CHAPTER 1

INTRODUCTION

In 1987, the International Union of Nutritional Sciences (IUNS) Committee on Nutrition and Ageing undertook to coordinate cross-cultural studies of food habits and health in later life. The candidate was allocated the task of coordinator and the development of the questionnaire and protocol. The main objective of this study was to describe health status, lifestyle and the range of food habits (present and past), amongst the aged in 13 elderly communities (Wahlqvist and Kouris, 1990). Results have now been descriptively documented in book form (Wahlqvist et al., in press). The study of elderly Greeks in Greece and Australia is part of the wider international study.

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There is currently concern regarding the aged because it has been estimated that by the year 2000 there will be an increase from 258 to 396 million in the elderly population (>65 years) of the world, with life expectancy increasing by as much as 25%, because of the reduced mortality rates in later life (Andrews et al., 1986). Inappropriate food intake in old age can lead not only to marginal intakes of micronutrients, but may also contribute to the development and enhanced progressions of many degenerative diseases associated with ageing, and may further promote various age-related changes in body composition or physiological function (Horwath, 1989). More than 70% of all deaths occur after age 65 of which more than 60% are diet related (Gray et al., 1986, Report to Minister for Heath).

An important goal now is to improve the health and therefore quality of life of elderly people, with a major emphasis on helping the elderly to live as independently as possible within the community (Steen, 1983). In accomplishing this goal, an appropriate food intake may have an important role to play, together with exercise and other preventive strategies (Horwath, 1989). Health promotion programs directed at senior populations were neglected until recently, upon the general belief that changes in health habits late in life were difficult to achieve and in any event would be "too little and too late". However, Fries (1992) argues that because the magnitude of health expenditures in the senior

population is so much greater than at younger ages and the proximity of the intervention and the events to be prevented so much closer, health preservation programs which encouraged good nutrition and exercise may be even more effective in seniors than in younger individuals. This was shown recently in a study of 6000 Bank of America retirees (Leigh et al., 1993). More evidence is needed on the importance of food in later life.

When compared to other developed countries, the growth in proportion of the Australian aged has been slow. This has been due to the large number of immigrants arriving under or in the childbearing age-group and thus affecting the age structure of the population. Now, 40 years later, those who arrived in Australia as young adults have grown old (Sax, 1984). At the 1986 Victorian census, a total of 130,553 persons reported as being of Greek ancestry, of which 65,515 were born in Greece. Of these, 2686 were aged over 70 (M 1104, F 1582) which represents 2% of the total Greek population (1.5% 70-79, 0.5% 80+). By 2001, the most significant increase in the proportion of elderly immigrants will be for the Greek community, which will rise by about 35%, with more than 40% of the community being aged 60 and over. These statistics highlight the need to enforce preventative measures as soon as possible in the Greek community in order to minimise health problems in later life (Sax 1984).

With respect to preventive measures, 1982 mortality statistics indicate that Greeks have got nothing to worry about. Of all ethnic groups, Greek migrants (followed closely by Italian migrants) have the lowest mortality rates, about half that of Australian-born (Young, 1986). This mortality advantage is spread over the major cause of death categories in which diet plays a major causal role - cardiovascular disease and cancer (Young, 1986; Powles et al., 1988 and 1990; McMichael et al., 1980).

There is some convergence towards the higher host population rates for these diseases with increasing length of stay. However, their overall mortality levels remain well below those of the host population and also lower than Greeks in Greece, with offsetting declines of fatal stroke, stomach and cervical cancers. Elderly Greek Australians aged 65-74 have continued protection against heart disease, with mortality rates being significantly lower than elderly Australian-born. Protection against colon and breast cancer appears to be lost with age, with mortality rates rising to the high levels found in Australian-born (Young, 1986). However, morbidity data paints a gloomier picture.

