NUTRIENT INTAKE DIFFERENCES BETWEEN SOCIAL STATUS GROUPS

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Low social status has been shown to be associated with high mortality in Australia (McMichael 1985). Nutrition targets have recently been defined which recommend that contributions of total fat, refined sugars and alcoholic beverages to total energy in the diet should be reduced and dietary fibre intake increased to specified levels in the diet of the population as a whole. Recommended daily intakes for micronutrients are also available for the Australian population. This study aims to investigate whether social status is associated with the level of compliance with these two sets of standards.

A random survey of 1500 adults in three capital cities (Adelaide, Perth and Brisbane) using a food frequency questionnaire found that intakes of fat, refined sugars and retinol relative to energy intake, as well as energy intake itself were lower in those of higher social status as measured by occupational prestige. Intakes of natural sugars, fibre, alcohol, iron, zinc, magnesium, potassium, beta-carotene, thiamine, riboflavin, niacin, folate and vitamin C relative to energy intakes were higher in upper social status groups. All of these analyses were adjusted for age and sex confounding.

Comparison of proportions in social status quintiles above and below recommended intake levels found differences of over ten percent between the top and bottom group for contributions of fat and 'added' sugar to total energy in the diet (see table). For sodium and fibre, less than one third of people had diets in line with the recommendations irrespective of social status.

	Social status quintile					
Recommended nutrient level	Upper	Upper-middle	Middle	Middle-lower	Lower	
%Fat≤33%	33.5#	38.4	35.5	28.2	22.9	*
%'Added' sugar≤12%	78.8	73.8	69.3	64.0	64.6	*

proportion in each occupational status quintile with intakes within recommended levels.

* significant variation between quintiles, $P<0.05$.

Smaller, but significant differences between groups were found for proportions meeting recommended levels for folate, iron, magnesium and zinc with the lower status groups generally showing less compliance. These nutrients were present in adequate amounts (of at least 70% of the RDI) in over 85% of respondents in all social status quintiles, excepting zinc which was found at this level in only 70% of the population.

The results of this survey indicate that social status is a weak marker for nutritional quality of the diet. Lower social status was associated with similar total nutrient intakes of micronutrients, but lower micronutrient densities in the diet due to larger energy intakes in turn caused by higher levels of fat and 'added' sugar. However all strata had large proportions of people outside the recommendations, indicating that programs are needed to improve the dietary intake of the population as a whole, perhaps with special emphasis on those of lower social status.

MCMICHAEL, A.J. (1985). Comm. Health Stud. 9: 220.

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