

SECTION 1: HISTORICAL REVIEW OF THE IUNS PROJECT



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1.1 INTRODUCTION

At a World Health Organisation (WHO) Workshop in Hyderabad, India in November 1986, virtually all of the newly constituted IUNS Committee on Nutrition and Ageing were present. They were stimulated by the need to understand the nutritionally-related health problems of elderly people in developing countries. Estimates are that the absolute numbers of elderly in the developing world will at least equal, if not surpass, the numbers in the developed world by the end of the 20th century. The potential nutritional problems could come to equal those of children in the developing world which have been the focus of much international effort for several decades.

Photo 1.1. Greece, Spata 1988: fit couple in their eighties, still busy working the farm lands.



Photo 1.2. Greece, Spata: same fit couple photographed as newly weds in their twenties.



This awareness has been sharpened by the WHO office for a "Global Programme for the Elderly" in Copenhagen, under the directorship of Dr David MacFadyen. On behalf of WHO, Dr Gary Andrews had published a provocative study of social and health status of elderly people in the western Pacific-- South Korea, the Philippines, Malaysia and Fiji [1]. For all of the difficulties in cross-cultural comparison, there were enough important differences in social factors and self-perceived health indicators to make a case for further cross-cultural studies on a wider international scale. Additionally, a WHO workshop at the PAHO (Pan American Health Organisation) building in Washington in 1985, produced a manual on "Nutrition in the Elderly" edited by A Horwitz, DM MacFadyen, B Steen and others [10]. It introduced both a need and a methodology for examining nutritional status in relation to health in the elderly. Professor Steen and Dr MacFadyen became members of the IUNS Committee, Dr MacFadyen making a formal liaison with WHO. The difficulty would be in managing the cross-cultural aspects of nutritional assessment (especially the food beliefs, habits and actual intakes) and then to link them to the social and health status methods that had been used in the WHO Western Pacific Study [1]. The Hyderabad meeting at-large, and the IUNS Committee in particular, began to address this problem. One of the strengths of IUNS is that it brings together people with various

methodological strengths, including socio-anthropological. Dr Nevin Scrimshaw, his wife Mary and daughter Susan, both anthropologists, were with the need to develop rapid techniques to assess health needs in relation to a community's food supply in a way which would lead to early and appropriate primary health care response. This was one of the primary objectives of the study for culturally disparate communities of elderly people. The Rapid Assessment Procedures (RAP) of Susan Scrimshaw and Elaine Hurtado, being developed through the United Nations University (UNU) were catalytic for our group [2].

We decided to describe the food-health relationships of elderly folk in accordance with their culture. We recognised the value of the systematic enquiries of Andrews and colleagues. We decided to make our initial appraisal of communities with RAP approaches and then, wherever possible, to apply cross-culturally robust food-health methodology on a representative sample of communities. During 1987, an EEC (European Economic Community) Committee on Nutrition, (EURONUT) chaired by Professor Joseph Hautvast, also Secretary General of the International Union of Nutrition Sciences, addressed the same issues for communities within the EEC.

The IUNS Committee was invited to participate in the development of a common methodology. A distinction would be that it would be exceptional for the IUNS studies to have access to biological samples (blood, urine), this would be regularised in the EEC studies (later to be called SENECA, Survey in Europe on Nutrition and the Elderly). A methods manual was duly produced [3] with the assistance of Antigone Kouris-Blazos, as co-ordinator of the IUNS project [4]. The IUNS Committee decided that it wanted to recruit communities into its project without the limitations (cultural, geographic and resource-dependent) that collection of biological specimens might impose. Instead, the primary response was to concentrate on food culture and its relationships to health, assessed non-invasively. We would be interested in both self-perceived and medically described health status. Why "Later Life"? In some communities we were likely to study, life expectancy at birth would be less than 70 and even as low as 65 or 60 years. Because of the fluctuations in what was considered old, we needed to be interested in the upper decile or quintile of the population as well as identifying the "elderly" as defined by developed country criteria. Aboriginal Australians, for example, have an age pyramid that is broad at the base [6,7]. Again, whilst we preferred to study people over 70 years old, we realised that the definition of "elderly" was relative.

Those over 75 years of age were referred to as "old elderly" and under 75 years as "young elderly". Nonagenarians were already a group of particular interest in Japan. "Elderly" implied biological as well as chronological age, and we wanted to make a distinction or, at least, not presume they were the same. We wanted to set aside any preconceived notions of what the problems or advantages of being elderly were. So our project became "Food Habits and Health in Later Life-- a Cross-cultural Study". Our basic approach was canvassed at the International Dietetics Congress in Paris in 1988, at a session chaired by Dr Louise Davies, Vice-Chairperson of the IUNS Committee [4].

