

OBESITY, DIABETES AND HYPERLIPIDEMIA IN A CENTRAL AUSTRALIAN
ABORIGINAL COMMUNITY

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A preliminary survey of the prevalence of lifestyle diseases among the adult population at Ntaria, an Aboriginal community 130 km west of Alice Springs, found very high rates of obesity, type 2 diabetes and hypertension. The survey covered an estimated 63% of the target population. The high diabetes prevalence in the adults over 30 years (16.4% of men, 19.2% of women) was considered to be an underestimate since random blood sugar levels were measured only in subjects with glycosuria. These data provided the rationale for a more comprehensive examination of the risk factors for type 2 diabetes and cardiovascular disease in this community, which was conducted in June 1987. Three hundred and fifty adults over the age of 15 years participated in this survey (more than 90% of those present at the community and its Outstations at the time of testing). The subjects were given a 75 g oral glucose tolerance test after an overnight fast with blood sampling before and 2 hours after. Body mass index (BMI) was calculated from weights and heights (kg/m^2). Some preliminary data from this survey are presented in the Table.

	Men		Women	
	Under 35	Over 35	Under 35	Over 35
Number of subjects	113	47	130	60
Overweight (BMI 25-30)	35%	30%	28%	30%
Obese (BMI > 30)	12%	21%	21%	45%
Diabetes	1%	32%	5%	29%
Impaired glucose tolerance	8%	11%	4%	19%
Hypercholesterolemia				
5.5-6.7 mmol/l	32%	38%	29%	31%
>6.7 mmol/l	16%	30%	12%	15%
Hypertriglyceridemia				
>2.0 mmol/l	18%	51%	15%	26%

Obesity is highly prevalent, particularly among the women where 49% of those under 35 and 75% of those over 35 were either overweight or obese. The overall prevalence of diabetes was 11.4%. However, the unusual age-distribution (only 30% of the population older than 35 years) masked the severity of the problem: of those over 35, 32% of men and 29% of women had diabetes. Impaired glucose tolerance and hypertriglyceridemia were also strongly age-related. In contrast, hypercholesterolemia was very common in all age-groups. These results confirm and extend the original findings of Phillips and Kubisch (1985) and highlight the severity of the public health problem posed by these "lifestyle diseases" in this community. The hypercholesterolemia is much more severe (particularly in the younger people) than that reported previously for other Aboriginal populations with high diabetes prevalence (eg Bastian 1979). All of these problems are diet-related, but the enormity of the challenge to change dietary patterns (once they have been accurately defined) cannot be underestimated.

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