Proceedings of the Nutrition Society

Abstracts of Original Communications

A Scientific Meeting was held at the University of Glasgow, Glasgow on 29 June–2 July 1999, when the following paper was presented.

The rest of the abstracts for this meeting have been published in Volume 59, OCA.

All abstracts are prepared as camera-ready material.

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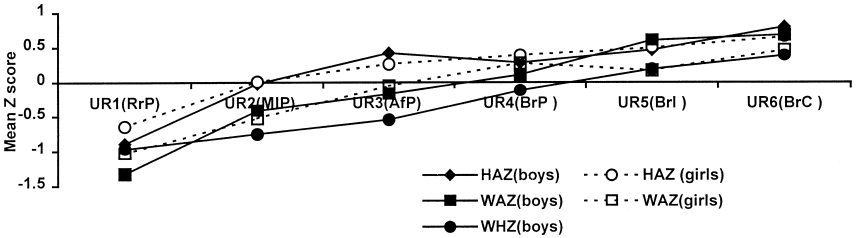
https://doi.org/10.1017/S0029665101000040 Published online by Cambridge University Press

Anthropometric assessment of the nutritional status of South Asian children in the UK and in Pakistan By RUBINA HAKEEM[1], JANE THOMAS[2] and SALMA H. BADRUDDIN[3], [1]*Department of Food and Nutrition, RLAK Government College of Home Economics, Stadium Road, Karachi-74800,* [2]*Department of Nutrition and Dietetics, Kings College, London, W8 7AH and* [3]*Department of Medicine/Community Health Sciences, The Aga Khan University, Stadium Road, Karachi-74800, Pakistan*

Anthropometric assessment of the nutritional status of six groups of 10-12-year-old school children, representing various urbanization categories was carried out. Three groups of children were recruited from Punjab, Pakistan. Children in rural (*n* boys,21;girls,21), middle-income urban (*n* boys,37;girls,29) and affluent urban (*n* boys,56;girls,31) groups were assigned urbanization rank (UR) 1, 2, and 3 respectively. Another three groups were recruited from Slough, UK: British Pakistani (*n* boys,66;girls,51), British Indian (*n* boys,41;girls,33), and British Caucasian (*n* boys,19;girls,14) and were assigned urbanization rank 4, 5, and 6 respectively.

Mean height and weight of children increased with urbanisation rank. Comparison with NCHS reference values (WHO 1983) also showed that in general urbanization accompanied increase in height and weight. Correlations were calculation for urbanization *v.* height for age z (HAZ) score, weight for age z (WAZ) score for both boys and girls and weight for height z (WHZ) score for boys only. WHZ could not be calculated for girls because the reference data reference values for girls more than 120 cms tall and almost all the girls in this sample were more than 120 cms tall. Urbanization had significant positive correlation with HAZ (Spearman's rho = 27, P = 0.000), WHZ (Spearman's rho = 28, P = 0.00) and WHZ (Spearman's rho = 30, P = 0.000).



Children below the 10th percentile for 'height-for-age' were caategorized as stunted. A higher proportion of rural boys and girls (boys,23%;girls,52%) were stunted as compared to affluent (boys,0%; girls,4%) or less affluent urban Pakistani boys and girls (boys,10%;girls,11%). British Caucasian (boys, 0%;girls,5%) and British Indian (boys,6%;girls,0%) children were less often stunted than British Pakistani children (boys,0%;girls,5%). Boys having more than 5% above median weight-for-height were classified as overweight and those below the 3rd centile for weight-for-height as wasted. None of the British Pakistani or British Caucasian, and only 3% of British Indian boys, were wasted according to this criterion. Wasting was noticed in 18% of rural, 14% of less affluent and 10% of affluent urban Pakistani boys.

It is concluded that genetic potential for growth of South Asian children may not be different from British Caucasian children. It appears that the quality of early childhood nutrition may have been responsible for the differences between British Pakistani and Caucasian children and the high rates of stunting among the former group.

World Health Organization (1983) *Measuring changes in nutritional status*. Geneva: WHO