



**APPARENT CONSUMPTION
OF FOODSTUFFS AND NUTRIENTS
AUSTRALIA 1978-79**

CATALOGUE NO. 4306.0

AUSTRALIAN BUREAU OF STATISTICS Canberra

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AUSTRALIA

1978-79

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Catalogue No. 4306.0

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EXPLANATORY NOTES

Introduction

This publication contains detailed statistics of the consumption of foodstuffs and nutrient intake in Australia for 1978-79, as well as comparative data for earlier years. Part I deals with the supply and utilisation of foodstuffs, while Part II deals primarily with the level of nutrient intake in Australia. These levels are compiled by officers of the Nutrition Section and the Central Statistical Unit of the Commonwealth Department of Health to whom thanks are extended.

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

Average 3 years ended —

1938-39	6,870,261
1948-49	7,651,558
1958-59	9,741,073
1968-69	11,919,046

Individual years —

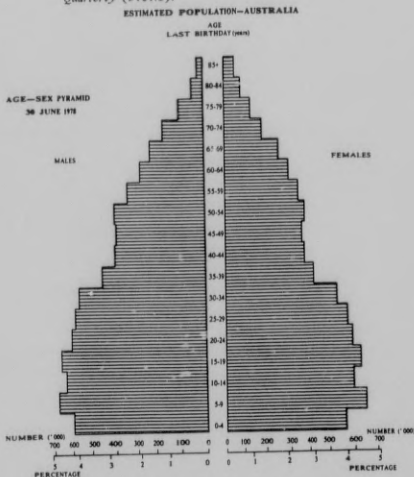
1973-74	13,488,234
1974-75	13,695,682
1975-76	13,846,241
1976-77	13,991,838
1977-78	14,161,421
1978-79	14,333,241

Factors affecting consumption estimates

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 and 22.4 per cent in 1976).
- (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 the relevant table. The following diagram shows the age distribution of the Australian male and female population at 30 June 1978. The age distribution is based on

the results of the Population Census of 30 June 1976 brought forward by reference to natural increase derived from records of births and recorded age at death, and details of overseas migration. Further details are available in the publication *Australian Demographic Statistics Quarterly* (3101.0).



- (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.

Changes in apparent consumption

4. There have been some marked changes in the apparent consumption of some food groups, which have in turn affected the level of nutrients available per head of population. Fluctuations in the apparent consumption of different types of meat are still occurring. Total carcass meat available decreased from 90.1 kg per capita in 1977-78 to 77.8 kg per capita in 1978-79. Within this category, beef and veal available decreased from 68.1 kg per capita (1977-78) to 55.5 kg (1978-79). There was a decrease in the availability of pigmeat, offal and canned meat and an increase in the availability of lamb, mutton, bacon and ham and poultry in 1978-79 compared to 1977-78.

5. In the vegetable group, there was an increased availability of all items in this category, particularly of leafy and green vegetables. In 1978-79, there were 27.3 kg of leafy and green vegetables available per capita compared to 23.0 kg in 1977-78.

6. There was an increase in the total milk and milk products (converted to milk solids, fat and non-fat) available for consumption per capita between 1977-78 (23.4 kg) and 1978-79 (25.1 kg). Between these years, the available quantities of fluid milk, powdered full cream milk, powdered skim milk and cheese had increased by 2.1, 33.3, 21.9 and 8.3 per cent respectively.

7. Between 1977-78 and 1978-79, there was a decline (16.0%) in the quantity of butter available for per capita consumption and only a slight increase (3.5%) in the quantity of margarine available. Overall there was a small decrease in the amount of oils and fats (2.9%) available per capita.

8. There were small decreases in the fruit and fruit products group (3.3%) and the seafood group (5.7 per cent) available for consumption in 1978-79, compared to the previous year. The trend continued for an increasing proportion of the available sugar to be incorporated into manufactured foods.

9. In regard to beverages, the apparent consumption of wine increased from 14.3 litres per capita in 1977-78 to 16.5 litres per capita in 1978-79. The only other significant trend in the beverages group was a 30.8% increase in the amount of coffee available.

10. In 1978-79, as a result of the above trends, there were some changes in the daily per capita availability of the following nutrients: fat, a decrease from 119.05 g to 113.70 g; iron, a decrease from 15.65 mg to 15.13 mg; and vitamin A activity, a decrease from 1616 µg to 1568 µg. These changes reflected in particular the decreased availability of beef and veal and meat offal. There were increases in some nutrients: calcium, from 920.05 mg to 965.36 mg and vitamin C (ascorbic acid), from 95.52 mg to 103.39 mg. These changes reflected an increased availability of milk and milk products and green and leafy vegetables respectively.

Related publications

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

Apparent Consumption of Tea and Coffee, Australia, 1979-80 (4307.0)

Crop Statistics, Australia, 1978-79 (7302.0)

Dairying and Dairy Products, Australia, 1978-79 (7209.0)

Fisheries, Australia, 1978-79 (7603.0)

Fruit Statistics, Australia, 1978-79 (7302.0)

Manufacturing Commodities, Principal Articles Produced, Australia, 1976-77 and 1977-78 (8303.0)

Meat Statistics, Australia, 1978-79 (7206.0)

Overseas Trade, 1977-78, Part 1: Exports and Imports (5409.0)

Overseas Trade, 1977-78, Part 2: Comparative and Summary Tables (5410.0)

Production Bulletin No. 3: Food, Drink and Tobacco, Australia (8359.0) - issued monthly

12. Current publications produced by the ABS are listed in *Catalogue of Publications* (1101.0) which is available free of charge from any ABS office.

Symbols and other usages

n.a. not available

p preliminary - figures or series subject to revision

.. not applicable

- nil or rounded to zero

n.e.i. not elsewhere included

n.y.a. not yet available

Abbreviations

g grams

mg milligrams

µg micrograms

kJ kilojoules

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

1. 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 + Ships' and aircraft stores + Usage for processed food + Non-food usage + Wastage + Closing stocks).

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

There are four significant factors which should be noted in regard to the estimates of consumption:

1. **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 of estimating consumption is available. In this publication the equation is not used for rice, bread, butter, beer, wine and spirits.

2. **Commercial production and estimated home production.** Available production statistics are confined mainly to commercial production and are deficient for the purposes of the calculation to the extent of production by householders for their own use. This applies particularly in the case of vegetables, fruit, eggs, 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. Statistics of production of agricultural products are generally derived from the annual Agricultural Census, and those for manufactured products from recorded monthly production for the year in question.

