



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## FALLING CONSUMPTION OF FOODSTUFFS IN AUSTRALIA.

by

ALAN G. LLOYD,

*Assistant Economics Research Officer.*

A recent report by the Commonwealth Statistician has highlighted the important fact that consumption of a number of important foodstuffs has fallen in Australia over recent years.<sup>1</sup> The most significant declines have been in the consumption of milk, cream, butter, eggs and pigmeats. This trend has a number of important implications, both economic and nutritional.

TABLE I.

*Consumption of Certain Protective Foodstuffs in Australia  
(per Head of Population)—1936-39 to 1951-52.*

Commodity.	Unit.	Average 1936-37 to 1938-39.	1949-50.	1951-52.	Percentage Change 1951-52 compared with—	
					Pre- war.*	Post- war.†
Fluid Milk ... ..	gallon	23.4	29.9	28.0	+19	— 8
Butter ... ..	lb.	32.9	‡	31.3	— 5	‡
Fresh Cream ... ..	„	6.4	§	2.0	—69	§
Processed Milk	„	7.9	14.3	14.7	+86	+17
Cheese ... ..	„	4.4	6.3	5.9	+34	+ 5
	(carcase weight)					
Beef and Veal ... ..	lb.	144.1	124.3	122.9	—15	+13
Mutton ... ..	„	59.8	45.7	39.8	—33	—12
Lamb ... ..	„	15.0	27.4	23.9	+59	— 5
Pork ... ..	„	10.4	7.2	7.2	—31	+ 1
	(cured weight)					
Ham and Bacon ... ..	lb.	10.2	9.6	7.2	—29	—38
Eggs¶	No.	243	236	219	—10	—14
Citrus Fruit** ... ..	lb.**	31.9	33.9	25.6	—20	—31
Other Fresh Fruit ... ..	„	94.0	77.7	79.7	—15	—18
Dried Vine Fruit††	„	5.2	6.5	4.9	— 6	—22
Canned Fruit ... ..	„	10.7	12.2	14.9	+39	+37

\* Average 1936-37 to 1938-39.

† Average 1946-47 to 1948-49.

‡ Rationing of butter continued until the end of 1949-50.

§ Cream was rationed during this period (1946-47 to 1948-49).

|| Includes condensed, concentrated and powdered milk and infants' and invalids' food (including malted milk).

¶ Includes egg pulp and egg powder at fresh egg equivalents.

\*\* Includes manufactured products in terms of fresh fruit.

†† Figures relate to calendar years; 1951 for 1951-52, etc.

Source : Commonwealth Bureau of Census and Statistics, *op. cit.*

<sup>1</sup> Commonwealth Bureau of Census and Statistics, "Report on Food Production and the Consumption of Foodstuffs and Nutrients in Australia." No. 7, 1951-52

It seems certain that this development has been very largely the result of consumer resistance to higher prices. In the post-war years up to the end of 1949-50, the price of food and groceries included in the "C" Series Index ("Six Capital Cities") increased only slightly faster than the prices of other index items. In 1950-51 and 1951-52, however, food prices in the regimen increased twice as fast as the prices of other regimen items—by 69 per cent. compared with 30 per cent. Food prices thus played a very large role in the determination of basic wage increases in these years. This rise in food prices, relative to other prices, was a reversal of an opposite trend which had ruled since the outbreak of war. However, by the middle of 1952, food prices relative to the prices of other commodities, had risen to a level higher than pre-war.

Over the same period (June quarter, 1950 to June quarter, 1952) average earnings per "male unit" in Australia increased by only 45 per cent., so that the "real" price of food rose considerably. The average wage-earner, if he spent only the same proportion of his income on food over this period, would have been forced to reduce his purchases by 15 per cent. Falls of this order did actually occur for a number of important food items as is shown in Table I.

### **Trends in Consumption.**

Table I shows details of trends in the consumption of the main "protective" foods, over a long-term period (since the immediate pre-war years.) The commodities listed are those which are of major importance in the maintenance of an adequate national level of nutrition.

This group of foodstuffs includes the products of those agricultural industries whose export prospects are least encouraging, and whose prosperity would therefore be most affected by a fall in domestic consumption. These products are eggs, butter, cheese, processed milk and pigmeats. It can be seen from Table I that 1951-52 consumption per head was below the pre-war level for 10 of the 15 products listed.

Although retail price statistics for Australia are not available for a number of the items included in Table I, there can be little doubt that in all cases prices rose considerably between 1949-50 and 1951-52. Comparing consumption per capita and retail prices between 1949-50 and 1951-52, consumption of milk in Australia fell by 7 per cent., whilst the price rose by 74 per cent. Egg consumption fell 7 per cent., whilst price rose by 82 per cent. Consumption of bacon and ham fell by 25 per cent., and the price of bacon rose by 86 per cent.

