

NUTRIENT INTAKES OF A GROUP OF AUSTRALIAN ADULTS.

D.C.K. ROBERTS*, J.A. ALLEN*, D. O'CONNELL**, D. SILLOVE*** and R. HELLER**

Four hundred and two adult volunteers gave informed consent to participate in the study from the Newcastle and Sydney regions. On the initial visit each person was weighed, measured and instructed on the procedure for weighing all their food for 4 days (Wednesday to Saturday). A set of battery operated scales which weighed to the nearest 2 g and a pocket sized recording book were given to each subject. The dietary records were coded using the Diaryan program based on the English food composition tables with additions of some Australian foods. These were the most appropriate tables to use at the time of analysis as to date (Aug 87) no Australian tables with current food composition data and comprehensive nutrient analyses are available.

394 useable records were obtained from subjects 17-66 yrs of age, 122 men and 272 women, principally in the higher socioeconomic groups with 51% of men and 23% of women tertiary educated. Body mass index rose in both men and women with increasing age with 32% of women and 48% of men being above 25 whereas 6% and 0.8% were below 19 respectively.

Women of all ages had lower energy intake than the men and this was matched by lower intake of fibre and cholesterol. The percent of energy derived from protein intake increased in women with age from 12.4% under 20 to 16.7% in the over 50's. This effect was not seen in men. Carbohydrate intake was about 42% of energy in both men and women and did not show any trend with age. Approximate equal proportions of simple and complex carbohydrate were being consumed. Fibre intake was of the order of 25g for men and 16g/day for women. Alcohol intake was about 4.5% of energy and was similar for men and women, although men 20-39 yr were heavier drinkers than women of this age. Fat intake was around 38% of energy for both men and women and for each age range, men had a slightly higher polyunsaturated to saturated fat ratio (0.55 vs 0.47).

Analysis of the data by education groups failed to show any major differences in intake for the macronutrients with the exception of alcohol intake which was higher in females who had completed high school and tertiary education than in those who had only completed some high school. This trend failed to reach significance in males, perhaps due to the smaller group numbers. Alcohol intake was higher in smokers than non-smokers and both fibre and total carbohydrate intake fell in smokers. Amongst the micronutrients derived from foods, education level did not produce any differences. By contrast, men and women smokers had lower intakes of vitamin C than non-smokers, although mean intake still exceeded the RDI.

The mean energy intakes were similar to the preliminary values from the 1983 National dietary survey. However, the percent energy from fat was lower and that for carbohydrate higher than in 1983. Other recent studies have shown a range of 35.5-39.3% of energy from fat for women and 36.3-40.6 for men. The goal for the year 2000 is to reduce the contribution of fat to total energy to 33%. We may be seeing a move in that direction in our sub-population but it still indicates the Australian diet is too high in fat.

*Human Nutrition Unit, University of Sydney, New South Wales 2006 **Centre for Clinical Epidemiology and Biostatistics, University of Newcastle New South Wales 2300 ***Dept of Psychiatry, University of NSW, Sydney, New South Wales 2033