

ASSESSMENT OF NUTRITIONAL STATUS OF THE ELDERLY - ANTHROPOMETRY

Delia M. Flint¹, Mark L. Wahlqvist¹, Trevor Smith² and Alan Parish.¹

¹Section of Human Nutrition, Deaken University, Geelong, Victoria, 3217.

²Grace McKellar Hospital for the Aged, Geelong, Victoria.

Measurement of the physical dimensions and body composition in the elderly are important parameters to measure when nutritional status is assessed. As part of a study to assess the nutritional status of all inhabitants of a long term geriatric institution, height, weight, mid-triceps and sub-scapular thickness, abdominal girth and hip length (HL=anterior superior iliac spine to knee joint space) were measured. These are all techniques which can contribute to the quantification of body fat and, therefore, of overweight. The most widely used indices for overweight are based on body weight in relation to height (Wt/Ht^2), body mass index (B.M.I.). The B.M.I. has the best correlation with body fat (1). In the elderly population it is not always possible to obtain an accurate measurement of height. In this study we have obtained a significant relationship between B.M.I. and Wt/HL^2 , ($n=85$; $r=0.81$; $P<0.001$) and also abdominal girth/ HL^2 ($n=85$; $r=0.55$; $P<0.001$). Thus in situations where measurement of weight or height presents a problem in the elderly, these alternative indices may be useful in assessment of overweight and obesity.

- (1) Bray, George A. Syndromes of obesity; pathogenesis and treatment. Medicine Australia, March: 690, 1979.

*Int Congress
of
Gerontology
Melb. December 1980*