied somewhat from the previous year. While some changes were minor, such as a 3.1 per cent increase in iron, and a 5.5 per cent increase in riboflavin, there was a 21.3 per cent increase in the available vitamin A (retinol equivalents). There had been a drop of 14.9 per cent in this nutrient between 1987-88 and 1988-89. The availability of this nutrient varies considerably, mostly due to relatively minor shifts in the apparent consumption of offal which is a rich source of vitamin A.

Since 1985-86, major changes in the unadjusted supply of nutrients included iron up 9.9 per cent, retinol equivalents up 24.1 per cent, thiamin up 7.9 per cent, riboflavin up 10.1 per cent and niacin up 9.7 per cent. Total energy in the same period has changed little. This increased nutrient density in the food supply available for consumption has been accompanied by increased consumption of cereal based foods, fruit and vegetables, and a fall in the intake of alcoholic beverages, oils and fats, and sugars.

These movements are reflected in the percentage of total energy derived from each commodity group since 1985-86 (see Table 7). Energy derived from consumption of grain products, the group contributing the most to total energy, increased by 8.0 per cent since 1985-86. Similarly vegetables increased by 12.5 per cent, whilst falls were recorded for alcoholic beverages (down 21.1%), fats (down 21.1%) and sugars (down 5.7%). Consequently, the percentages of total energy contributed by the macronutrients, alcohol and fat, have decreased, while that from carbohydrate has increased.

All nutrients available for consumption continue to be in excess of the recommended dietary intake (RDI) for the Australian population (see Table 8). The table shows wide variation, from calcium being only 4 per cent in excess of the RDI, to vitamin C and retinol equivalents, being 201 per cent and 324 per cent respectively, in excess of the RDI. It should be noted, however, that when the contribution of offal meats to this nutrient supply is removed, then retinol equivalents are about 65 per cent in excess of the RDI.

NUTRIENTS AVAILABILITY: PERCENTAGE DIFFERENCE BETWEEN RECOMMENDED DIETARY ALLOWANCE AND AVAILABILITY



SECTION I. SUPPLY AND UTILISATION OF FOODSTUFFS

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*	*1990-91*
MEAT AND MEAT PRODUCTS—							
Carcass meat—							
Beef and veal	63.6	49.5	56.2	40.0	64.8	40.1	40.7
Lamb	6.8	11.4	13.3	20.5	14.4	14.9	14.1
Mutton	27.2	20.5	23.1	18.8	3.6	7.3	7.7
Pigmeat	3.9	3.2	4.6	6.7	13.3	17.5	18.0
Total carcass meat	*101.5*	*84.6*	*97.2*	*85.9*	*96.1*	*79.8*	*80.5*
Offal and meat n.e.i.	3.8	4.0	5.2	5.1	5.9	3.1	3.8
Total Meat and Meat Products (carcass equivalent weight)	**118.5**	**103.0**	**112.4**	**98.8**	**102.0**	**r82.9**	**84.4**
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	7.1
POULTRY—							
Poultry (dressed weight)	n.a.	n.a.	n.a.	8.3	17.1	24.3	25.4
SEAFOOD—							
Fresh and frozen (edible weight)—							
Fish—							
Australian	2.7	2.4	1.4	1.4	1.6	r2.5	3.8
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	1.2
Seafood, otherwise prepared (product weight)(a)—							
Australian	1.9	1.4	0.4	0.4	0.5	0.5	0.4
Imported—							
Fish			0.8	1.0	1.8	1.7	1.7
Crustacea and molluscs					0.4	0.6	0.8
Total seafood	**4.9**	**4.1**	**4.5**	**5.6**	**6.4**	**r8.1**	**9.5**
DAIRY PRODUCTS—							
Market milk (fluid whole)(litres)(b)	106.4	138.7	128.7	128.2	100.5	101.8	101.1
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	1.7
Powdered milk—							
Full cream	1.2	1.5	1.1	0.8	1.3	0.9	0.7
Skim (incl. buttermilk and mixed skim and buttermilk)	—	0.3	1.1	4.3	2.7	2.7	2.2
Infants' and invalids' food	0.5	0.6	1.0	1.3	1.2	1.2	1.3
Cheese (natural equivalent weight)(d)	2.0	2.5	2.6	3.5	5.3	r8.8	8.7
Total (converted to milk solids fat and non-fat)(e)	**17.8**	**22.3**	**22.1**	**25.4**	**22.1**	**r23.7**	**23.2**
FRUIT AND FRUIT PRODUCTS—							
Fresh fruit (incl. fruit for fruit juice)—							
Citrus	14.5	16.9	16.1	22.5	34.5	38.5	36.3
Other	42.6	39.5	35.6	40.8	34.6	47.7	52.3
Jams, conserves, etc. (product weight)	5.2	5.6	3.9	3.3	2.0	2.1	2.2
Dried fruit (product weight)	3.8	3.9	2.8	2.5	2.0	2.4	2.5
Processed fruit (product weight)	3.5	3.4	6.0	9.9	10.5	8.2	7.5
Total (fresh fruit equivalent)	**78.7**	**80.9**	**72.2**	**86.5**	**91.0**	**108.6**	**110.2**
VEGETABLES—							
Potatoes	47.1	56.3	51.7	53.7	50.1	62.0	63.5
Other root and bulb vegetables(f)	n.a.	19.1	15.9	17.1	16.7	19.6	21.0
Tomatoes	7.1	11.5	13.0	14.2	13.6	19.6	25.8
Leafy and green vegetables	n.a.	20.5	17.9	21.3	24.3	23.7	24.1
Other vegetables	n.a.	22.3	18.6	18.1	17.9	22.2	21.9
Total (fresh equivalent weight)	n.a.	129.7	117.1	124.3	122.5	147.2	156.3

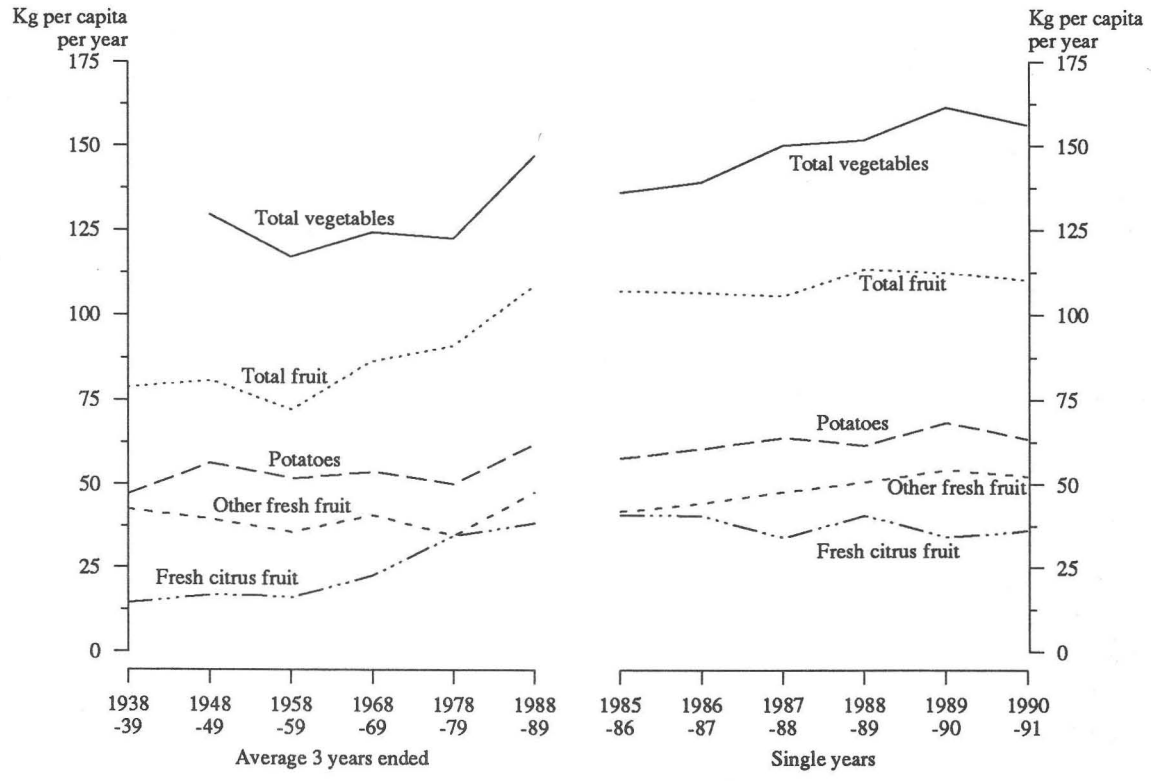
For footnotes see end of table.

