

PROSPECTIVE STUDY OF WEIGHT STATUS OF ADOLESCENTS

P. TIENBOON, M.L. WAHLQVIST* and I.H.E. RUTISHAUSER

The question of whether or not weight in childhood can be used to predict later and/or adult weight still needs further study. However, many studies have shown some evidence for this possibility (Charney, et al. 1976; Poskitt & Cole 1977; Wilkinson et al. 1977). Although there is an increased risk for remaining overweight in later years for infants and children who have once been overweight, overweight can also develop at any time during childhood.

The data presented are part of a prospective study of the health of Geelong adolescents (Tienboon et al. 1988). Data on weight were available for 83 adolescents (40 boys; 43 girls) at birth, 12 months, 80 months and 15 years. Overweight was defined as a weight (birth) or body mass index (BMI) (12 months and later) > 1 SD above the study sample mean for age and underweight as a weight or BMI > 1 SD below the sample mean. The figure indicates the number of subjects who were overweight at each age.

Prospective study of weight status of 83 Geelong adolescents

Birth	12 months	80 months	15 years
10 overweight	13 overweight	7 overweight	12 overweight
59 normal	57 normal	68 normal	60 normal
14 underweight	13 underweight	8 underweight	11 underweight
2	0	0	2
2	2		
6			
	3	3	3
	1	1	
	7		
		1	1
		2	
			6

Of the 23 individuals classified as overweight at birth or at 12 months, 17 % were overweight at 80 months and 22 % at 15 years. Of the adolescents classified as overweight at 15 years, half had been overweight at some time in early childhood and the remainder first became overweight at this age.

It is clearly inappropriate to suggest that overweight in infancy will persist into adult life but at the same time the risk of persisting overweight should not be underestimated in older children.

This work was in part supported by a grant from Mead Johnson, Thailand.

CHARNEY, E., GOODMAN, H.C., McBRIDGE, M., LYON, B. and PRATT, R. (1976). *N. Engl. J. Med.* 295:6.

POSKITT, E.M.E. and COLE, C.G. (1977). *Br. Med. J.* 1:7.

TIENBOON, P., WAHLQVIST, M.L. and RUTISHAUSER, I.H.E. (1988).

Proc. Nutr. Soc. Aust. 13:76.

WILKINSON, P.W., PEARLSON, J., PARKIN, J.M., PHILIPS, P.R. and SYKES, P. (1977). *Lancet* 1:350.

Department of Human Nutrition, Deakin University, Victoria 3217
 * Department of Medicine, Prince Henry's Hospital Campus, Monash Medical Centre, Monash University, St. Kilda Road, Victoria 3004