3. **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 with regard to consumption as ordinarily understood, i.e. foodstuffs consumed by the individual. This difficulty is apparent particularly in the case of canned foodstuffs, where in some years it has been necessary to initiate special enquiries from the trade and other informed sources in an endeavour to take better account of these deficiencies.

4. **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, and it should therefore be taken into account when using these statistics. 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

Additional information related to some of the individual food groups in Tables 1, 2 and 3 are set out below:

Nuts. Formerly this section contained details on pulse and nuts. However, due to a lack of adequate information estimates of consumption of dried pulse and cocoa have not been calculated in recent years.

Vegetables. All 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.

Meat. Owing to diverse cutting practices by butchers in Australia and because of the difficulty of clearly defining the term 'retail weight of meat', it is considered impracticable to derive a satisfactory factor for the purpose of expressing estimated meat consumption in terms of retail weight. Depending on cutting practices employed and whether or not bones, etc., sold to customers are included in retail weight of meat, the retail weight as a proportion of carcass weight ranges from about 60 per cent to 75 per cent for beef, from 80 per cent to 95 per cent for mutton and lamb and from 90 per cent to 95 per cent for pork. For this reason apparent consumption of carcass meat is expressed in terms of carcass weight.

Eggs and egg products. The production of eggs shown in Table 3 is 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 figures should be used with some reserve.

Advances in poultry technology have resulted in a gradual increase in the average weight of eggs produced. For statistical purposes, the average weight of an egg was increased in 1960-61 from 49.6g to 56.7g. Although the increase in average weight actually occurred over a period of years, no adjustment has been made to 1959-60 and earlier years.

Fish. For the purpose of estimating supplies of fish available for consumption, in this publication, an

allowance of 10 per cent of commercial production has been made for the non-commercial catch of fish. No such allowances have been made for crustacea or molluscs as it is considered that the non-commercial take is not significant.

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.

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

	Average 3 years ended										
	1938-39	1948-49	1958-59	1968-69	1978-79	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79 p
GRAIN PRODUCTS -											
Flour (a)	84.9	91.6	82.3	77.4	70.2	76.8	74.2	73.9	72.8	67.6	70.2
Table rice	1.8	0.4	n.a.	1.9	2.4	2.0	2.4	2.4	2.4	2.5	2.5
Breakfast foods	4.8	6.1	6.2	6.8	8.1	6.6	6.6	7.1	7.9	8.0	8.4
Total	92.5	98.6	n.a.	86.8	80.7	85.7	83.2	83.6	83.1	78.1	81.1
Bread (900 g loaves) (a)	55.1	71.1	76.7	66.1	n.y.a.	56.2	54.2	54.8	54.3	53.6	n.y.a.
FRUIT AND FRUIT PRODUCTS -											
Fresh fruit (incl. fruit for fruit juice) -											
Citrus	14.5	16.9	16.1	22.5	34.8	31.3	36.7	39.6	32.8	35.8	35.9
Other	42.6	39.5	35.6	40.8	31.1	33.5	32.7	33.3	33.0	30.0	30.2
Jams, preserves, etc	5.2	5.6	3.9	3.3	2.0	2.2	2.5	1.9	2.0	1.8	2.3
Dried fruit	3.8	3.9	2.8	2.5	1.6	2.4	1.8	2.2	2.0	2.0	1.0
Canned and bottled fruit	3.5	3.4	6.0	9.9	10.5	10.2	10.1	9.7	10.1	10.6	10.8
Total (fresh fruit equivalent)	78.7	80.9	72.2	86.5	87.3	89.4	91.2	95.7	88.2	88.3	85.4
MEAT -											
Carcass meat -											
Beef and veal	63.6	49.5	56.2	40.0	64.4	41.1	64.3	67.6	69.7	68.1	55.5
Lamb	6.8	11.4	13.3	20.5	13.8	15.4	17.7	16.7	13.4	13.8	14.1
Mutton	27.2	20.5	23.1	18.8	4.3	8.6	9.0	7.0	4.7	3.7	4.6
Pigmeat	3.9	3.2	4.6	6.7	4.2	6.7	5.1	4.4	4.4	4.6	3.7
Total carcass meat	101.5	84.6	97.2	85.9	86.7	71.9	96.2	95.8	92.3	90.1	77.8
Offal and meat n.e.i.	3.8	4.0	5.2	5.1	6.1	4.4	5.2	5.9	6.2	6.5	5.6
Canned meat (canned weight)	1.0	1.2	1.9	2.2	1.6	2.4	2.3	1.7	1.7	1.7	1.4
Bacon and ham (cured carcass weight) (b)	4.6	5.3	3.2	3.6	6.1	5.4	4.9	5.2	5.6	6.1	6.6
Total (converted to carcass equivalent weight)	118.5	103.0	112.4	98.8	103.1	86.7	111.1	110.8	108.1	107.0	94.2
Poultry (dressed weight)	n.a.	n.a.	n.a.	8.3	17.2	13.6	13.6	14.5	15.8	17.0	18.9
VEGETABLES -											
White potatoes	47.1	56.3	51.7	53.7	50.5	45.5	51.7	46.6	48.9	50.7	52.0
Other root and bulb vegetables (c)	n.a.	19.1	15.9	17.1	16.8	17.5	17.7	15.9	16.0	17.0	17.3
Tomatoes	7.1	11.5	13.0	14.2	13.9	14.9	10.1	14.3	14.6	13.2	13.8
Leafy and green vegetables	n.a.	20.5	17.9	21.3	24.2	21.0	21.6	23.0	22.4	20.0	27.3
Other vegetables (c)	n.a.	22.3	18.6	18.1	21.5	18.7	19.2	18.2	19.7	21.7	23.3
Total (fresh equivalent weight)	n.a.	129.7	117.1	124.3	126.9	117.6	120.3	118.1	121.5	125.6	133.6
SEAFOOD -											
Fresh and frozen (edible weight) -											
Fish -											
Australian	2.7	2.4	1.4	1.4	1.6	2.0	1.3	1.5	1.4	1.6	1.6
Imported	0.3	0.3	1.4	1.9	1.6	1.8	1.6	1.6	1.6	1.7	1.5
Crustacea and molluscs	0.3	0.3	0.4	0.8	0.9	1.2	0.7	1.0	0.9	0.9	0.9
Seafood, otherwise prepared (product weight) (d) -											
Australian	1.9	1.4	0.4	0.4	0.5	0.4	0.7	0.7	0.5	0.5	0.5
Imported -											
Fish			0.8	1.0	2.2	2.4	2.1	1.8	2.5	1.9	1.6
Crustacea and molluscs										0.4	0.3
Total seafood	4.9	4.1	4.5	5.6	6.8	7.7	6.4	6.6	6.9	7.0	6.6

