NUTRITION OF PRIMARY SCHOOL CHILDREN

D. WALDRON* and A.M. LILBURNE*#

Primary school children have been shown to have a limited knowledge of many basic nutrition principles. Many Australian children have undesirable eating patterns which include missing meals and eating foods with a poor nutrient content in place of regular meals. Nutritional related problems have been identified and include - cardiovascular disease risk factors, such as obesity, increased blood pressure and serum cholesterol, iron deficiency anaemia among adolescent girls; and high rates of dental caries especially among some migrant groups. (National Health and Medical Research Council, 1989)

The aim of this study was to determine the nutritional status of primary school children and to determine the nutritional knowledge, attitudes and practices of these children, their parents and teachers. Children aged 5-12 years (n=110), attending the same school, had their height and weight measured and the corresponding Eid Index (Storlien et al 1987) was determined. Parents, teachers from five schools in the area and children in grades 4-6 completed a voluntary questionnaire on their nutrition knowledge, attitudes and practices. The parents and teachers questionnaire included questions on their views on what factors influence children's eating habits and nutritional status. A survey of the school canteen was undertaken to determine the foods provided and the nutritional knowledge of the canteen supervisor.

The response rate for anthropometric measurements was 53%. Only 54% of children were within the recommended weight for height range, 23% were overweight, 16% obese and 7% underweight. Significantly more boys than girls were overweight (P<0.001). There was no

difference in the proportion of girl and boys who were underweight.

Of the 49% of parents who responded to the questionnaire, most (97%) sent their children to school with some food. Of the 71% of children who responded, 9% used the local shop and 96% used the canteen at least once a week. Sandwiches, potato crisps, muesli bars, juice and biscuits were foods most frequently purchased. Foods sold in the canteen, which included carob buds, high fat cracker biscuits and sausage rolls, were considered to be healthy. Other, misconceptions about the nutritional value of certain foods were common. For example, a proportion of children considered muesli bars (84%) and flavoured mineral water (49%) and 'MSG free' chips (40%) to be healthy.

Of the 49% of teachers who responded to the questionnaire, the majority (92%) stated that they taught nutrition despite their acknowledgement of lack of time and nutrition education resources. However, parents (57%) felt that children were not receiving adequate nutrition education during school hours.

Parents identified the major nutrition-related problems of primary school children as: food choices provided at the school canteen (60%), obesity and the lack of parent education. Solutions offered by the teachers included: nutrition education for parents, nutrition programs in schools,

advertising healthy food, teacher education and canteen modification.

This study showed that 39% of children were overweight or obese which compares with 30% from a previous Australian study. Our survey identified these issues which need to be addressed to improve the nutritional status of school children: the foods available from the canteen, foods eaten at recess, nutrition education resources for teachers, and the teachers', parents' and childrens' knowledge of what is in foods, and how to interpret food labels.

STORLIEN, L., BIRD, J. and SILVA, P. (1987). <u>Aust. Paed. J. 23</u>: 131. NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL. (1989). 'Implementing the Dietary Guidelines for Australians'. (AGPS: Canberra).

^{*}Human Nutrition Unit, Department of Biochemistry, University of Sydney, NSW 2006 #Community Health Services, Central Sydney Health Service, Queen Mary Building, Grose Street, Camperdown NSW 2050