

**Does exposure to cardiovascular disease affect dietary habits?***KN Shaw, DR Woodward*

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The links between diet and cardiovascular disease are now widely discussed in the media. It might be therefore expected that being diagnosed with cardiovascular disease, or being aware of the premature death of close relatives from such disease, would result in healthier food choices. However, very few studies have explored such questions. This paper reports an examination of relevant data from non-metropolitan Tasmania, where the prevalence of cardiovascular disease is substantially above the national average (1).

As part of a cross-sectional risk factor prevalence survey in the North and North-Western regions of Tasmania (2), 1088 adults aged 20-70 years systematically selected from the electoral rolls (response rate 79%) provided data on their consumption yesterday of 53 selected foods. They also answered questions on demographic background and exposure to cardiovascular disease in themselves and those close to them.

Overall, 3% of subjects had survived a heart attack, 24% had been told that their serum cholesterol was high, 14% that their blood pressure was high, and 21% were aware that a close relative had died of a heart attack prior to age 65. These prevalence rates varied with age, gender, educational level and between the North and North-West.

Of the 53 foods studied, heart attack survivors were significantly ( $P < 0.05$ ) more likely to have eaten skinned chicken and lower-fat milks yesterday than other people but less likely to have eaten cakes, untrimmed beef or full-cream milk. (This analysis, and those following, used logistic regression, including as predictors not only the indicator of disease exposure, but also gender, age, educational level and region.) Those diagnosed with high blood cholesterol were more likely to have consumed apples, skinned chicken, fish, low-fat milk, and mono- or poly-unsaturated margarines, but less likely to have consumed cakes, full-cream milk, saturated margarines, butter, cream, and sugar. There were fewer differences between respondents diagnosed with high blood pressure and other respondents, and those aware of premature coronary deaths among relatives showed no significant differences from other people at all.

While the cross-sectional design places restrictions on interpretation, these results suggest that exposure to cardiovascular disease results in a limited number of appropriate sustained dietary changes, at least in this area of Tasmania.

1. Sexton P, Jamrozik K, Walsh J, Rundle S. Regional differences in coronary mortality within Tasmania. *Med J Aust* 1992;157:449-51.
2. Thomson A, Rundle S, Singh BB, Watts R, Sexton P, Woodward D. *Aust N Z J Med* 1995;25:290-6.