Consumption per capita of citrus fruit fell by 25 per cent., mutton by 17 per cent. and lamb by 30 per cent. In the case of cream, consumption in 1951-52 was less than one-third of the pre-war level. In Sydney over the past two years, cream consumption per head has fallen by more than 60 per cent., whilst the price has risen by over 40 per cent. Finally, between 1950-51 and 1952-53 consumption per capita of butter in Australia fell by 5 per cent., whilst price rose by 90 per cent.

Although these figures are rather disturbing, there is some reason to believe that the trend towards a reduced consumption of foodstuffs is easing. The rising price trend halted abruptly in 1952-53, food prices in the "C" Series Index rising by less than two per cent. during that period. Accurate consumption figures for 1952-53 are not yet available for most of the products mentioned above, but preliminary figures show that there was an increase in the consumption of mutton, lamb, and dairy produce other than butter, whilst consumption of butter, beef and veal, and probably bacon and eggs, fell during the year. The danger has not altogether abated, since it can be assumed that consumer resistance to any further price rises will be much greater at to-day's high level of food prices than it was in the 1949-52 period.

### **Unremunerative Export Markets.**

Any reduction in domestic consumption will, of course, tend to increase exports of the products concerned. This trend creates difficulties in those industries, such as dairying, poultry-farming and dried vine fruits, which have home-consumption price schemes designed to raise producers' returns above the level of prices ruling in the unremunerative export markets. For instance, in the case of butter the producer receives 4s. 1¼d. per lb. (commercial butter) from domestic sales, but only about 3s. 2d. per lb. for those export sales under the United Kingdom contract which are not subject to Commonwealth Government price guarantee (the contract price is 3s. 7½d. per lb., from which f.o.b. costs and costs of factory production must be deducted).

The problem that arises with home-consumption price schemes is that any trend towards an increase in the proportion of the production exported lowers the average return to the producer, and a point is reached where it is no longer possible to counteract this by raising local prices. The Paterson Plan of 1926-1934 faced this difficulty. Rapidly increasing production over the period of the Plan raised exports of butter from 30 per cent. to 56 per cent. of output, and contributed to the ultimate failure of the scheme.

The dilemma facing the dairying industry to-day is that any attempt to raise the return to the producer by increasing the local price is unlikely to have a great deal of success. The Commonwealth Government's guaranteed price for butter does not apply to exports in excess of 20 per cent. of domestic consumption. Producers are losing about 11d. per lb. on these non-guaranteed exports, and if a price rise on the local market reduced home consumption, not only would the volume of exports rise, but the quantity of exports subject to price guarantee would be reduced automatically. In addition any increase in butter production would further reduce the average return to the producer from all markets.

Local consumption of butter in 1952-53 fell by approximately 9,000 tons following the retail price rise of 1s. per lb. in July, 1952. Most of the fall in consumption must be attributed directly to the increased price. Whilst increased consumption of table margarine was to some extent a contributing factor, statistics show that Australian consumption of that product rose by only 1,500 tons in 1952-53, compared with the previous year.

It is impossible to make an accurate forecast of the effect on consumption of another increase in the price of butter, but it is known as a general principle that, for foodstuffs such as butter, consumers' resistance to higher prices increases very sharply as price rises. If a further price rise of 6d. per lb. resulted in another fall of 9,000 tons per annum in local consumption (bringing the Australian consumption figure to approximately 100,000 tons per annum) the average price to the producer would increase by only about  $3\frac{1}{2}$ d. per lb.<sup>2</sup>

Australia's rapidly rising population is an important factor counteracting any fall in consumption per head, and in the long term there is little doubt that the local market will expand. Nevertheless, the contemporary marketing problem has important implications as to the necessity for reducing costs. There is little doubt that the considerations outlined above played an important part in the decision made early in 1953-54 that the retail price of butter was not to be increased, despite the fact that the "average cost of production" had risen.

As in the case of butter, consumption of dried vine fruits and eggs has fallen, and these industries are in a similar position to the dairying industry in that they operate under home-consumption price schemes which make them particularly dependent on the local market. Export returns have fallen and, like dairying, these industries find themselves in the position where there seems to be no escape from rising costs, since "passing on" the increases to Australian consumers tends to increase the export surplus, and yields only small increases in average returns to the grower.

To the individual farmer the rising cost trend appears to be solely the result of external influences, and thus it tends to create resentment in the minds of producers who consider themselves victims of adverse circumstances over which they have no control. However, it seems likely that we are witnessing only a return to pre-war conditions and not a new economic phenomenon produced by the post-war inflation. Most of the industries in which difficulty is being experienced, such as the dairying, poultry and pig industries, had similar difficulties in pre-war years. Then, as now, exports had to be sold abroad at prices below those realised on local markets, and even local prices in those days were probably below "average cost of production" at times. In other words, the gradual lessening of inflation both here and overseas, and the abating of the post-war world shortage of fats and oils, has shown that there are some primary industries in which producers will again have difficulty in finding profitable export markets, as they did in pre-war days.