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

	Average 3 years ended						*Current year*
	1938-39	*1948-49*	*1958-59*	*1968-69*	*1978-79*	*1988-89*	*1990-91*
GRAIN PRODUCTS—							
Flour(g)	84.9	91.6	82.3	77.4	69.6	72.6	74.3
Breakfast foods	4.8	6.1	6.2	6.8	7.8	9.7	12.2
Table rice	1.8	0.4	n.a.	1.9	2.4	4.7	6.0
Total	**92.5**	**98.6**	**n.a.**	**86.8**	**79.9**	**87.0**	**92.5**
Bread(h)	49.6	64.0	69.1	59.5	47.7	43.9	n.c.
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	126
NUTS (in shell)—							
Peanuts	n.a.	4.2	3.1	2.8	2.1	1.8	1.9
Tree nuts	n.a.	1.8	3.4	5.8	2.9	3.7	3.9
OILS AND FATS—							
Butter	14.9	11.2	12.3	9.8	5.1	3.2	2.8
Margarine—							
Table	0.4	0.4	n.a.	1.5	5.4	6.8	6.7
Other	1.8	2.4	2.2	3.4	3.1	2.2	1.9
Total (fat content)(j)	**17.1**	**14.0**	**n.a.**	**14.3**	**21.6**	**20.4**	**19.8**
SUGARS—							
Cane Sugar—							
As refined sugar	32.0	31.2	27.0	21.0	14.9	8.8	9.1
In manufactured foods	16.3	23.1	23.6	27.7	34.6	33.9	32.9
Total(k)	**50.8**	**56.8**	**53.0**	**51.9**	**54.5**	**48.2**	**47.2**
BEVERAGES—							
Tea	3.1	2.9	2.7	2.3	1.7	1.2	1.0
Coffee(l)	0.3	0.5	0.6	1.2	1.6	2.0	2.1
Aerated and carbonated waters (litres)(m)	n.a.	n.a.	n.a.	47.3	67.4	r87.5	96.7
Beer (litres)	53.2	76.8	99.7	113.5	133.2	111.7	108.4
Wine (litres)	2.7	5.9	5.0	8.2	14.7	20.2	17.8
ALCOHOL (litres alcohol)(n)—							
Beer	2.55	3.58	4.79	5.45	6.40	5.04	4.81
Wine	0.35	0.77	0.87	1.15	1.98	2.35	2.06
Spirits	0.50	0.80	0.74	0.89	1.21	1.24	1.18
Total	**3.40**	**5.15**	**6.40**	**7.49**	**9.59**	**8.63**	**8.04**

(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) Refer to paragraph 5 of the Technical Notes. (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) Includes bulk pre-mix and post-mix con centrates in terms of drink equivalent. (n) 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. Prior to this the alcohol content of beer was calculated using 2.4% by volume for low alcohol beer and 4.8% for other beer.