(a) Flour used for bread making is included in the item 'Flour'. (b) Excludes canned bacon and ham. (c) Sweet potatoes included with 'Other root and bulb vegetables' since 1968-69; formerly included with 'Other vegetables'. (d) Comprised canned seafood only prior to 1972-73. Prepared seafood other than canned was included with 'Fresh and frozen' in this period.

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

	Average 3 years ended					1973-74	1974-75	1975-76	1976-77	1977-78	1978-79 p
	1938-39	1948-49	1958-59	1968-69	1978-79						
EGGS AND EGG PRODUCTS -											
Total	12.1	12.7	10.2	12.6	12.4	12.4	12.4	12.5	12.4	12.4	12.5
Equivalent number of eggs	243	255	206	222	219	219	219	220	219	219	221
MILK AND MILK PRODUCTS -											
Fluid whole milk (litres)	106.4	138.7	128.7	128.2	103.9	114.5	106.6	101.1	104.8	102.4	104.5
Condensed, concentrated and evaporated milk -											
Full cream -											
Sweetened	2.0	1.6	1.2	1.1	0.8	0.8	0.9	1.1	0.8	0.8	0.7
Unsweetened (a)	n.a.	1.8	2.9	3.5	2.5	2.4	2.4	2.3	2.6	2.5	2.5
Skim	n.a.	n.a.	0.6	0.7	1.6	0.8	0.8	1.5	1.6	1.6	1.5
Powdered milk -											
Full cream	1.2	1.5	1.1	0.8	1.7	1.2	1.2	1.4	1.6	1.5	2.0
Skim (incl. buttermilk and mixed skim and buttermilk)	-	0.3	1.1	4.3	3.0	3.8	4.2	3.8	2.0	3.2	3.9
Infants' and invalids' food	0.5	0.6	1.0	1.3	1.1	1.5	2.1	1.4	1.1	1.2	1.1
Cheese (natural equivalent weight) (b)	2.0	2.5	2.6	3.5	6.0	5.3	5.2	5.7	5.3	6.6	6.5
Total (converted to milk solids, fat and non-fat) (c)	17.8	22.3	22.1	25.4	23.6	24.6	24.0	23.6	22.3	23.4	25.1
OILS AND FATS -											
Butter	14.9	11.2	12.3	9.8	5.0	7.7	7.2	6.8	5.8	5.0	4.2
Margarine -											
Table	0.4	0.4	n.a.	1.5	5.5	1.7	2.2	3.1	4.7	5.7	5.9
Other	1.8	2.4	2.2	3.4	3.1	4.0	3.8	3.9	3.5	2.9	2.9
Total (fat content) (d)	17.1	14.0	n.a.	14.3	13.6	13.4	13.2	13.6	13.9	13.6	13.2
SUGAR -											
As refined sugar	32.0	31.2	27.0	21.0	14.7	17.4	16.7	16.1	15.2	14.8	14.2
In manufactured foods	16.3	23.1	23.6	27.7	34.9	31.9	32.4	35.0	34.4	34.9	35.3
Total (e)	50.8	56.8	53.0	51.9	53.9	54.4	53.7	55.6	53.7	54.1	53.8
NUTS (in shell) -											
Peanuts	n.a.	4.2	3.1	2.8	2.7	1.6	1.3	2.3	1.8	3.4	3.0
Tree nuts	n.a.	1.8	3.4	5.8	3.0	3.0	3.2	3.3	3.2	3.1	2.6
BEVERAGES -											
Tea	3.1	2.9	2.7	2.3	1.7	1.9	2.0	1.9	2.0	1.6	1.7
Coffee (f)	0.3	0.5	0.6	1.2	1.6	1.4	1.1	1.5	1.8	1.3	1.7
Aerated and carbonated waters (litres)	n.a.	n.a.	n.a.	47.3	68.0	63.4	59.6	65.0	68.1	68.8	67.0
Beer (litres)	53.2	76.8	103.2	116.8	136.0	139.0	140.3	137.4	136.2	137.6	134.2
Wine (litres)	2.7	5.9	5.0	8.2	14.8	11.0	12.3	13.0	13.7	14.3	16.5
Spirits (litres alcohol)	0.5	0.8	0.8	0.9	1.2	1.2	1.2	1.1	1.3	1.3	1.1

(a) Included ice-cream mix prior to 1972-73. (b) Combined product and natural equivalent weights prior to 1971-72. (c) Includes an allowance for estimated cream consumption. (d) Includes an estimate for vegetable oils and other fats. (e) Includes sugar content of syrups, honey and glucose. (f) Coffee and coffee products in terms of roasted coffee.

