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Advances in medical technology, particularly in the developed world, have been associated with improvements in health and the living environment, a longer average life expectancy, and a gradual ageing of society. Based on statistical predictions, it is estimated that the world's elderly population in the year 2050 will be more than three times that in 2002. In Taiwan, the elderly population aged 65 years and older accounted for 9.13% of the total population in 2003, which compared to the 6.95% of 10 years previous³ is almost a 30% increase. As a result of this changing demographic pattern, the physical and mental health of older persons and the prevention and management of disease in this age group have become important issues. In line with the increased interest in the health of older persons, the Taiwanese Nutrition and Health Survey Team carried out an island-wide survey of elderly people in 1999-2000. Our aim was to investigate the health and nutrition of the Taiwanese elderly and associated influential factors. By carrying out this survey we hoped to promote understanding of the relationship between diet and disease and facilitate the development of appropriate nutrition and health education policies that can maintain health, decrease medical costs and improve the quality of life of our senior citizens. The Bureau of Foods and Hygiene of the Department of Health began funding the conduction of national nutrition surveys in 1980 and since that time has continued to fund surveys carried out approximately every 5 years. The first survey (1980-1981) and the second survey (1986-1988) were predominantly household surveys of diet and nutrient intake. The third survey (1993-1996) was expanded to include a comprehensive health and a KAP (knowledge, attitude, and practice) components. However, this survey did not have sufficient power to cover all important nutritional issues for older persons. The Elderly Nutrition and Health Survey in Taiwan (1999-2000) has been specifically designed for the Taiwanese elderly. It paves the way for the next nationwide survey that will be carried out in 2005-2008.

The content of the Elderly Nutrition and Health Survey in Taiwan (1999-2000)⁴ included: elderly person's dietary consumption and estimates of nutritional biochemical parameters, physical and mental health status of the elderly, and possible influential socio-demographic and lifestyle factors. We hope that this survey will not only help us to appraise the nutritional status of elderly people in Taiwan, but also provide a deeper understanding of factors influencing the health and nutrition of the Taiwanese elderly and the mutual relationship between nutrition and health. A more detailed explanation of the study design, content and methods of the elderly nutrition survey is described elsewhere in this issue. There are a total of twelve papers included in this issue that describe a variety of results from the survey including the distribution of dietary nutritional intakes by residents in Taiwan, the use of nutritional supplements, and nutritional biochemical parameters. The biochemical parameters covered in this issue included vitamin B1, vitamin B2, folate, vitamin A, vitamin E, magnesium, iron and homocysteine. In addition, the relationship between B-complex vitamins and homocysteine, and the relationship between magnesium and diabetes mellitus were also presented. There are also two papers discussing health problems associated with diet and nutrition. One describes how Taiwan has possibly one of the highest prevalence rates of hyperuricemia in the world and the other discusses bone mineral density and its relationship with dietary intakes of calcium, protein and sodium. This group of papers only presents part of the results from the Elderly Nutrition and Health Survey in

Taiwan (1999-2000). Some data has already been published⁵ and further results will be published in other international journals in the future.

The majority of people in Taiwan are of Chinese ethnicity and their nutritional intake is a hybrid of the Chinese traditional diet and a more modernized diet. As a result, the findings of this elderly person's nutritional survey can be used as a guide in Chinese societies undergoing rapid modernization to prevent nutritional related chronic diseases associated with westernization of the diet. The relative proportion (<2%) of Taiwanese Aborigines in the population was increased in the survey sample to 1 in 13, so that there would be sufficient numbers to discover important nutritional and health issues for Indigenous Taiwanese people. In addition, this enabled data from Han Chinese and Aboriginal people in Taiwan to be compared, leading to further understanding of the interaction between genes and the environment.

We hope that the publishing of this series of papers in this issue will provide information to the international academic community about the nutritional and health issues faced by Chinese society post modernization. In addition, to obtain further benefit from the nutrition and health survey data and encourage across nation and across racial data comparisons, the data from this survey will be placed in the public data-base⁶ of the Center for Survey Research, Academia Sinica, where applications can be made for access to the data by local and international academics. It is hoped that such access will promote greater international exchange between academics. By comparing the varying influences of ethnicity and dietary patterns on health we hope to further understanding of the mechanism of development of the various diseases influenced by diet and nutrition.

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References

- US Census Bureau. Global population profile: 2002. Washington, DC: US Government Printing Office, 2004. (International Population Reports WP/02)
- 2. Department of Health, Executive Yuan, Taiwan, ROC. Annual report of health and vital statistics II: vital statistics, 2003. Taipei, Taiwan: Department of Health, Executive Yuan, 2004.
- 3. Department of Health, Executive Yuan, Taiwan, ROC. Annual report of health and vital statistics II: vital statistics, 1993. Taipei, Taiwan: Department of Health, Executive Yuan, 1994.
- Pan WH, Hung YT, Shaw NS, Lin W, Lee SD, Chiu CF, Lin MC, Chen SY, Hong CM, Huang TY, Chang HY, Tu SH, Chang YH, Yeh WT, Su SC. Elderly Nutrition and Health Survey in Taiwan (1999–2000): research design, methodology and content. Asia Pac J Clin Nutr 2005; 14: 203 210
- Huang KC, Lee MS, Lee SD, Chang YH, Lin YC, Tu SH, Pan WH. Obesity in the elderly and its relationship with cardiovascular risk factors in Taiwan. Obes Res 2005; 13 (1): 170-178.
- Center for Survey Research, Academia Sinica. Survey research data archive. Taipei, Taiwan: Center for Survey Research, Academia Sinica, 2005. Available at http://srda.sinica.edu.tw

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