

## Regional variation in the dietary intake of Australian schoolchildren

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Regional variation in the dietary intake of adults between Australian capital cities has been reported (1) using data from the 1983 National Dietary Survey of Adults. We examined dietary data from the 1985 National Survey of Schoolchildren (2) to determine if differences in dietary intake by region were consistent with those reported for adults.

The National Dietary Survey of Schoolchildren collected 24 hour dietary records from 5210 schoolchildren aged 10 to 15 years. Sampling aimed to provide records from an equal number of boys and girls, an equal number from each age group and numbers weighted by the population of each State and Territory. The response rate was 65.5% and was higher for younger children and for boys. The percentage of children from each State or Territory eating a specific food type was compared to the mean percentage from the remaining regions after controlling for age and sex. Comparisons were made for 94 food types, and  $P < 0.05$  was considered to indicate a significant difference.

Regional differences found in the schoolchildren study and also in the adult study			Regional differences found in the adult study but not found in the schoolchildren study		
Food group	Higher prevalence	Lower prevalence	Food group	Higher prevalence	Lower prevalence
Marrow/pumpkin	QLD		Wholemeal bread	Hobart	
Onions	WA		Flour	Hobart	
Other tropical fruits	QLD		Potato	Hobart	
Whole liquid milk		SA	Peas and Beans	Hobart	
Reduced fat milk	SA		Carrot	Hobart	
Polyunsaturated margarine	NSW	QLD, TAS	Tomato		Hobart
Other margarine	QLD	NSW, SA			
Soups	VIC				

Note: The Adult study included six capital cities only (Adelaide, Brisbane, Hobart, Melbourne, Perth and Sydney)

In the schoolchildren survey, Tasmania had the highest proportion of subjects eating potato, peas and beans, and carrots and the lowest proportion eating tomato and tomato products. However, unlike the adult survey where the number of subjects in each city was approximately equal, the number of Tasmanian subjects in the schoolchildren survey was relatively small ( $n = 113$ ) reducing the power of the study to find statistically significant differences between regions.

Considering methodological differences between these studies, the regional variation observed in food intake practice is consistent. This regional variation in diet is probably influenced by climate, factors relating to food availability, and cultural factors relating to each specific population.

1. Woodward DR. Dietary variation within the Australian community: differing food choices in the state capital cities. *Aust J Nutr Diet* 1990;47:3-7.
2. Department of Community Services and Health. National dietary Survey of Schoolchildren (aged 10 -15years):1985. No 2 Nutrients consumed. Canberra: AGPS.