TABLE 2. TOTAL APPARENT CONSUMPTION OF SELECTED FOODSTUFFS : AUSTRALIA
(tonnes, except where otherwise stated)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79 p
GRAIN PRODUCTS -						
Flour (a)	1,036,448	1,015,855	1,022,623	1,018,571	957,741	1,006,084
Table rice	27,433	32,200	33,485	33,328	34,789	35,455
Breakfast foods	89,550	90,619	98,790	110,669	113,159	120,317
Total	1,153,431	1,138,674	1,154,898	1,162,568	1,105,689	1,161,856
Bread ('000 900 g loaves) (a)	758,449	742,141	759,108	759,611	759,260	n.y.a.
FRUIT AND FRUIT PRODUCTS -						
Fresh fruit (incl. fruit for fruit juice) -						
Citrus	421,849	503,304	548,888	458,768	506,551	514,495
Other	452,376	447,830	460,458	461,507	424,747	433,204
Jams, conserves, etc	29,506	34,799	26,849	28,345	25,011	32,351
Dried fruit	32,400	24,930	29,797	27,307	27,821	14,153
Canned and bottled fruit	137,108	137,902	134,372	140,952	150,438	154,706
Total (fresh fruit equivalent)	1,205,325	1,249,244	1,324,470	1,233,614	1,250,352	1,223,898
MEAT -						
Carcass meat -						
Beef and veal	554,994	881,288	936,351	975,728	963,990	794,816
Lamb	208,130	242,889	231,535	188,164	195,130	201,622
Mutton	116,150	123,060	97,496	65,984	52,467	65,685
Pigmeat	90,316	70,157	60,655	61,135	64,560	53,076
Total carcass meat	969,590	1,317,394	1,326,037	1,291,011	1,278,147	1,115,199
Offal and meat n.e.l.	59,589	71,304	82,099	87,444	91,925	80,684
Canned meat (canned weight)	32,827	31,038	23,112	23,988	24,306	20,525
Bacon and ham (cured carcass weight)(b)	72,867	67,230	71,806	77,663	86,087	94,694
Total (carcass equivalent weight)	1,169,208	1,521,371	1,534,532	1,512,772	1,515,397	1,350,137
Poultry (dressed weight)	183,985	186,935	201,373	221,547	240,886	270,968
VEGETABLES -						
White potatoes	613,896	707,674	644,988	683,786	718,070	745,820
Other root and bulb vegetables	235,924	242,791	220,845	224,114	240,912	247,596
Tomatoes	200,912	137,643	198,692	204,206	187,530	197,277
Leafy and green vegetables	282,607	296,398	318,302	312,850	325,078	390,748
Other vegetables	252,510	262,493	252,435	274,962	306,976	333,626
Total (fresh equivalent weight)	1,585,849	1,646,999	1,635,262	1,699,918	1,778,566	1,915,067
SEAFOOD -						
Fresh and frozen (edible weight) -						
Fish -						
Australian	26,778	17,797	20,729	20,150	23,034	23,480
Imported	23,670	21,976	22,834	22,938	23,571	21,905
Crustacea and molluscs	16,097	9,445	13,631	13,018	12,564	13,358
Seafood, otherwise prepared (product weight) -						
Australian	5,399	9,468	9,651	6,695	7,366	7,836
Imported -						
Fish	32,347	28,421	24,370	34,350	26,319	23,299
Crustacea and molluscs					5,997	4,773
Total seafood	104,290	87,108	91,215	97,150	98,851	94,651

(a) Flour used for breadmaking is included in the item 'Flour'. (b) Excludes canned bacon and ham.

TABLE 2. TOTAL APPARENT CONSUMPTION OF SELECTED FOODSTUFFS : AUSTRALIA - *continued*
(tonnes, except where otherwise stated)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79 p
EGGS AND EGG PRODUCTS -						
Total	164,970	167,415	172,551	173,480	176,042	179,204
Equivalent number of eggs ('000 dozen)	241,984	245,410	253,604	254,973	258,737	263,385
MILK AND MILK PRODUCTS -						
Fluid whole milk ('000 litres)	1,544,215	1,460,066	1,400,516	1,466,597	1,450,046	1,497,207
Condensed, concentrated and evaporated milk -						
Full cream -						
Sweetened	11,226	12,629	14,574	11,605	11,371	10,652
Unsweetened	31,746	32,996	31,391	36,108	34,973	36,258
Skim	11,449	11,033	21,116	22,247	22,040	21,604
Powdered milk -						
Full cream	16,093	16,192	19,069	22,475	20,738	28,615
Skim (incl. buttermilk and mixed skim and buttermilk)	50,755	57,386	53,089	28,160	44,840	55,494
Infants' and invalids' food	20,077	29,273	19,967	15,855	17,687	15,088
Cheese (natural equivalent weight)	71,246	71,219	79,194	74,192	85,555	93,559
Total (converted to milk solids, fat and non-fat)(a)	331,228	329,368	326,682	311,541	331,192	359,575
OILS AND FATS -						
Butter	104,188	98,480	93,475	81,115	71,044	60,773
Margarine -						
Table	23,333	22,703	42,506	66,238	80,959	84,869
Other	54,574	52,481	53,966	48,586	41,211	41,524
Total (fat content)(b)	180,189	180,167	188,272	194,395	192,867	188,720
SUGAR -						
As refined sugar	234,539	228,325	223,374	212,663	209,392	203,630
In manufactured foods	429,954	444,218	484,840	481,315	494,578	506,430
Total (c)	733,152	736,005	769,450	751,581	766,546	771,185
NUTS (in shell) -						
Peanuts	21,276	18,274	32,336	24,620	47,853	43,095
Tree nuts	40,338	43,008	45,934	44,361	43,698	37,730
BEVERAGES -						
Tea	26,127	26,855	26,257	27,382	22,131	24,145
Coffee (d)	18,578	15,711	20,767	25,083	18,495	24,164
Aerated and carbonated waters ('000 litres)	854,785	816,192	900,568	953,135	974,141	960,185
Beer ('000 litres)	1,874,274	1,921,633	1,901,979	1,905,282	1,948,811	1,923,388
Wine ('000 litres)	148,075	168,017	180,087	191,078	202,181	236,257
Spirits ('000 litres alcohol)	16,752	16,284	15,901	17,725	18,802	15,157

(a) Includes an allowance for estimated cream consumption. (b) Includes an estimate for vegetable oils and other fats. (c) Includes sugar content of syrups, honey and glucose. (d) Coffee and coffee products in terms of roasted coffee.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS : AUSTRALIA, 1978-79 p