According to the National Health Survey 1989-1990 (ABS, 1991b; Appendix 1) and studies on small samples of migrants in Australia (Australian Institute of Multicultural Affairs AIMA, 1986; Australian Council on the Ageing ACOTA & Department of

Community Services DCS, 1985) elderly Southern-European migrants compared to Australian-born reported worse health and well-being and suffered more nervous and mental disorders and more disability. The prevalence of heart disease, hypertension and hypercholesterolaemia was equally high or higher than Australian-born in all age groups. Cancer prevalence was lower in the younger age groups but increased to Australian-born levels for those aged 70+ (except the men).

The 1989 morbidity data suggests the mortality profile of Greek Australians may have changed in an adverse direction since the 1982 mortality data was reported. Therefore, the belief that Greek Australians are the second longest lived population in world (after the Japanese in Hawaii) (Powles, 1990a), may no longer be true. They appear to be losing their protection against these diseases at a greater rate than Greeks in Greece (WHO, 1992). Whether there is a high level of morbidity present in the elderly Greek community in Australia, requires further investigation, particularly since they will experience the most rapid ageing of their community in the years to come. Complimentary information would include examination of their food and nutrient intake, lifestyle habits and social factors, paying particular attention to changes on migration.

Powles (1990a) attributes the health advantages of Greek Australians to the retention of some 'protective' elements of their traditional way of life, such as a high intake of 'protective' components of the diet (fruit, vegetables, olive oil and fish) and cultural beliefs and practices, including high levels of social support and interaction. Food and social factors appear to overwhelm other influences (e.g high prevalence of smoking, obesity, low exercise levels) on the incidence rates of non-communicable disease. He follows this with a public health message to ethnic groups: 'stay with what you've got; the mainstream Australian way of life is not likely to be as good for your health'. There have been a few studies reported so far of consumption habits in Greek Australians, but none on the elderly (Powles et al., 1988a,b; Rutishauser and Wahlqvist, 1983 and Kosmidis, 1980; Household Expenditure Survey, Powles et al., 1990b; National Dietary Survey of Adults 1983). Most of these studies provide inadequate and incomplete data on food and nutrient intakes in Greek Australians.

Furthermore, there have been several attempts to define the food and nutrient composition of the Greek diet in Greece. Most of these attempts have not relied on actual intake but on indirect measures such as food balance sheets. Trichopoulou et al (1993) recently described the macronutrient composition of the Greek diet from case control studies. The diets of small samples of elderly Greeks in Greece have also been defined in the Euronut-Seneca study (de Groot et al.,1991) by Trichopoulou and colleagues in

Markopoulo Greece on 60 subjects and Kafatos and colleagues in Crete on 85 subjects. More data is clearly needed on the composition of the Greek diet and how it changes on migration. Such basic information is essential for the provision of appropriate multicultural health care and for the design of preventive approaches to ensure that the health advantages are maintained and morbidity reduced in Greek Australians.

Greece provides an unusual opportunity because several regions (particularly rural areas) still follow a more traditional Greek diet and lifestyle whereas city regions have adopted a more 'westernized' way of life (Trichopoulou and Efstathiadis, 1989; Trichopoulou et al., 1993b). Spata is located in a rural region of Greece, in the state of Attiki (near Athens). Inhabitants of this town still follow a more traditional lifestyle, including diet. A 'traditional' Greek town would act as standard by which to determine the degree of lifestyle and dietary changes made on migration by elderly Greeks to Australia.

A number of studies have assessed health, food and lifestyle of elderly Anglo-Celtic Australians (Horwath, 1987; Baghurst et al., 1991; National Dietary Survey of Adults 1983). However, due to differences in methodologies, comparisons are often difficult. The questionnaire designed for this study has been adapted and used by colleagues on a reference group of Anglo-Celtic Australians aged 70+ (M 50, F 49) (Wahlqvist et al., 1993). Data from this study has been drawn upon to highlight the degree of acculturation by Greek migrants to Australia.