APPARENT PER CAPITA CONSUMPTION OF VEGETABLES AND FRUIT



APPARENT PER CAPITA CONSUMPTION OF SUGAR

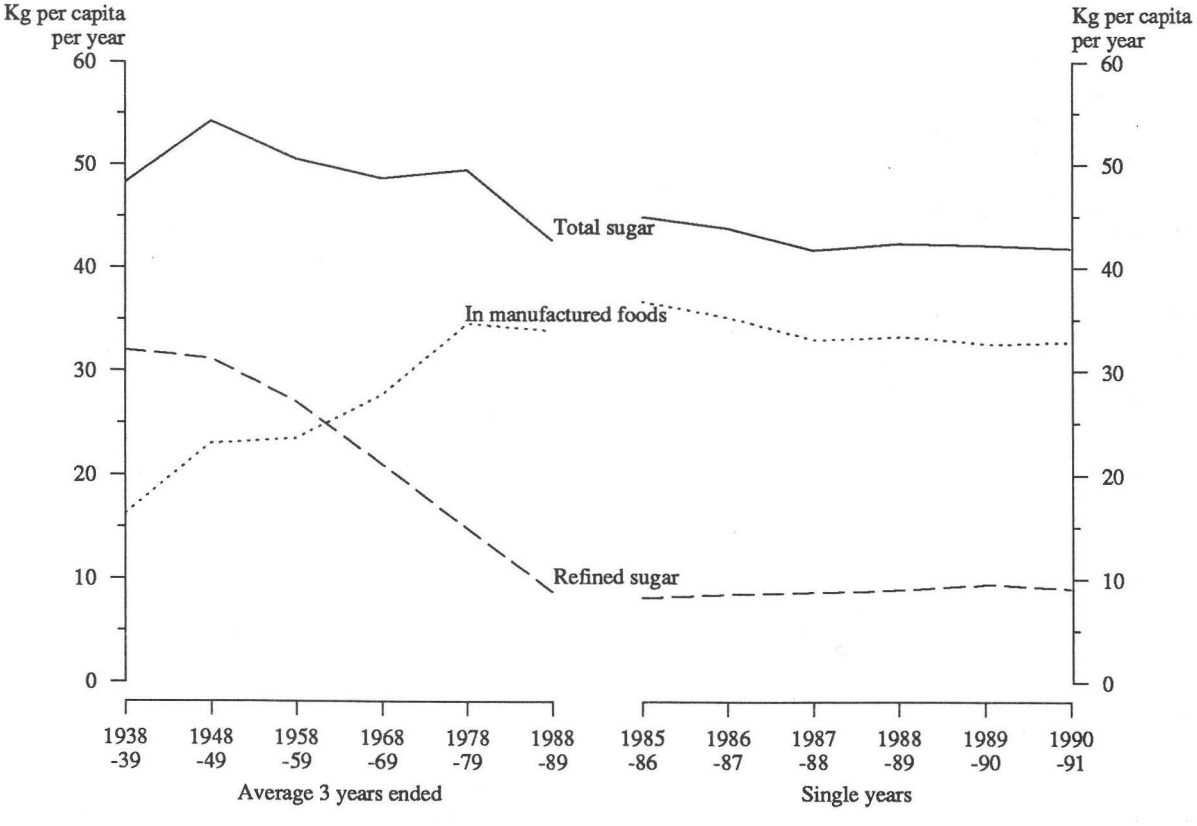


TABLE 2. TOTAL APPARENT CONSUMPTION OF SELECTED FOODSTUFFS, AUSTRALIA

	Available for consumption—						*Apparent per capita consumption—*					
	1985-86	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1990-91*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1990-91*
MEAT AND MEAT PRODUCTS—			— tonnes—							—kg—		
Carcass meat—												
Beef and veal	*655,883*	*630,083*	*656,178*	*685,087*	*691,319*	*699,374*	*41.4*	*39.2*	*40.0*	*41.0*	*40.8*	*40.7*
Beef	622,610	599,394	626,242	659,750	665,421	672,893	39.3	37.3	38.2	39.5	39.2	39.2
Veal	33,273	30,689	29,937	25,337	25,898	26,481	2.1	1.9	1.8	1.5	1.5	1.5
Lamb	268,213	241,015	243,842	248,626	251,456	242,778	16.9	15.0	14.9	14.9	14.8	14.1
Mutton	112,979	118,383	130,110	112,942	139,224	132,114	7.1	7.4	7.9	6.8	8.2	7.7
Pigmeat	268,901	269,877	288,136	301,987	312,297	308,592	17.0	16.8	17.6	18.1	18.4	18.0
Total carcass meat	*1,305,976*	*1,259,359*	*1,318,266*	*1,348,642*	*1,394,296*	*1,382,858*	*82.3*	*78.3*	*80.4*	*80.8*	*82.2*	*80.5*
Offal and meat n.e.i.	42,633	55,083	55,321	r42,305	r46,378	65,801	2.7	3.4	3.4	r2.5	r2.7	3.8
Total Meat and Meat Products (carcass equivalent weight)	**1,348,609**	**1,314,442**	**1,373,587**	**r1,390,947**	**r1,440,674**	**1,448,659**	**85.0**	**81.7**	**83.7**	**r83.3**	**85.0**	**84.4**
Bacon and ham (cured carcass weight)	103,693	107,996	116,191	115,970	r128,771	121,910	6.5	6.7	7.1	6.9	r7.6	7.1
POULTRY—												
Poultry (dressed weight)	365,168	378,091	405,182	411,921	417,010	435,858	23.0	23.5	24.7	24.7	24.6	25.4
SEAFOOD—												
Fresh and frozen (edible weight)—												
Fish—												
Australian	34,274	36,577	41,046	r43,378	r51,642	65,881	2.2	2.3	2.5	r2.6	r3.0	3.8
Imported	28,552	28,936	31,968	r31,033	r29,749	28,634	1.8	1.8	1.9	1.9	r1.8	1.7
Crustacea and molluscs	11,758	13,042	13,786	r18,122	r17,957	19,815	0.7	0.8	0.8	r1.1	1.1	1.2
Seafood otherwise prepared (product weight)—												
Australian	7,233	7,855	7,863	8,243	7,999	7,609	0.5	0.5	0.5	0.5	0.5	0.4
Imported—												
Fish	28,729	27,599	25,411	28,358	29,668	28,609	1.8	1.7	1.5	1.7	1.7	1.7
Crustacea and molluscs	8,174	8,527	9,868	12,618	12,697	13,250	0.5	0.5	0.6	0.8	0.7	0.8
Total seafood	**118,720**	**122,536**	**129,942**	**r144,708**	**r149,712**	**163,798**	**7.5**	**7.6**	**7.9**	**r8.7**	**r8.8**	**9.5**
DAIRY PRODUCTS—			—'000 litres—							—litres—		
Market milk (fluid whole)	1,625,485	1,655,000	1,665,600	1,684,700	1,706,900	1,736,600	102.5	102.9	101.5	100.9	100.7	101.1
Condensed, concentrated and evaporated milk—			—tonnes—							—kg—		
Full cream sweetened / Full cream unsweetened	43,679	39,597	33,715	36,757	40,484	41,957	2.8	2.5	2.1	2.2	2.4	2.4
Skim	13,467	16,055	20,834	22,242	24,093	29,852	0.8	1.0	1.3	1.3	1.4	1.7
Powdered milk—												
Full cream	9,358	13,735	15,867	16,031	17,100	12,250	0.6	0.9	1.0	1.0	1.0	0.7
Skim	36,082	43,787	47,997	42,991	41,418	38,466	2.3	2.7	2.9	2.6	2.4	2.2
Infants' and invalids' food	18,829	15,245	21,133	r23,045	r24,856	22,855	1.2	0.9	1.3	1.4	r1.5	1.3
Cheese (natural equivalent weight) r	132,454	136,976	144,729	150,322	149,847	149,797	8.3	8.5	8.8	9.0	8.8	8.7
Total (converted to milk solids, fat and non-fat) r	**362,157**	**379,278**	**392,670**	**395,956**	**400,125**	**398,084**	**22.8**	**23.6**	**23.9**	**23.7**	**23.6**	**23.2**

For footnotes see end of table.

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

	Available for consumption—						*Apparent per capita consumption—*					
	1985-86	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1990-91*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1990-91*
FRUIT AND FRUIT PRODUCTS—			—tonnes—						—kg—			
Fresh fruit (incl. fruit for fruit juice)—												
Citrus	647,991	653,566	558,524	680,878	581,116	623,751	40.8	40.6	34.1	40.8	34.3	36.3
Other	667,852	715,574	785,293	847,566	921,446	897,289	42.1	44.5	47.9	50.8	54.3	52.3
Jams, conserves, etc. (product weight)	30,582	30,237	32,414	37,625	38,412	36,931	1.9	1.9	2.0	2.3	2.3	2.2
Dried fruit (product weight)	45,582	37,087	40,703	42,005	40,006	43,351	2.9	2.3	2.5	2.5	2.4	2.5
Processed fruit (product weight)	126,758	131,208	r146,826	r123,459	r161,271	128,350	8.0	8.2	r9.0	7.4	9.5	7.5
Total (fresh fruit equivalent)	**1,697,194**	**1,712,748**	**r1,731,854**	**1,895,335**	**r1,905,899**	**1,892,722**	**107.0**	**106.4**	**105.6**	**113.5**	**112.4**	**110.2**
VEGETABLES—												
Potatoes	914,976	975,422	1,049,167	1,027,071	1,157,491	1,090,758	57.7	60.6	64.0	61.5	68.3	63.5
Other root and bulb vegetables	299,343	304,549	305,139	353,457	333,985	360,604	18.9	18.9	18.6	21.2	19.7	21.0
Tomatoes	267,739	289,475	326,812	349,825	r401,741	442,230	16.9	18.0	19.9	21.0	23.7	25.8
Leafy and green vegetables	361,139	350,560	392,340	424,788	441,790	413,379	22.8	21.8	23.9	25.4	26.1	24.1
Other vegetables	316,838	320,779	389,536	381,970	404,806	376,765	20.0	19.9	23.7	22.9	23.9	21.9
Total (fresh equivalent weight)	**2,160,035**	**2,240,785**	**2,462,994**	**2,537,111**	**r2,739,813**	**2,683,736**	**136.2**	**139.3**	**150.2**	**152.0**	**161.6**	**156.3**
GRAIN PRODUCTS—												
Flour(a)	1,138,270	1,158,778	1,208,389	1,205,837	1,247,853	1,275,729	71.8	72.0	73.7	72.2	73.6	74.3
Breakfast foods—												
Oatmeal and rolled oats	24,543	25,301	26,759	31,550	32,128	39,351	1.5	1.6	1.6	1.9	1.9	2.3
Other (from grain)	118,737	115,943	134,544	143,151	143,982	169,864	7.5	7.2	8.2	8.6	8.5	9.9
Total breakfast foods	*143,280*	*141,244*	*161,303*	*174,701*	*176,110*	*209,215*	*9.0*	*8.8*	*9.8*	*10.5*	*10.4*	*12.2*
Table rice	58,625	60,035	80,185	89,426	97,561	103,001	3.7	3.7	4.9	5.4	5.8	6.0
Total grain products	**1,340,175**	**1,360,057**	**1,449,877**	**1,469,964**	**1,521,524**	**1,587,945**	**84.5**	**84.5**	**88.4**	**88.0**	**89.7**	**92.5**
Bread	n.c.	719,025	n.c.	n.c.	n.y.a.	n.c.	n.c.	44.7	n.c.	n.c.	n.y.a	n.c.
EGGS AND EGG PRODUCTS			—'000 dozen—						—number—			
Number of eggs(b)	185,331	184,473	183,961	178,302	176,368	180,358	140	138	135	128	125	126
NUTS (in shell)—			—tonnes—						—kg—			
Peanuts	25,741	35,084	28,394	27,477	33,270	33,383	1.6	2.2	1.7	1.6	2.0	1.9
Tree nuts	60,836	56,134	59,918	68,170	69,650	67,105	3.8	3.5	3.7	4.1	4.1	3.9

For footnotes see end of table.