	Supply					Utilisation			
	Production				Exports (incl. ships' stores)	Non-food use, waste, etc.	For pro- cessed food	Apparent consump- tion in Australia as human food	
	Net change in stocks	Commercial	Estimated home production	Imports				Total	Per capita per year
									kg
GRAIN PRODUCTS -									
Flour (a)	(-)5,487	1,076,670	..	4,773	1,086,930	80,846	..	1,006,084	70.2
Table rice (b)	..	..	..	753	..	..	..	(c)35,455	2.5
Breakfast foods -									
Oatmeal and rolled oats	(-)2,138	18,683	..	..	20,821	8,003	..	12,818	0.9
Other (from grain)	(-)493	117,213	..	260	117,966	10,467	..	107,499	7.5
Bread (a) (b)	..	..	..	323	'000 900 g loaves -	435	..	n.y.a.	number n.y.a.
									kg
FRUIT AND FRUIT PRODUCTS -									
Fresh fruit (incl. fruit for fruit juice) -									
Oranges	..	368,554	18,428	53,928	440,910	31,921	7,371	401,618	28.0
Other citrus fruit	..	106,914	5,346	6,629	118,889	6,012	n.a.	112,877	7.9
Fresh fruit	(d)(+)41,783	858,330	15,000	22,260	853,807	83,950	n.a.	336,653	433,204
Jams, conserves, etc	(-)1,959	31,488	1,000	2,166	36,613	4,262	..	..	30.2
Dried vine fruit -									
Currents	(+)806	4,075	-	-	3,269	1,856	..	(e)1,413	2.3
Raisins	(+)2,381	4,747	-	-	2,366	1,827	..	(e)539	0.1
Sultanas	(-)3,297	46,440	-	-	49,737	43,767	..	(e)5,970	-
Dried tree fruit (f) -									
Apricots	(-) 90	1,220	-	46	1,356	420	..	936	0.1
Prunes	(+)1,689	4,027	-	139	2,477	42	..	2,435	0.2
Other	(-) 35	155	-	2,838	3,028	168	..	2,860	0.2
Canned and bottled fruit -									
Apples	(+)1,857	13,371	-	-	12,014	59	..	11,955	0.8
Apricots	(+)5,402	15,084	150	-	9,832	1,410	..	8,422	0.6
Fruit salad	(+)3,746	35,135	-	-	31,389	11,242	..	20,147	1.4
Feaches	(-)179	57,020	150	-	57,349	24,183	..	33,166	2.3
Pears	(+)8,325	61,356	100	-	53,131	33,359	..	19,772	1.4
Pineapples	(+)5,080	37,228	100	4,083	36,331	1,799	..	34,532	2.4
Other	(+)2,563	5,710	-	23,877	27,024	312	..	26,712	1.9
MEAT -									
Carcass meat (g) -									
Beef and veal	(-)48,094	2,017,986	-	1,207	2,067,287	1,220,311	..	794,816	55.5
Lamb	(+)4,384	252,518	-	4	248,138	46,516	..	201,622	14.1
Mutton	(+)4,340	238,873	-	-	243,213	170,536	..	65,685	4.6
Pigmeat	(-)495	198,562	-	-	199,057	2,308	..	143,673	3.7
Total carcass meat	(-)48,545	2,707,939	-	1,211	2,757,695	1,439,671	..	202,825	77.8
Offal and meat n.e.l. (g)	(-)1,905	119,982	-	826	152,713	69,029	3,000	..	80,684
Canned meat (canned weight)	(-) 45	45,030	-	598	45,673	25,148	..	20,525	1.4
Bacon and ham (cured carcass weight)	(+)281	103,224	-	-	102,943	434	..	7,815	94,694
Total meat (carcass equivalent weight)	(-)52,948	3,071,376	-	2,593	3,126,917	1,560,326	3,000	213,454	94.2
Poultry (dressed weight)	(-)3,039	271,092	3,249	264	277,644	6,676	..	270,968	18.9

For footnotes see end of Table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS: AUSTRALIA, 1978-79 p - continued

	Supply					Utilisation			Apparent consumption in Australia as human food	
	Net change in stocks	Production		Imports	Total supply	Exports (incl. ships' stores)	Non-food use, waste, etc.	For processed food	Total	Per capita per year
		Commercial	Estimated home production							
		— tonnes —							kg	
VEGETABLES —										
Fresh —										
Carrots	..	104,962	5,248	766	110,976	4,354	3,149	6,216	97,257	6.8
Onions	..	105,232	5,262	1,779	112,273	7,320	3,157	27,339	74,457	5.2
Tomatoes	(-9,839	172,639	17,264	533	200,275	813	8,632	23,713	167,117	11.7
Beans	..	44,379	9,000	—	53,379	27	2,334	46,941	4,077	0.3
Cabbages and sprouts	..	132,970	6,649	—	139,619	1,791	6,649	1,113	130,066	9.1
Peas	..	116,597	20,000	—	136,597	16	2,510	125,224	8,847	0.6
Cucumbers (incl. gherkins)	..	15,741	787	4	16,532	81	472	4,345	11,634	0.8
Frozen (product weight) —										
Beans	(+7,198	25,865	n.a.	1,489	20,156	115	..	..	20,041	1.4
Peas	(+3,334	46,336	n.a.	2,942	45,944	553	..	..	45,391	3.2
Canned and bottled (product weight) —										
Carrots	(+423	5,137	—	—	4,714	118	..	..	4,596	0.3
Onions	(+218	3,900	—	—	3,682	2	..	..	3,680	0.3
Tomatoes	(-746	15,704	—	3,524	19,974	—	..	..	19,974	1.4
Beans —										
Green	(+808	4,863	—	—	4,055	58	..	..	3,997	0.3
Baked (incl. pork and beans)	(-31	22,895	—	386	23,312	744	..	..	22,568	1.6
Cabbages and sprouts	(-285	1,184	—	—	1,469	293	..	..	1,176	0.1
Peas	(+4,414	17,522	—	—	13,108	116	..	..	12,992	0.9
Cucumbers (incl. gherkins)	(+602	5,112	—	380	4,890	14	..	..	4,876	0.3
Total (fresh equivalent weight) —										
White potatoes	n.a.	794,644	25,400	460	820,504	5,978	68,706	..	745,820	52.0
Other root and bulb vegetables —										
Beetroot	(+4,467	28,043	1,963	—	25,539	252	280	..	25,007	1.7
Carrots	(+512	104,962	5,248	766	110,464	4,497	3,149	..	102,818	7.2
Onions	(+1,528	105,232	5,262	1,779	110,745	7,334	3,157	..	100,254	7.0
Parsnips	n.a.	9,198	460	—	9,658	126	184	..	9,348	0.7
Sweet potatoes	n.a.	2,812	n.a.	—	2,812	—	..	..	2,812	0.2
White turnips and swede	n.a.	7,892	237	—	8,129	614	158	..	7,357	0.5
Total	(+6,507	258,139	13,170	2,545	267,347	12,823	6,928	..	247,596	17.3
Tomatoes	(-10,965	172,639	17,264	5,854	206,722	813	8,632	..	197,277	13.8
Leafy and green (incl. legumes) —										
Beans	(+8,281	44,379	9,000	1,750	46,848	692	2,334	..	43,822	3.1
Cabbages and other greens	(-268	135,433	6,772	—	142,473	2,066	6,772	..	133,635	9.3
Ciery	n.a.	36,720	1,836	—	38,556	99	1,836	..	36,621	2.6
Lettuce	n.a.	49,575	4,958	—	54,533	586	3,470	..	50,477	3.5
Peas	(+13,033	116,597	20,000	6,531	130,095	1,392	2,510	..	126,193	8.8
Total	(+21,046	382,704	42,566	8,281	412,505	4,835	16,922	..	390,748	27.3

For footnotes see end of Table.

