

## NUTRIENT INTAKE OF ABORIGINAL CHILDREN IN THE KIMBERLEY

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The mean nutrient intakes of 169 Aboriginal children aged 7.8 to 13.1 years were estimated by the 24 hour recall method and compared with those of 70 Caucasian children of similar age living in Adelaide. The data are derived from a total of 530 interviews with the Aboriginal children over a period of approximately three years and from a single set of interviews with the Caucasian children. Food photographs were used to aid estimation of the quantity of each of the major foods consumed and for milk powder and sugar Aboriginal children measured the amount consumed on each occasion into a cup and this was weighed. Nutrient composition was calculated using the DIARYAN program (Baghurst and Record 1984).

The estimated mean daily energy intake of Aboriginal children (5308 KJ) was significantly ( $P < 0.001$ ) less than that of Caucasian children (6795 KJ). In addition, whereas energy intake increased significantly with age in Caucasian children (0.61% per month,  $P < 0.001$ ), there was no statistically significant increase for Aboriginal children (0.06% per month). "Bush foods" were a very minor component of the diet, providing less than 1% of total energy. The estimated daily intakes of a number of nutrients are summarised in the Table. Log transformation of all data was required because of the large range of values and the high degree of skewness. In the table these have been back-transformed to geometric means (Geom. mean) which are approximately equivalent to the medians of the underlying statistical distributions.

Nutrient and unit	Caucasian		Aboriginal		Caucasian Geom. mean	Aboriginal <sup>1</sup> Geom. mean
	Log	se	Log	se		
Fibre (g)	2.62	0.068	2.03	0.028	13.8	7.63
Protein (g)	3.92	0.036	3.76	0.020	50.6	42.9
Fat (g)	4.24	0.045	3.61	0.028	69.5	37.0
Carbohydrate (g)	5.31	0.036	5.24	0.018	203	189
Calcium (mg)	6.37	0.060	6.07	0.028	585	432
Retinol ( $\mu$ g)	5.53	0.095	5.02	0.042	252	151
Vitamin D ( $\mu$ g)	0.21	0.143	-1.27	0.059	1.24	0.28
Thiamine (mg)	0.08	0.062	-0.52	0.020	1.08	0.60
Riboflavin (mg)	0.37	0.077	-0.22	0.026	1.45	0.80
Vitamin E (mg)	1.29	0.061	0.45	0.036	3.65	1.57
Vitamin B6 (mg)	-0.16	0.055	0.52	0.029	0.86	0.59

<sup>1</sup>All  $P < 0.001$  v Caucasian values except carbohydrate which was NS.

It is concluded that the Aboriginal children suffer significant dietary deficiencies. The lack of an increase of energy intake with age is unexplained.

BAGHURST K.I. and RECORD S.J. (1984). Community Hlth. Stud. VIII: 11.

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