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

	Available for consumption—						*Apparent per capita consumption—*					
	1985-86	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1990-91*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1990-91*
OILS AND FATS—			—tonnes—							—kg—		
Butter(c)	59,550	56,182	50,201	48,794	48,789	47,965	3.8	3.5	3.1	2.9	2.9	2.8
Total margarine	*143,463*	*142,676*	*148,093*	*149,640*	*r145,662*	*147,735*	*9.0*	*8.9*	*9.0*	*9.0*	*r8.6*	*8.6*
Table margarine	109,576	108,854	112,267	113,278	r109,435	115,027	6.9	6.8	6.8	6.8	6.5	6.7
Other margarine	33,887	33,822	35,826	36,362	r36,227	32,708	2.1	2.1	2.2	2.2	r2.1	1.9
Total (fat content)(d)	**332,258**	**331,096**	**334,026**	**337,165**	**r336,320**	**339,578**	**20.9**	**20.6**	**20.4**	**20.2**	**r19.8**	**19.8**
SUGARS—												
Cane Sugar—												
As refined sugar	130,841	138,246	144,002	150,228	r161,782	155,519	8.2	8.6	8.8	9.0	r9.5	9.1
In manufactured foods	583,276	568,300	542,422	558,197	r554,148	564,137	36.8	35.3	33.1	33.4	r32.7	32.9
Total cane sugar	*714,117*	*706,546*	*686,424*	*708,425*	*r715,930*	*719,656*	*45.0*	*43.9*	*41.8*	*42.4*	*r42.2*	*41.9*
Honey	12,341	14,679	16,851	16,285	14,050	15,409	0.8	0.9	1.0	1.0	0.8	0.9
Total(e)	**790,899**	**786,628**	**779,132**	**806,509**	**r820,444**	**810,198**	**49.9**	**48.9**	**47.5**	**48.3**	**r48.4**	**47.2**
BEVERAGES—												
Tea	21,502	20,928	19,804	19,587	18,228	17,128	1.4	1.3	1.2	1.2	1.1	1.0
Coffee(f)	25,392	28,859	34,733	33,583	33,081	35,289	1.6	1.8	2.1	2.0	2.0	2.1
			—'000 litres—							—litres—		
Aerated and carbonated waters(g) r	1,261,632	1,306,174	1,436,827	1,560,339	1,619,753	1,660,848	79.5	81.2	87.6	93.4	95.5	96.7
Beer—												
Low alcohol	201,044	185,009	198,592	273,596	318,114	338,167	12.7	11.5	12.1	16.4	18.8	19.7
Other beer	1,630,970	1,605,987	1,618,095	1,614,416	1,574,015	1,523,751	102.8	99.8	98.7	96.7	92.8	88.7
Total beer	*1,832,014*	*1,790,996*	*1,816,687*	*1,888,012*	*1,892,129*	*1,861,918*	*115.5*	*111.3*	*110.8*	*113.1*	*111.6*	*108.4*
Wine	343,112	337,588	338,701	318,888	311,063	305,271	21.6	21.0	20.6	19.1	18.3	17.8
ALCOHOL—			—'000 litres alcohol—						—litres alcohol —			
Beer(h)—												
Low alcohol	4,825	4,440	4,766	6,566	9,046	9,665	0.30	0.28	0.29	0.39	0.53	0.56
Other beer	78,287	77,087	77,669	77,492	75,219	72,864	4.94	4.79	4.74	4.64	4.44	4.24
Total beer	*83,112*	*81,527*	*82,435*	*84,058*	*84,265*	*82,529*	*5.24*	*5.07*	*5.03*	*5.03*	*4.97*	*4.81*
Wine	39,879	39,233	39,287	37,009	36,118	35,312	2.51	2.44	2.40	2.22	2.13	2.06
Spirits	20,147	18,997	20,275	21,488	21,629	20,232	1.27	1.18	1.24	1.29	1.28	1.18
Total	**143,138**	**139,757**	**141,997**	**142,555**	**142,012**	**138,073**	**9.02**	**8.69**	**8.66**	**8.54**	**8.37**	**8.04**

(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) Includes bulk pre-mix and post-mix concentrates in terms of drink equivalent. (h) From 1989-90 onwards, data for beer have been compiled on the basis of excise data. Prior to this the alcohol content of beer was calculated using 2.4% by volume for low alcohol beer and 4.8% for other beer.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1990-91

	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	-1,568	1,759,569	—	3,780	1,764,917	1,065,543	. .		699,374	40.7
Beef	-1,521	1,723,236	—	3,024	1,727,781	1,054,888	. .		672,893	39.2
Veal	-47	36,333	—	756	37,136	10,655	. .		26,481	1.5
Lamb	-1,229	287,271	—	—	288,500	45,722	. .	(b)	242,778	14.1
Mutton	-1,903	381,443	—	63	383,409	251,295	. .		132,114	7.7
Pigmeat	-806	312,116	—	1,009	313,931	5,339	. .		308,592	18.0
Total carcass meat	*-5,506*	*2,740,399*	—	*4,852*	*2,750,757*	*1,367,899*	. .		*1,382,858*	*80.5*
Offal and meat n.e.i.(a)	-3,499	125,154	—	5,970	134,623	65,821	3,000	. .	65,802	3.8
Total Meat and Meat Products(carcass equivalent weight)	**-9,005**	**2,865,553**	**—**	**10,822**	**2,885,380**	**1,433,720**	**3,000**	**. .**	**1,448,660**	**84.4**
Bacon and ham (cured carcass weight)	5,459	131,719	—	198	126,458	1,133	. .	3,415	121,910	7.1
POULTRY—										
Poultry (dressed weight)	-9,318	424,314	3,893	629	438,154	2,296	. .	n.a.	435,858	25.4
SEAFOOD—										
Fresh and frozen (edible weight)—										
Fish—										
Australian	n.a.	78,276	7,828	. .	86,104	13,109	n.a.	7,114	65,881	3.8
Imported	n.a.	. .	. .	29,006	29,006	372	n.a.	. .	28,634	1.7
Crustacea and molluscs	n.a.	31,633	—	5,551	37,184	15,157	n.a.	2,212	19,815	1.2
Seafood, otherwise prepared (product weight)—										
Australian	-757	9,326	—	. .	10,083	2,474	. .	. .	7,609	0.4
Imported—										
Fish	n.a.	. .	. .	28,651	28,651	42	. .	. .	28,609	1.7
Crustacea and molluscs	n.a.	. .	. .	13,317	13,317	67	. .	. .	13,250	0.8
DAIRY PRODUCTS—					— '000 litres —					litres
Market milk (fluid whole)	. .	. .	. .	. .	. .	. .	. .	. .	(c)1,736,600	101.1
Condensed, concentrated and evaporated milk—					— tonnes —					kg
Full cream sweetened / Full cream unsweetened	-983	43,752	—	239	44,974	3,017	. .	. .	41,957	24
Skim	-273	38,752	—	972	39,997	10,145	. .	. .	29,852	1.7
Powdered milk—										
Full cream	. .	. .	. .	. .	. .	. .	. .	. .	(c)12,250	0.7
Skim (incl. buttermilk and mixed skim and buttermilk)	. .	. .	. .	. .	. .	. .	. .	. .	(c)38,466	2.2
Infants' and invalids' food	-832	32,545	—	1,476	34,853	11,968	. .	. .	22,855	1.3
Cheese (natural equivalent weight)	. .	. .	. .	. .	. .	. .	. .	. .	(c)149,797	8.7

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1990-91 — *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	. .	461,195	23,060	113,571	597,826	73,870	9,224	n.a.	514,732	30.0
Other citrus fruit	. .	105,440	5,272	7,600	118,312	9,293	n.a.	n.a.	109,019	6.3
Other fresh fruit—										
Apples	(d)-16,166	292,948	—	—	309,114	25,897	n.a.	22,368	260,849	15.2
Apricots	. .	26,228	—	723	26,951	240	n.a.	11,066	15,645	0.9
Bananas	. .	218,734	—	11	218,745	34	n.a.	—	218,711	12.7
Grapes	. .	46,583	—	—	46,583	8,777	n.a.	. .	37,806	2.2
Melons, cantaloupes etc.	. .	134,765	—	—	134,765	5,532	n.a.	. .	129,233	7.5
Peaches	. .	62,017	—	2,396	64,413	656	n.a.	29,588	34,169	2.0
Pears	(d)-576	158,164	—	87	158,827	26,235	n.a.	44,957	87,635	5.1
Pineapples	. .	129,899	—	—	129,899	905	n.a.	49,822	79,172	4.6
Plums and prunes	. .	20,639	—	5	20,644	2,323	n.a.	n.a.	18,321	1.1
Total	*(d)-16,742*	*1,159,318*	*15,000*	*31,164*	*1,222,224*	*74,565*	*n.a.*	*250,370*	*897,289*	*52.3*
Jams, conserves, etc. (product weight)	-327	30,092	1,000	6,390	37,809	878	. .	. .	36,931	2.2
Dried vine fruit (product weight)—										
Currants	. .	. .	. .	. .	. .	. .	. .	. .	(e)4,131	0.2
Raisins	. .	. .	. .	. .	. .	. .	. .	. .	(e)3,124	0.2
Sultanas	. .	. .	. .	. .	. .	. .	. .	. .	(e)24,987	1.5
Dried tree fruit (product weight)—										
Apricots	. .	. .	. .	. .	. .	. .	. .	. .	(f)2,517	0.1
Prunes	. .	. .	. .	. .	. .	. .	. .	. .	(f)3,752	0.2
Other	. .	. .	. .	. .	. .	. .	. .	. .	(f)4,840	0.3
Processed fruit (product weight)—										
Apples	-1,369	10,551	—	—	11,920	10	. .	. .	11,910	0.7
Apricots	168	8,8315,	150	552	9,365	1,535	. .	. .	7,830	0.5
Mixed fruits (incl. fruit salad)	3,906	32,769	—	697	29,560	16,876	. .	. .	12,684	0.7
Peaches	-2,596	30,995	150	1,765	35,506	15,781	. .	. .	19,725	1.1
Other	-17	74,306	200	30,430	104,953	28,752	. .	. .	76,201	4.4