TABLE 3. ESTIMATED SUPPLY AND UTILISATION OF FOODSTUFFS: AUSTRALIA, 1978-79 - continued

	Supply				Utilisation				
	Net change in stocks	Production		Imports	Total supply	Exports (incl. ships' stores)	Non-food use, waste, etc.	For processed food	Apparent consumption in Australia as human food
		Commercial	Estimated home production						Total
					— tonnes —				kg
VEGETABLES continued —									
Other vegetables —									
Asparagus	(-) 39	4,581	458	3,596	8,674	273	—	..	8,401
Cauliflowers	—	116,411	5,821	—	122,232	2,678	8,149	..	111,405
Cucumbers (incl. gherkins)	(+) 512	15,741	787	327	16,343	93	472	..	15,778
Marrows, squashes and zucchinis	n.a.	4,650	233	—	4,883	99	—	..	4,784
Pumpkins	n.a.	62,501	3,125	—	65,626	99	—	..	65,527
Sweet corn	(+) 11,160	45,263	2,263	—	36,366	110	905	..	35,351
Other	(+) 1,533	76,801	—	17,112	92,380	—	—	..	92,380
Total	(+) 13,166	325,948	12,687	21,035	346,504	3,352	9,526	..	333,626
Total all vegetables	(+) 29,754	1,934,074	111,087	38,175	2,053,582	27,801	110,714	..	1,915,067
SEAFOOD —									
Fresh and frozen (edible weight) —									
Fish —									
Australian	..	31,697	3,170	..	34,867	3,239	n.a.	8,149	23,480
Imported	..	..	..	22,070	22,070	165	n.a.	..	21,905
Crustacea and molluscs	..	27,090	—	1,374	28,464	14,169	n.a.	937	13,358
Seafood, otherwise prepared (product weight) —									
Australian	(-) 441	9,077	—	..	9,518	1,682	..	..	7,836
Imported —	..	..	..	23,394	23,394	95	..	..	23,299
Fish	..	..	..	4,863	4,863	90	..	..	4,773
Crustacea and molluscs	..	..	..	..	..	..	..	..	..
EGGS AND EGG PRODUCTS (h) —									
Total (eggs in shell weight)	(-) 1,599	127,970	67,663	—	197,232	17,309	720	..	179,204
					— '000 litres —				litres
MILK AND MILK PRODUCTS —									
Fluid whole milk	..	5,659,445	n.a.	—	5,659,445	14,141	..	4,148,097	1,497,207
					— tonnes —				kg
Cream	..	13,016	..	..	13,016	..	..	..	13,016
Condensed, concentrated and evaporated milk —									
Full cream —									
Sweetened	(-) 87	15,488	—	777	16,352	5,700	..	..	10,652
Unsweetened	(-) 2,389	39,110	—	—	41,499	5,241	..	..	36,258
Skim	(+) 139	26,589	—	658	27,108	5,504	..	..	21,604
Powdered milk —									
Full cream	(+) 504	77,451	—	67	77,014	48,399	..	..	28,615
Skim (incl. buttermilk and mixed skim and buttermilk)	(+) 1,679	82,886	—	—	81,207	25,713	..	..	55,494
Infants' and invalids' food	(-) 694	23,792	—	369	24,855	9,767	..	..	15,088
Cheese (natural equivalent weight) (i)	(+) 14,412	141,815	2,743	11,578	141,724	48,165	..	..	93,559
OILS AND FATS —									
Butter (b)	..	..	..	—	..	..	..	..	(j) 60,773
Margarine — Table	(+) 1,584	87,051	—	—	85,467	598	..	..	84,869
Other	(-) 115	43,897	—	4	44,016	2,192	..	..	41,824
SUGAR —									
As refined sugar	n.a.	2,901,569	..	13,255	n.a.	1,862,890	n.a.	n.a.	203,630
In manufactured foods	..	..	..	..	..	..	..	..	506,430

For footnotes see end of Table.

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(a) Flour used for breadmaking is included in the item 'Flour'. (b) The general consumption equation has not been used for this item. See paragraph 2, page 4. (c) Comprises output from mills for domestic consumption and imports. (d) Cold stored stocks of apples and pears. (e) Comprises Australian deliveries, year ended 30 June, as recorded by the Australian Dried Fruit Association (ADFA). (f) Stocks and commercial production obtained from the ADFA. (g) Stocks held by the Australian Cattle and Livestock Corporation. (h) Stocks held by Egg Boards. (i) Stocks obtained from the Australian Dairy Corporation. (j) Includes butter equivalent of butter oil, butter concentrate and ghee. (k) Stocks held by the Queensland Peanut Marketing Board. (l) Australian production confidential. Stocks adjusted to account for this production. (m) Imports cleared for home consumption. (n) Comprises the quantity of beer removed (duty paid and duty free) for consumption in Australia and imports cleared for home consumption. (o) Comprises the quantity of wholesale sales of wine and imports cleared for home consumption. (p) Comprises the quantity of potable spirits upon which excise duty was paid and imports cleared for home consumption.

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, it is necessary to calculate the amount of nutrients the foods provide.

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. See the explanatory notes for a statement of these qualifications.

The basis for the calculations of estimated supplies of nutrients available for consumption in Australia was changed after Bulletin No. 23 (1967-68) and is now dependent on conversion factors calculated from *Metric Tables of Composition of Australian Food* (Suey Thomas and Margaret Corden, A.G.P.S. Canberra, 1977). The previously used Tables, compiled by Anita Osmond and Winifred Wilson, 1954, have been revised and considerably enlarged and nutrient values for almost all food items altered in the light of improved analytical techniques. While comparison with figures published for previous years is no longer entirely valid, the differences in conversion factors are not so great as to negate the value of all such comparisons.