---

<sup>2</sup> This rough calculation assumes that there will be no significant rise in export returns, and that annual production will be in the vicinity of 165,000 tons. (If production increased, the increase in the average price to the producer would be even smaller). The export returns used in the calculation are United Kingdom f.o.b. contract prices for 1953-54, less 46s. 8d. per cwt. for manufacturing cos and 4s. 6d. per cwt. for f.o.b. charges.

### Comparative Food Consumption Levels.

Declining consumption of foodstuffs can be viewed in a wider setting. Current development policy aims at a population of more than ten million by 1960, and unless food production rises at a much faster rate than would be expected from our past record, some fall in consumption per head will be inevitable, if exports are to be maintained at a level sufficient to finance essential imports. Some authorities (notably Colin Clark) have even maintained that we have been eating too well—that Australian food prices, low by world standards, have induced excessive consumption, which should have been diverted to exports in the interests of national development. (Food prices in Australia have risen considerably since those views were expressed.)

However, any complacency about declining consumption of foodstuffs in Australia is not shared by nutritional authorities. Australians have always regarded themselves, with justification, as one of the best-fed nations in the world. The "average Australian diet" compares favourably with standards recommended by nutritional authorities such as The National Research Council of America.

A comparison of nutritional standards as between Australia and other countries enjoying a somewhat similar standard of living is shown in Table II.

TABLE II.

*Consumption of Selected Foodstuffs—Australia and other Countries.*  
(Per head per annum.)

Commodity.	Unit.	Australia.	United Kingdom.	New Zealand.	United States.
Cereals*... ..	lb.	218	220	194	169
Potatoes* ... ..	"	99	242	119	110
Meat* ... ..	"	242	108	233	165
Fluid Milk ... ..	gallons.	28.0	31.0	48.0	38.8
Butter ... ..	lb.	28.3	11.0	41.4	8.7
Margarine ... ..	"	1.6	18.9	...	7.7
Cheese ... ..	"	5.5	10.1	5.9	7.5
Eggs ... ..	No.	219	194	204	406
Calories per Day ... ..	...	3,280	3,100	3,450	3,210

\* F.A.O. Statistical Year Book, 1952. Table 122.

*Note.*—The statistics in this table serve only as a general comparative indication of consumption standards in the four countries listed. The figures apply to several periods ranging from 1950–51 to 1952–53, and have been drawn from a number of different sources, including—

F.A.O. *Statistical Year Book*, 1952.

Commonwealth Economic Committee *Intelligence Bulletins*.

United States Department of Agriculture *Situation Reports*.

F.A.O. *Commodity Reports*.

*New Zealand Year Book*.

The table shows that consumption of food per head in Australia, when converted into energy terms (calories), is higher than in the United Kingdom and the United States, and only slightly below the very high New Zealand level. It is nevertheless disturbing to find that there has been a tendency to substitute cheaper foods, such as potatoes and flour, for the higher-priced foods such as milk, eggs and meat, which are rich in calcium and protein. The main defect of our diet seems to be a shortage of calcium, which is obtained mainly in the form of milk and cheese. Intake of calcium per head in Australia is nearly 30 per cent. lower than in the United Kingdom, Canada and the United States. Increased consumption of milk in Australia is therefore of particular importance from the nutritional viewpoint.

International comparisons are not flattering to Australia in this regard. Australian consumption of fresh milk increased from 23.4 gallons per head to only 28.0 gallons between 1936-39 and 1952. In New Zealand, over the same period, annual consumption improved from 40 to 48 gallons per head, and in the United Kingdom there was an increase from 21 to 31 gallons per head. The latter two countries took positive measures to increase milk consumption, including liberal consumer subsidies. There can be little doubt that from the nutritional viewpoint the current butter subsidy of approximately £16,000,000 per annum would be far better spent as a subsidy on fresh milk, but the economic issues involved are not nearly so clear-cut.

---

### BOOK NOTES.

**Introduction to Economics for Agriculture.** John D. Black. The MacMillan Company, New York, 1953. Pp. xv, 727. \$6.00.

Professor Black of Harvard University is one of the most prolific writers on agricultural economics in the United States—and at the same time one of the clearest exponents of his subject. His latest work is likely to enhance his reputation in this respect. As the title implies, the objective of this "Introduction" is "to give an agricultural college student, or educated farmer. . . . exactly that understanding of economics which he or she needs in order to function effectively and live happily in the world of to-day". To some extent the title is too broad, the subject dealt with is almost entirely the agriculture of the United States and the economy of the United States; little space is given to the problems of other countries.

The book's 700 pages are divided into nine major sections. An introductory section occupying over 100 pages—which is inevitably duplicated to some extent later in the book—is followed by the most important parts in which production, consumption and commodity distribution are discussed. These sections occupy more than half of the book. To round off the economic education of his readers, Black has added five sections on money and business cycles, income distribution, land economics, international trade and exchange and lastly public finance and public agricultural programmes in the United States.