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1990-91 — *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.	1,161,032	25,400	7,621	1,194,053	18,464	84,831		1,090,758	63.5
Other root and bulb vegetables—										
Beetroot	363	28,381	1,987	—	30,005	100	284		29,621	1.7
Carrots	605	158,492	7,925	—	165,812	20,648	4,755		140,409	8.2
Onions	393	226,069	11,303	6,348	243,327	60,022	6,782		176,523	10.3
Parsnips	n.a.	4,681	234	—	4,915	540	94		4,281	0.2
Sweet potatoes	n.a.	7,147	—	62	7,209	—	143		7,066	0.4
White turnips and swedes	n.a.	5,243	157	—	5,400	2,591	105		2,704	0.2
Total	*1,361*	*430,013*	*21,606*	*6,410*	*456,668*	*83,901*	*12,163*		*360,604*	*21.0*
Tomatoes	18,790	381,985	38,199	64,062	465,456	4,127	19,099		442,230	25.8
Leafy and green veg. (incl. legumes)—										
Beans	1,334	40,213	6,032	4,270	49,181	2,555	804		45,822	2.7
Cabbages and other greens	-5	96,850	4,843	1,596	103,294	5,498	4,843	(b)	92,953	5.4
Celery	n.a.	58,564	2,928	1	61,493	432	2,928		58,133	3.4
Lettuce	n.a.	100,885	10,088	120	111,093	2,440	7,062		101,591	5.9
Peas	-4,901	95,107	14,266	13,069	127,343	5,654	6,809		114,880	6.7
Total	*-3,572*	*391,619*	*38,157*	*19,056*	*452,404*	*16,579*	*22,446*		*413,379*	*24.1*
Other vegetables—										
Asparagus	n.a.	6,688	669	4,983	12,340	2,641	. .		9,699	0.6
Cauliflowers	n.a.	92,418	4,621	—	97,039	8,286	6,469		82,284	4.8
Cucumbers (incl. gherkins)	144	15,966	798	2,762	19,382	340	479		18,563	1.1
Marrows, squashes and zucchinis	n.a.	10,870	544	—	11,414	432	n.a.		10,982	0.6
Pumpkins	n.a.	94,412	4,721	—	99,133	432	n.a.		98,701	5.7
Sweet corn	-4,358	50,920	2,546	11,961	69,785	2,332	1,018		66,435	3.9
Other	12,694	83,099	—	43,750	114,155	24,054	n.a.		90,101	5.2
Total	*8,480*	*354,373*	*13,899*	*63,456*	*423,248*	*38,517*	*7,966*		*376,765*	*21.9*
Total all vegetables	**25,059**	**2,719,022**	**137,261**	**160,605**	**2,991,829**	**161,588**	**146,505**		**2,683,736**	**156.3**
GRAIN PRODUCTS—										
Flour (incl. flour for breadmaking)	88	1,295,017	. .	26,484	1,321,413	45,684	. .	. .	1,275,729	74.3
Breakfast foods—										
Oatmeal and rolled oats	n.a.	42,280	. .	1	42,281	2,930	. .	. .	39,351	2.3
Other (from grain)	773	192,088	. .	2,157	193,472	23,608	. .	. .	169,864	9.9
Table rice	n.a.	76,389	. .	26,612	103,001	. .	. .	. .	103,001	6.0
Total grain products	**861**	**1,605,774**	**. .**	**55,254**	**1,660,017**	**72,222**	**. .**	**. .**	**1,587,945**	**92.5**
Bread(g)	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.	n.c.
EGGS AND EGG PRODUCTS—									'000 doz.	number
Number of eggs	. .	. .	. .	. .	. .	. .	. .	. .	(h)180,358	126
NUTS (in shell)—					— tonnes —					kg
Peanuts	4,837	20,300	n.a.	27,000	42,463	1,754	. .	7,326	33,383	1.9
Tree nuts	n.a.	18,272	n.a.	56,247	74,519	7,414	n.a.	n.a.	67,105	3.9

For footnotes see end of table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS, AUSTRALIA, 1990-91 — *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)47,965	2.8
Total margarine	*-1,222*	*162,170*	—	*932*	*164,324*	*16,589*	..	..	*147,735*	*8.6*
Table margarine	-577	119,123	—	932	120,632	5,605	..	..	115,027	6.7
Other margarine	-645	43,047	—	—	43,692	10,984	..	..	32,708	1.9
SUGARS—										
Cane Sugar—										
As refined sugar	11,135	781,236	—	1,261	771,362	5,452	..	610,391	155,519	9.1
In manufactured foods	—	610,391	..	50,063	660,454	96,317	..	..	564,197	32.9
Honey	—	26,777	—	62	26,839	11,430	—	—	15,409	0.9
BEVERAGES—										
Tea	n.a.	785	—	16,630	17,415	287	..	..	17,128	1.0
Coffee	n.a.	101	—	39,857	39,958	4,634	..	..	35,324	2.1
					— '000 litres —					litres
Aerated and carbonated waters	n.a.	1,610,257	n.a.	77,093	1,687,350	26,502	..	..	1,660,848	96.7
Beer—				(i)					(j)	
Low alcohol	..	..	..	450	..	..	..	..	338,167	19.7
Other beer	..	..	..	10,455	..	..	..	..	1,523,751	88.7
Total beer	..	..	..	*10,905*	..	..	..	..	*1,861,918*	*108.4*
Wine—				(i)					(k)	
Dessert wine	..	..	..	108	..	..	..	..	17,806	1.0
Sherry	..	..	..	83	..	..	..	..	13,129	0.8
Sparkling and carbonated wine	..	..	..	2,285	..	..	..	..	35,125	2.0
Table wine	..	..	..	5,604	..	..	..	..	233,936	13.6
Vermouth	..	..	..	223	..	..	..	..	1,842	0.1
Other wine, n.e.i.	..	..	..	696	..	..	..	..	3,433	0.2
Total wine	..	..	..	*8,999*	..	..	..	..	*305,271*	*17.8*
Spirits—					— '000 litres alcohol —					litres alcohol
				(i)					(j)	
Brandy	..	..	..	636	..	..	..	..	2,079	0.12
Gin	..	..	..	628	..	..	..	..	855	0.05
Liqueurs (incl. flavoured spirits)	..	..	..	1,765	..	..	..	..	1,878	0.11
Rum	..	..	..	578	..	..	..	..	2,655	0.15
Vodka	..	..	..	673	..	..	..	..	1,000	0.06
Whisky	..	..	..	10,162	..	..	..	..	10,191	0.59
Other, n.e.i. (incl. bitters)	..	..	..	399	..	..	..	..	1,574	0.09
Total spirits	..	..	..	*14,841*	..	..	..	..	*20,232*	*1.18*

(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 1990-91. (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.