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 now stated as micrograms of vitamin A (retinol) activity. Strict comparisons between vitamin A activity values published since 1968-69 cannot be made with previous values, since the values given for individual food items vary considerably in the food composition tables (1954 and 1977).

Nutrients available for consumption. Details of the estimated supplies of nutrients passing into consumption during 1978-79 are shown in Table 4. Data

for previous years and for other countries are given in Tables 7 and 9 respectively. A note on trends in consumption of nutrients is included in the explanatory notes on page 3.

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 7 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).

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 (ascorbic acid) 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.

Losses of vitamin C cover a wide range, from almost nil to 100 percent. On average, 60 percent of vitamin C in leafy green vegetables is lost through cooking, while losses for skinned potatoes, other vegetables and stewed fruit are approximately 50 percent. 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.

TABLE 4. ESTIMATED NUTRIENTS AVAILABLE FOR CONSUMPTION IN EACH COMMODITY GROUP, UNADJUSTED: AUSTRALIA (a), 1978-79 p (per capita per day)

Commodity group	Protein (g)	Fat (g)	Carbohydrate (g)	Calcium (mg)	Iron (mg)	Vitamin A activity (b) (μ g)	Vitamin C (mg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Energy value (kJ)
Grain products	23.65	3.68	166.40	47.28	4.63	3.04	—	0.77	0.57	5.88	3,357
Fruit and fruit products	1.12	0.38	21.86	36.82	0.71	33.20	41.16	0.09	0.06	0.56	357
Meat (c)	31.71	46.61	0.41	20.82	5.17	506.59	2.71	0.20	0.56	7.76	2,345
Poultry	7.41	2.90	—	5.40	0.69	22.59	—	0.03	0.06	2.76	242
Vegetables	5.43	0.55	35.92	62.46	2.19	414.24	56.14	0.26	0.17	2.54	658
Seafood	2.48	0.71	(d) 0.20	9.06	0.22	3.46	—	0.01	0.02	0.65	74
Eggs and egg products	3.63	3.37	0.21	15.69	0.70	82.35	—	0.03	0.08	0.02	195
Milk and milk products (e)	21.82	21.10	23.94	746.41	0.54	238.88	3.38	0.12	0.96	0.49	1,591
Oils and fats (f)	0.20	34.40	0.24	6.62	0.01	263.61	—	—	—	—	1,285
Sugar	—	—	147.25	2.95	0.15	—	—	—	—	—	2,406
Beverages (g)	0.99	—	11.84	11.85	0.12	—	—	0.01	0.33	0.55	833
Total	98.44	113.70	408.27	965.36	15.13	1,567.96	103.39	1.53	2.81	21.21	13,342

(a) Adjustments have not been made for 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 β carotene equivalent. (c) Includes canned and cured meat and edible offal. (d) Prior to 1977-78 an allowance was not made for carbohydrate content of crumbs on fish fingers. (e) Excludes butter. (f) Includes butter. (g) Comprises beer, wine and spirits, the energy value of which includes the contribution made by alcohol.

TABLE 5. ADJUSTMENTS TO THE AVAILABILITY OF SPECIFIC VITAMINS, AUSTRALIA (a), 1978-79 p (milligrams per capita per day)

Nutrient	Calculated value	Amount available	Nutrient	Calculated value	Amount available
Vitamin C —			Vitamin C continued —		
Milk and milk products —			Vegetables —		
Fluid whole milk	2.86	2.86	Fresh tomatoes	7.82	7.82
Other milk products	0.52	(b)	Lettuce	0.93	0.93
Meat	2.71	(b)	Canned vegetables	0.79	0.79
Fruit and fruit products —			Cooked potatoes and other vegetables	46.60	23.30
Fresh, canned and dried	6.56	6.56			
Cooked	0.45	0.23	Total vitamin C	103.39	76.64
Citrus	34.15	34.15	Thiamin	1.53	1.30
			Niacin equivalent (c)	21.21	36.96

(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.

Dietary allowances. The nutritive value of food available for consumption may be compared with some arbitrary standard such as the *Dietary Allowances for Use in Australia (1970 Revision, reprinted in metric version 1977)*, formulated by the Nutrition Committee of the National Health and Medical Research Council. 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, is compared with desirable quantities recommended by the Council. The allowances shown in Table 8 are averages weighted according to the various age groups in the population. The allowance data are based on information from the publication *Australian Demographic Statistics Quarterly (3101.0)*. See the age-sex pyramid of the Australian population in the explanatory notes of this publication (page 2).

The comparisons in these tables are useful as an indication of trends in food consumption, although it

must be emphasised that the allowances 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 comparison with these allowances. 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 allowance, 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 estimates that in communities with a plentiful food supply, up to 15 per cent of the food available may be wasted.

TABLE 6. PERCENTAGE OF TOTAL ENERGY DERIVED FROM EACH COMMODITY GROUP, AUSTRALIA

Commodity group	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79 p
Grain products	26.8	25.5	25.0	25.3	24.0	25.2
Fruit and fruit products	2.7	2.7	3.0	2.8	2.8	2.7
Meat	16.2	19.5	19.8	19.6	19.4	17.6
Poultry	1.3	1.3	1.3	1.5	1.6	1.8
Vegetables	4.3	4.6	4.3	4.6	4.7	4.9
Seafood	0.5	0.5	0.6	0.6	0.6	0.6
Eggs and egg products	1.4	1.4	1.4	1.4	1.4	1.5
Milk and milk products	12.1	11.5	10.9	10.6	11.3	11.9
Oils and fats	10.0	9.5	9.7	10.1	9.9	9.6
Sugar	18.3	17.3	17.8	17.5	18.1	18.0
Beverages	6.4	6.3	6.1	6.0	6.1	6.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 7. ESTIMATED NUTRIENTS AVAILABLE FOR CONSUMPTION, ADJUSTED, AUSTRALIA (a)
(per capita per day)

