

## CORONARY HEART DISEASE MORTALITY IN AUSTRALIA - REASONS FOR THE RECENT DECLINE

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Australian Coronary Heart Disease (CHD) mortality, which had been increasing steadily in the post-war era, reached a peak around 1967, and has since been declining.<sup>1</sup> Examination of age-specific data reveals that this trend applies to men of all age groups, and to women over 50. The decline in these groups has been of the order of 10-20%. Women under 50 have experienced either no change or a slight increase in rates.

There are a number of possible explanations for this, ranging from improvement in the treatment of myocardial infarction, to changes in various elements of lifestyle. The relative contribution of these factors has been assessed, using data from Australia, and from the U.S.A. and the U.K. These latter two countries were chosen for comparison because they have similar lifestyles and standards of medical care to Australia, and yet have experienced different CHD mortality trends. In the U.S.A.<sup>2</sup> the decline has been even greater than in Australia, while the U.K.<sup>3</sup> rates continued to increase through the early 1970s.

The data suggest that changes in lifestyle, rather than improvements in medical care, have contributed most to the recent Australian mortality pattern. Within Australia alterations in each of the major CHD risk factors - diet<sup>4</sup> and hyperlipidemia, hypertension,<sup>5</sup> and smoking<sup>6</sup> - have been in a direction consistent with the recent decline in mortality. However, the international comparisons indicate that of these three, changes in diet are likely to have been the most important. In both the U.S.A.<sup>7</sup> and Australia there has been a decrease since the 1950s in the consumption of several foodstuffs that increase serum cholesterol, such as beef, whole milk, and butter, with a concomitant increase in the intake of cholesterol-lowering vegetable oils in various forms. In the U.K.,<sup>8</sup> however, the only country of the three to experience a continuing increase in mortality, the trend in food consumption has been in the opposite direction.

### APPROXIMATE PERCENTAGE CHANGES IN CONSUMPTION OF SELECTED FOODSTUFFS - AUSTRALIA, U.S.A., U.K.: 1958-75<sup>4,7,8</sup>

	Australia	U.S.A.	U.K.
Meat	- 20%	+ 10%	+ 3%
Eggs	+ 5%	- 20%	+ 20%
Milk	- 1%	- 10%	+ 5%
Butter	- 40%	- 35%	+ 10%
Margarine	+110%	+ 15%	- 10%

1. ABS reports: Deaths - 1950-1975.
2. U.S. National Center for Health Statistics. (HRA) 22, 74-110 (1974).
3. Trends in heart disease in England and Wales 1950-73. Health Trends, 1977, Volume 9.
4. ABS reports Ref. No. 10.10.
5. Christie, D., Med. J. Aust. 1974, 1: 390-393.
6. Lee P.N. (ed.) Tobacco Consumption in Various Countries.
7. U.S. Department of Agriculture Agricultural Statistics, 1972, 1976.
8. U.K. Ministry of Agriculture, Fisheries & Food. Domestic Food Consumption and Expenditure: 1957-1975.

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