SECTION II. LEVEL OF NUTRIENT INTAKE

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
					1985-86						
Meat and meat products r	29.5	27.2	0.1	12	2.9	1,297	2	0.27	0.49	6.2	1,514
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) r	19.1	21.2	19.8	652	0.6	211	4	0.21	0.76	0.4	1,426
Fruit and fruit products	1.9	0.2	25.8	41	0.8	37	55	0.13	0.06	0.6	472
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
Sugars	—	—	128.4	5	0.1	—	—	—	—	—	2,054
Beverages(alcoholic)(d)	1.1	—	7.4	16	0.1	—	7	—	—	1.4	747
Total r	**97.7**	**120.3**	**373.2**	**859**	**12.1**	**2,337**	**134**	**1.65**	**2.28**	**22.7**	**12,919**
					1986-87						
Meat and meat products r	28.6	26.1	0.2	11	3.0	1,631	2	0.27	0.55	6.1	1,459
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) r	19.7	21.4	20.2	673	0.6	211	4	0.21	0.79	0.4	1,451
Fruit and fruit products	1.9	0.2	25.0	40	0.8	37	55	0.12	0.07	0.6	461
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
Sugars	—	—	125.6	5	0.1	—	—	—	—	—	2,009
Beverages(alcoholic)(d)	1.0	—	7.1	16	0.1	—	7	—	0.01	1.3	719
Total r	**97.8**	**119.0**	**370.8**	**878**	**12.0**	**2,705**	**135**	**1.66**	**2.35**	**22.8**	**12,811**
					1987-88						
Meat and meat products r	29.2	26.9	0.2	12	3.0	1,631	2	0.28	0.55	6.2	1,498
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) r	20.2	21.7	21.0	689	0.6	218	5	0.22	0.80	0.4	1,486
Fruit and fruit products	1.8	0.2	25.3	37	0.8	37	50	0.11	0.07	0.6	463
Vegetables and vegetable products	6.7	0.5	25.6	43	2.0	455	72	0.24	0.16	3.2	574
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	54.1	0.2	4	—	312	—	—	0.01	0.1	2,010
Sugars	—	—	122.0	5	0.1	—	—	—	—	—	1,951
Beverages(alcoholic)(d)	1.0	—	7.1	16	0.1	—	7	—	—	1.3	714
Total r	**100.8**	**119.5**	**377.3**	**896**	**12.6**	**2,707**	**136**	**1.72**	**2.43**	**23.7**	**12,987**

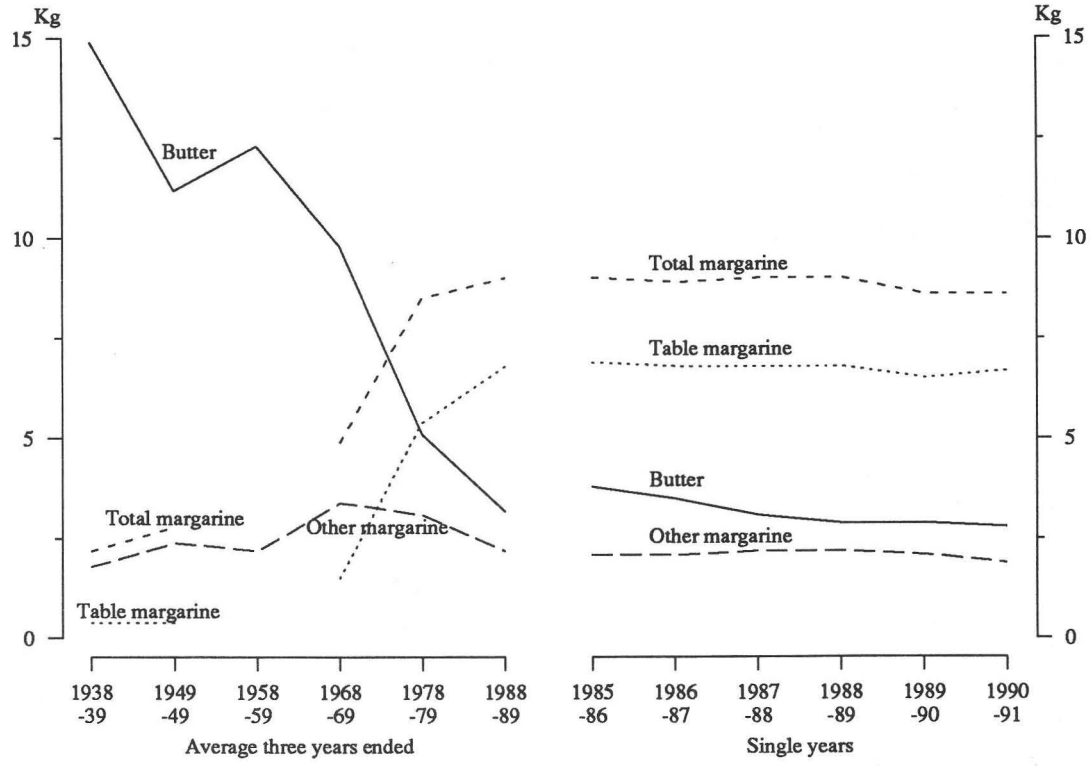
For footnotes see end of table.

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
					1988-89						
Meat and meat products r	28.8	26.7	0.1	11	2.9	120	2	0.28	0.47	6.0	1,483
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) r	20.1	21.9	20.7	683	0.6	221	5	0.21	0.79	0.4	1,486
Fruit and fruit products	2.0	0.2	26.5	42	0.9	39	58	0.13	0.07	0.6	486
Vegetables and vegetable products	6.8	0.5	r25.5	45	2.0	485	71	0.24	0.16	3.2	575
Grain products	25.5	3.4	174.6	46	4.9	—	—	0.79	0.65	8.0	3,527
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	53.7	0.2	4	—	307	—	—	0.01	0.1	1,993
Sugars	—	—	124.3	5	0.1	—	—	—	—	—	1,988
Beverages(alcoholic)(d)	1.0	—	7.2	16	0.1	—	7	—	r—	1.3	710
Total r	**100.7**	**119.4**	**379.7**	**899**	**12.7**	**2,303**	**142**	**1.73**	**2.37**	**23.7**	**13,016**
					1989-90						
Meat and meat products r	29.4	27.3	0.1	12	2.9	1,297	2	0.28	0.49	6.2	1,517
Poultry	7.7	5.5	—	3	0.4	16	—	0.02	0.05	1.5	334
Seafood	r4.7	1.2	—	22	0.3	6	—	0.01	0.03	r1.0	r128
Dairy products(c) r	19.8	21.8	20.0	674	0.6	221	5	0.21	0.78	0.5	1,476
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	r52.8	0.2	4	—	r296	—	—	0.01	0.1	r1,960
Sugars	—	r125.3	122.3	5	0.1	—	—	—	—	—	r2,004
Beverages(alcoholic)(d)	1.0	—	7.1	15	0.1	—	7	—	—	1.3	694
Total r	**101.9**	**119.5**	**385.6**	**888**	**12.9**	**2,391**	**141**	**1.75**	**2.38**	**24.3**	**13,125**
					1990-91						
Meat and meat products	29.5	26.9	0.2	12	3.1	1,822	2	0.29	0.59	6.3	1,505
Poultry	7.9	5.7	—	3	0.4	17	—	0.02	0.05	1.5	345
Seafood	5.1	1.3	—	23	0.3	6	—	0.01	0.03	1.0	138
Dairy products(c)	19.4	21.4	19.8	659	0.6	215	5	0.20	0.76	0.4	1,442
Fruit and fruit products	1.9	0.2	26.2	39	0.8	42	53	0.12	0.07	0.6	480
Vegetables and vegetable products	6.8	0.5	26.0	45	2.0	477	73	0.25	0.16	3.3	583
Grain products	26.8	3.7	183.0	49	5.3	—	—	0.85	0.71	9.6	3,700
Eggs and egg products	2.2	1.7	0.1	7	0.3	27	—	0.01	0.07	—	101
Nuts	1.9	4.6	0.6	15	0.3	—	—	0.04	0.08	0.7	210
Oils and fats	0.2	52.6	0.2	4	—	294	—	—	0.01	0.1	1,952
Sugars	—	—	122.5	4	0.1	—	—	—	—	—	1,958
Beverages(alcoholic)(d)	1.0	—	6.9	15	0.1	—	7	—	—	1.3	668
Total	**102.7**	**118.6**	**385.4**	**873**	**13.3**	**2,901**	**140**	**1.78**	**2.51**	**24.9**	**13,081**