Nutrient	Unit	Average 3 years ended -				1976-77	1977-78	1978-79 p
		1938-39	1948-49	1958-59	1968-69			
Protein - Animal	g	58.7	57.4	59.6	64.2	69.2	70.1	67.1
Vegetable	g	30.9	35.3	32.3	35.5	31.5	30.1	31.3
Total	g	89.6	92.7	91.9	99.7	100.7	100.2	98.4
Fat (from all sources)	g	133.5	121.7	131.7	123.2	119.3	119.1	113.7
Carbohydrate	g	377.4	424.8	416.7	406.8	407.4	403.5	408.3
Calcium	mg	642	785	817	968	859.2	920.1	965.4
Iron	mg	15.4	15.1	14.0	14.7	15.7	15.7	15.1
Vitamin A activity	µg	1,471.5	1,389.0	1,370.4	1,347.9	1,580.6	1,616.2	1,568.0
Vitamin C	mg	52.6	58.8	54.3	59.8	67.5	71.9	76.6
Thiamin	mg	1.2	1.3	1.1	1.4	1.3	1.3	1.3
Riboflavin	mg	1.7	1.9	1.8	2.7	2.7	2.8	2.8
Niacin equivalent	mg	33.0	32.4	33.3	36.2	38.2	38.0	37.0
Energy value	kJ	13,048	13,584	13,801	13,835	13,595	13,486	13,342

(a) Not comparable with years prior to 1968-69. Figures are based on conversion factors calculated from the revised and enlarged edition of S. Thomas and M. Corden *Metric Tables of Composition of Australian Food A.G.P.S.*, Canberra 1977. See notes page 14. Adjustments have been made for loss of nutrients in cooking and the extra niacin obtained from the metabolism of protein.

TABLE 8. NUTRIENTS AVAILABLE FOR CONSUMPTION (a) IN AUSTRALIA
COMPARED WITH DIETARY ALLOWANCES

Nutrient	unit	Nutrients expressed as percentage in excess of dietary allowances (%)			Dietary allowance (b) Nutrients available (per capita per day) (per capita per day)	
		1976-77	1977-78	1978-79 p	1978-79 p	1978-79 p
Protein	g	68.6	67.4	64.3	59.88	98.44
Calcium	mg	96.8	111.1	121.2	436.34	965.31
Iron	mg	50.7	49.7	44.2	10.47	15.12
Vitamin A activity	µg	133.6	138.5	130.7	679.63	1,567.96
Vitamin C	mg	112.1	126.3	141.0	31.79	103.39
Thiamin	mg	56.4	52.9	52.9	0.85	1.53
Riboflavin	mg	155.1	161.1	162.6	1.07	2.81
Niacin equivalent	mg	171.9	170.1	163.3	14.05	36.96
Energy value	kJ	52.2	50.7	49.2	89.44	13,342

(a) Adjustments have been made for the loss of nutrients in cooking and the extra niacin obtained from the metabolism of protein. (b) Source: S. Thomas and M. Corden *Metric Tables of Composition of Australian Food A.G.P.S.*, Canberra, 1977. Appendix 1. The allowances are averages weighted according to various age groups in the population; the age distributions at the beginning of each period have been used.

TABLE 9. INTERNATIONAL COMPARISON OF ESTIMATED NUTRIENTS AVAILABLE FOR CONSUMPTION, UNADJUSTED (a)
(per capita per day)

Nutrient	Unit	Australia					United Kingdom (b)					United States of America (c)				
		Average -					Average -					Average -				
		1936-37 to 1938-39	1946-47 to 1948-49	1956-57 to 1958-59	1977-78 (d)	1978-79 p (d)	1936-37 to 1938-39	1946-47 to 1948-49	1956-57 to 1958-59	1977	1978	1935 to 1939	1947 to 1949	1957 to 1959	1978	1979 p
Protein -																
Animal	g	58.7	57.4	59.6	70.1	67.1	43.5	43.5	49.9	51.0	51.4	n.a.	n.a.	n.a.	n.a.	n.a.
Vegetable	g	30.9	35.3	32.3	30.1	31.3	36.8	45.8	34.4	31.9	31.4	n.a.	n.a.	n.a.	n.a.	n.a.
Total	g	89.6	92.7	91.9	100.2	98.4	80.3	89.3	84.3	82.9	82.8	89.0	95.0	95.0	103.0	104.0
Fat from all sources	g	133.5	121.7	131.7	119.1	113.7	130.0	112.6	140.0	131.0	130.0	133.0	141.0	143.0	159.0	168.0
Carbohydrate	g	377.4	424.8	416.7	403.5	408.3	377.5	395.8	388.6	378.0	379.0	444.0	403.0	375.0	392.0	400.0
Calcium	mg	642	785	817	920.1	965.4	688	1,152	1,130	110.5	108.0	910	990	980	950	950
Iron	mg	15.4	15.1	14.0	15.7	15.1	13.2	15.4	15.7	13.1	13.1	14.5	16.7	16.3	18.6	18.5
Vitamin A activity	µg	1,471.5	1,389.0	1,370.4	1,616.1	1,568.1	1,109.7	1,197.9	1,375.2	1,344.9	1,370.1	2,460.0	2,610.0	2,430.0	2,400.0	2,400.0
Vitamin C	mg	86	96	89	96	104	93	110	95	98	102	118	113	104	119	120
Thiamin	mg	1.4	1.5	1.3	1.5	1.5	1.3	1.7	1.8	1.7	1.7	1.5	1.9	1.8	2.1	2.2
Riboflavin	mg	1.7	1.9	1.8	2.8	2.8	1.6	1.9	1.8	1.9	1.9	1.9	2.3	2.3	2.5	2.4
Niacin (nicotinic acid)	mg	18.7	17.6	18.6	21.9	21.2	13.1	15.9	16.2	19.5	19.7	15.9	21.0	21.1	25.8	26.7
Energy value	kJ	13,050	13,586	13,804	13,486	13,342	12,560	12,364	13,176	12,930	12,927	13,816	13,523	13,147	14,151	14,654

(a) Adjustments have not been made for loss of nutrients in cooking, or the extra niacin obtained from the metabolism of protein. (b) Source: Departments of Trade, Prices and Consumer Protection, *Trade and Industry*, H.M.S.O., London. (c) Source: Economics, Statistics and Cooperative Service, *National Food Review*, US Department of Agriculture, Washington. (d) Not comparable with years prior to 1968-69. Figures are based on conversion factors calculated from the revised and enlarged edition of S. Thomas and M. Corden, *Metric Tables of Composition of Australian Food*, A.G. P.S., Canberra 1977.

Note. Owing to the differences in the bases of calculating co-assumption and the use of different nutrient conversion factors, figures for the countries shown are not strictly comparable.