1.2 AIMS & HYPOTHESES

By now the overall purposes of the IUNS project were clear:

1. To recognise the ever-diminishing resource of intact cultures, adhered to by elderly people for much of their lives, the knowledge of which was increasingly theirs alone; and to describe these food cultures in relation to the health status of the communities so as to learn of their advantages and disadvantages for posterity.
2. To develop methodology which would create a comparison of food-health relationships between disparate cultural groups of elderly people.
3. To appreciate that while only a prospective study could tell what nutritional factors earlier in life could allow consideration of how they affected survivorship, the way in which food conferred ongoing health status on survivors was worthy of enquiry in its own right.
4. To develop instruments for the assessment of food-health relationships amongst elderly people in a community, which could be applied by such a community for its own benefit [5].
5. To increase the consciousness of nutrition scientists, those responsible for health care, and communities, of the potential importance of the food supply and of food habits for the health and welfare of elderly people.

Out of these purposes would arise certain hypotheses which might be tested in the course of the study:

1. That people following quite different food cultures could achieve comparable levels of health.
2. That a given health status would be accounted for better by food intake descriptors than by nutrient descriptors of nutritional status.
3. That there would be offsets within and between cultures in components of lifestyle which in aggregate would produce comparable health status.
4. That a community with a greater variance in food intake would have better health status than one with little variance.

Other hypotheses would be generated by the study. Various study centres were progressively recruited for the project and this book deals with the findings of those whose enquiry is complete at first cross-sectional examination (Table 1.1). Some of these will go on to a follow-up study to

take advantage of what prospect analyses can provide. When there are complete data from about 20 communities, the intended cross-cultural analyses will be more feasible.

Table 1.1. IUNS study centres.

Code	Location	Ethnicity	Sub	Investigators
ABOR	Fitzroy Crossing, Australia	Aboriginal Australians	50	Wahlqvist, Kouris-Blazos, Gracy, Sullivan
ACA	Melbourne, Australia	Anglo-Celtic Australians	99	Wahlqvist, Kouris-Blazos, Hsu-Hage, Lukito
GRK-M	Melbourne, Australia	Melbourne Greeks	189	Kouris-Blazos, Wahlqvist
GRK-S	Spata, Greece	Spatarn Greeks	104	Kouris-Blazos, Trichopoulos Polychronopoulos
SWE	Johanneberg, Gothenburg	Swedes	217	Steen, Rothenberg, Augustsson, Eriksson, Sundh, Warne
FIL	Philippines, Manila	Filipinos	281	Guzman
JPN-O	Semi-urban Okazaki	Japanese	89	Horie, Horie, Sugase
JPN-H	Urban Hiroshima	Japanese	90	Inai
JPN-K	Semi-urban	Japanese	91	Kasugai Kumamoto
JPN-Y	Urban Yokohama	Japanese	68	Teshima, Nishikawa
CBJ	Beijing	Chinese	305	Roe, Wang
CTJ-R	Rural Tianjin, China	Chinese	181	Xi, Sun
CTJ-U	Urban Tianjin, China	Chinese	260	Xi, Sun

1.3 OTHER ELDERLY STUDIES

This book also brings together some cross-cultural studies of the elderly which have considered food and health at the same time like the IUNS project and which allow a preliminary analysis of some of the questions raised by the IUNS Committee [4-9]. These studies are:

- a) The EEC Study (SENECA) for
The Netherlands
Switzerland
Denmark
Portugal
- b) A study of the National Institutes of Nutrition and Public Health in Beijing (NINPHB) of six Chinese communities with very different food patterns in:
Beijing (City)
Huairou (Agricultural)
Baoshan (Fishing)
Rongcheng (Fishing)
Xinyuan (Agricultural & Pastoral)
Tuoli (Pastoral)
- c) A New Zealand-Australian study (Caroline Horwath)

d) Studies in Central America

Now that it is possible we believe it is our responsibility to provide some guidance from what we have learned for communities keen to improve their food-health equation.

1.4 SUMMARY

In 1988, the International Union of Nutritional Sciences (IUNS) Committee on Nutrition and Ageing (II-8) undertook to co-ordinate cross-cultural studies of food habits and health in later life with the following objectives:

- 1) To describe health status, lifestyle and the range of food habits (present and past), amongst the aged (>70 years or upper decile) in developed and developing countries
- 2) To determine to what extent food habits and lifestyle variables predict health status in the aged.

The principal hypothesis is that it is possible for comparable health status to be achieved by people in later life, having eaten, and continuing to eat in quite different ways from each other.

Results from 13 elderly communities (Australia, China, Greece, Japan, the Philippines, and Sweden) studied in 1988-1992, with a total of 2013 subjects, have been descriptively documented, fulfilling the first objective of the study.

This book also brings together some cross-cultural studies of the elderly which have considered food and health at the same time as the IUNS project (4 countries from the EURONUT-SENECA study, six Chinese communities in China, a New Zealand-Australian study, and 2 communities in Central America) comprising 27 centres in all.

A major strength of this study's cross-cultural research is its population selection drawing from rural, urban, developed and developing areas, and thus the demographic transition of ageing populations can be better appreciated.

1.5 REFERENCES

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1.6 ILLUSTRATIONS

Photo 1.1 Greece, Spata 1988: fit couple in their eighties, still busy working the farm lands.

Photo 1.2 Greece, Spata: same fit couple photographed as newly weds in their twenties.