(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)

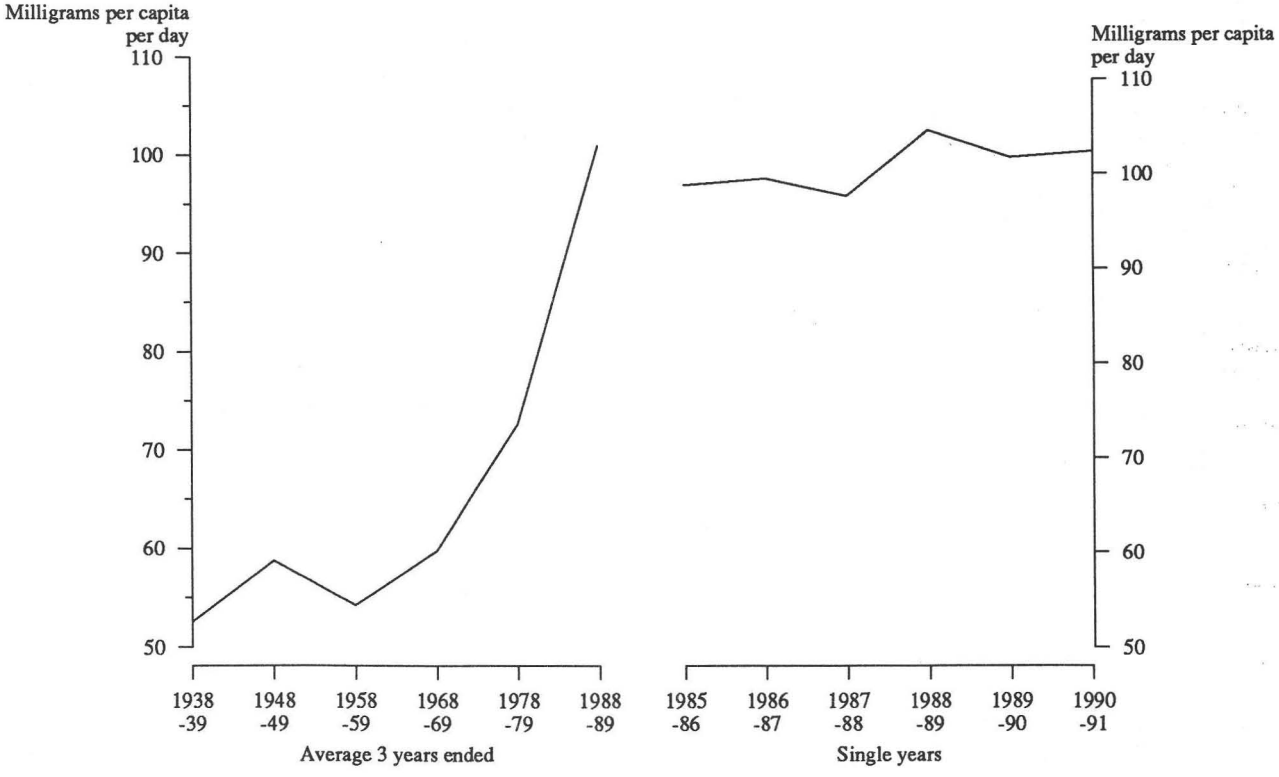


TABLE 5. ADJUSTMENTS TO THE AVAILABILITY OF SPECIFIC VITAMINS, AUSTRALIA(a)
(milligrams per capita per day)

	1985-86		1986-87		1987-88		1988-89		1989-90		1990-91	
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	1.6	1.6	1.3	1.3	1.8	1.8	1.9	1.9	r2.0	r2.0	1.8	1.8
Meat and meat products	r1.8	(b)	2.1	(b)	2.1	(b)	r1.7	(b)	r1.8	(b)	2.3	(b)
Fish	0.2	(b)	0.2	(b)	0.3	(b)	0.3	(b)	0.3	(b)	0.3	(b)
Beverages, alcoholic	7.2	7.2	r7.0	r7.0	6.9	6.9	7.0	7.0	6.9	6.9	6.7	6.7
Fruit and fruit products—												
Fresh, canned and dried r	13.3	11.9	13.8	12.7	15.4	13.9	15.8	14.4	16.5	15.1	16.1	14.8
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	41.6	41.6	41.3	41.3	34.7	34.7	41.3	41.3	34.7	34.7	36.9	36.9
Vegetables and vegetable products—												
Fresh tomatoes	8.2	3.4	8.8	3.9	9.7	4.6	10.2	4.8	11.6	5.3	12.6	7.0
Lettuce	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.6	0.6
Canned vegetables	7.6	5.3	9.2	6.0	9.2	5.9	9.4	6.2	9.7	6.8	9.3	6.3
Cooked potatoes and other vegetables	48.3	24.2	47.4	23.7	52.4	26.2	50.7	25.3	53.9	27.0	50.3	25.2
Total vitamin C r	**133.5**	**98.8**	**134.8**	**99.5**	**136.1**	**97.6**	**142.0**	**104.6**	**141.2**	**101.7**	**140.0**	**102.4**
Thiamin r	1.65	1.40	1.66	1.41	1.72	1.46	1.73	1.47	1.75	1.49	1.78	1.52
Niacin equivalent(c) r	22.7	39.6	22.8	39.7	23.7	41.2	23.7	41.1	24.3	42.0	24.9	42.6

(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*	*1985-86*	*1986-87*	*1987-88*	*1988-89*	*1989-9*	*1990-91*
Protein—							r	r	r	r	r	r	
Animal	g	58.7	57.4	59.6	64.2	69.3	63.0	62.1	62.0	63.6	63.4	63.7	64.1
Vegetable	g	30.9	35.3	32.3	35.5	32.2	36.8	35.6	35.8	37.2	37.3	38.2	38.6
Total	g	89.6	92.7	91.9	99.7	101.5	99.8	97.7	97.8	100.8	100.7	101.9	102.7
Fat (from all sources)	g	133.5	121.7	131.7	123.2	152.6	119.3	120.3	119.0	119.5	119.4	119.5	118.6
Carbohydrate	g	377.4	424.8	416.7	406.8	396.2	375.9	373.2	370.8	377.3	379.7	385.6	385.4
Calcium	mg	642	785	817	968	874	891	859	878	896	899	888	873
Iron	mg	15.4	15.1	14.0	14.7	15.7	12.4	12.1	12.0	12.6	12.7	12.9	13.3
Retinol equivalent	µg	1,472	1,389	1,370	1,348	1,602	2,571	2,337	2,705	2,704	2,303	2,391	2,901
Vitamin C	mg	52.6	58.8	54.3	59.8	72.7	101.0	99	100	98	105	102	102
Thiamin	mg	1.2	1.3	1.1	1.4	1.50	1.45	1.40	1.41	1.46	1.47	1.49	1.52
Riboflavin	mg	1.7	1.9	1.8	2.7	2.74	2.38	2.28	2.35	2.43	2.37	2.38	2.51
Niacin equivalent	mg	33.0	32.4	33.3	36.2	40.8	40.7	39.6	39.7	41.2	41.1	42.0	42.6
Energy value	kJ	13,048	13,584	13,801	13,835	14,635	12,938	12,919	12,811	12,987	13,016	13,125	13,081

(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

	1985-86	*1986-87*	*1987-88*	*1988-89*	*1989-90*	*1990-91*
Meat and meat products r	11.7	11.4	11.5	11.4	11.6	11.5
Poultry	2.4	2.5	2.6	2.6	r2.5	2.6
Seafood	0.9	0.9	0.9	1.0	1.0	1.1
Dairy products r	11.0	11.3	11.4	11.4	11.2	11.0
Fruit and fruit products	3.7	3.6	3.6	3.7	3.6	3.7
Vegetables and vegetable products	4.0	4.2	4.4	4.4	4.7	4.5
Grain products r	26.2	26.4	27.3	27.1	27.4	28.3
Eggs and egg products	0.9	0.9	0.8	0.8	0.8	0.8
Nuts	1.5	1.6	1.5	1.6	1.7	1.6
Oils and fats r	16.0	15.9	15.5	15.3	14.9	14.9
Sugar r	15.9	15.7	15.0	15.3	15.3	15.0
Beverages(alcoholic)	5.8	5.6	5.5	5.5	5.3	5.1
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*
1985-86—									
RDI	45.6	842	9.2	682	34	0.88	1.37	15.3	9,463
Nutrients—									
Available r	97.7	859	12.1	2,337	99	1.40	2.28	39.6	12,919
In excess of RDI (%) r	114	2	31	243	191	59	66	159	37
1986-87—									
RDI	45.8	842	9.2	684	34	0.90	1.37	15.3	9,481
Nutrients—									
Available r	97.8	878	12.0	2,705	100	1.41	2.35	39.7	12,811
In excess of RDI (%)	114	r4	31	r295	193	57	r71	160	35
1987-88—									
RDI	45.7	840	9.2	683	34	0.89	1.37	15.3	9,471
Nutrients—									
Available r	100.8	896	12.6	2,704	98	1.46	2.43	41.2	12,987
In excess of RDI (%)	r120	7	37	296	r187	64	r78	169	37
1988-89—									
RDI	45.7	840	9.2	683	34	0.89	1.37	15.3	9,471
Nutrients—									
Available r	100.7	899	12.7	2,303	105	1.47	2.37	41.1	13,016
In excess of RDI (%) r	120	7	38	237	208	65	73	169	37
1989-90—									
RDI	45.7	840	9.2	683	34	0.89	1.37	15.3	9,471
Nutrients—									
Available	101.9	888	12.9	2,391	102	1.49	2.38	42.0	13,125
In excess of RDI (%)	123	6	40	250	199	67	74	174	39
1990-91—									
RDI	45.8	838	9.2	685	34	0.89	1.36	15.2	9,283
Nutrients—									
Available	102.7	873	13.3	2,901	102	1.52	2.51	42.6	13,081
In excess of RDI (%)	124	4	44	324	201	70	84	180	41

(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, and iron are calculated on the mid value for the RDI range given for each age group. The same applies for thiamin, riboflavin and niacin in the years to which ranges for RDI's of these nutrients applied. Energy calculated from mid value of the range up to 18 years. Energy for 18 years onwards is based on BMRX1.5 and mean weights for age from NHF Risk Factor Prevalence Study 1983 and 1989.

EXPLANATORY NOTES

Introduction

This publication contains detailed statistics of the consumption of foodstuffs and nutrient intake in Australia for 1990-91 as well as comparative data for earlier years. Historical data published in Tables 1 and 6 refer to averages for the three-year periods ending 1938-39, 1948-49, 1958-59, 1968-69, 1978-79, and 1988-89. 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 Health, Food and Nutrition Unit of the Australian Institute of Health and Welfare to whom thanks are extended. Preliminary statistics for 1991-92 covering major food items have been published in *Apparent Consumption of Selected Foodstuffs, Australia, 1991-92, 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 1991-92 (5436.0)

Foreign Trade, Australia: Merchandise Imports, Detailed Commodity Tables 1991-92 (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

National Health Survey: Health Risk Factors, 1989-90 (4380.0)

National Health Survey: Alcohol Consumption 1989-90 (4381.0)

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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- text and tables for selected Main Economic Indicator publications. Further information is available on (06) 252 6684.

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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	1985-86	15,861,410
1948-49	7,651,558	1986-87	16,089,900
1958-59	9,741,073	1987-88	16,402,017
1968-69	11,919,046	1988-89	16,696,699
1978-79	14,275,870	1989-90	16,958,654
1988-89	16,396,205	1990-91	17,171,700

These data are published in *Australian Demographic Statistics* (3101.0). Revised estimates for the period 1986 to 1991, incorporating the final results from the 1991 Census, will be published in June 1993. See also population data published on page 24 of this publication.

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, 20.8 per cent in 1981, 21.2 per cent in 1986 and 22.7 per cent in 1991).

(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. In particular, the recommended dietary intakes of the population are dependent on the age and sex distribution of the population. Changes in the age distribution will affect the comparison of the nutrients available to the population, with dietary needs.

(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.

1. See Technical Note III.

(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 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. This grouping includes sugar cane products, honey and syrups. 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 72 per cent for beef, 83 per cent for veal, 80 to 85 per cent for lamb and 82 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 1990a, 1990b; English & Lewis 1990; and Lewis, Holt & English, 1992 (AGPS, Canberra). There are additions to, and revisions of data provided through this series. These additions and revisions are incorporated into the nutrient calculations included in this bulletin as they become available, resulting in minor fluctuations in the data provided. 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. Similarly, any revisions to the nutrient data base used to calculate the available nutrients for the latest year in the apparent consumption series, will be reflected in all the years included in the tables in Section II.

4. Revised factors and nutrients have been applied to all food groups in the 1990-91 publication except for tree nuts. Revised Australian data on tree 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 1985-86 to 1990-91 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. No allowance is made for the addition of vitamins and supplements (e.g. vitamin tablets, supplements and fortification) in the nutrient supply data. The only exception is for ready to eat breakfast foods for which there are a common range of nutrient additions.

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 nutrients available for consumption may be compared to the national nutrition reference *Recommended Dietary Intakes for Use in Australia* (RDI), formulated by the National Health and Medical Research Council. There has been a revision of this reference in the 1980's, with serial publication of the revised references. The complete set of revised references were published by the Australian Government Publishing Service in 1991. For this publication they have been determined on the data for each individual year. These are regularly updated, but not necessarily annually, to the age and sex composition of the population.

14. The data in these tables are useful as an indicator of trends in food and nutrient consumption. Whilst it must be emphasized that RDI's do not necessarily represent nutritional requirement, they are devised for the purpose of monitoring the availability and adequacy of nutrients in the national food supply to meet the needs of the population. 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 RDI cannot be assumed to represent nutritional deficiency 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 1990 and 1991 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. Final results from the 1991 Census will be published in mid-1993.

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 1990 AND 1991

Age group (years)	*Number*		*Per cent of total population*		*Number*		*Per cent of total population*	
	1990	*1991*	*1990*	*1991*	*1990*	*1991*	*1990*	1991
	MALES				FEMALES			
0-4	643,888	654,531	3.78	3.79	613,038	623,668	3.60	3.61
5-9	647,395	653,478	3.80	3.78	616,750	622,752	3.62	3.60
10-14	632,952	637,298	3.71	3.69	602,351	606,082	3.53	3.50
15-19	713,100	695,398	4.18	4.02	686,830	667,483	4.03	3.86
20-24	687,633	706,342	4.03	4.08	673,438	695,849	3.95	4.02
25-29	717,905	706,945	4.21	4.09	706,836	699,148	4.15	4.04
30-34	700,347	717,620	4.11	4.15	695,478	714,955	4.08	4.13
35-39	656,029	666,041	3.85	3.85	654,817	664,063	3.84	3.84
40-44	639,341	655,446	3.75	3.79	616,990	638,089	3.62	3.69
45-49	501,347	524,652	2.94	3.03	475,487	498,897	2.79	2.89
50-54	420,415	433,732	2.47	2.51	400,461	412,630	2.35	2.39
55-59	367,014	367,355	2.15	2.12	358,566	357,966	2.10	2.07
60-64	368,594	367,392	2.16	2.12	370,859	370,366	2.18	2.14
65-69	312,770	319,767	1.84	1.85	346,099	348,789	2.03	2.02
70-74	218,517	228,487	1.28	1.32	270,526	281,697	1.59	1.63
75-79	153,473	158,295	0.90	0.92	218,250	223,619	1.28	1.29
80-84	79,979	83,809	0.47	0.48	137,906	143,633	0.81	0.83
85 and over	40,044	42,824	0.23	0.25	99,226	102,946	0.58	0.60
All ages	*8,500,743*	*8,619,412*	*49.87*	*49.85*	*8,543,908*	*8,672,632*	*50.13*	*50.15*

Source: Australian Demographic Statistics, September Quarter 1992 (3101.0) published by the ABS on 3 March 1993.

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