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SOUTH PACIFIC COMMISSION

UNDP/SPC REGIONAL MEETING : THE EFFECTS OF URBANISATION AND  
WESTERN DIET ON HEALTH OF PACIFIC ISLAND POPULATIONS

(Suva, Fiji, 7 - 16 December 1981)

REPORT

Noumea, New Caledonia  
January 1982

289/82



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## I. INTRODUCTION

1. Infantile diarrhoea, childhood malnutrition, dental caries, diabetes, hypertension, obesity and gout are serious health problems of growing concern in many South Pacific countries. The causes are many, but include bottle feeding, the substitution of fresh foods with imported foods, increasing urbanisation, and the general adoption of a western way of life. At the same time, food imports constitute a major item in the trade figures of every Pacific Island community and trade deficits are widespread.

2. The United Nations Development Programme provided funds to the South Pacific Commission to help to bring about better nutrition by helping countries review the changes taking place in diet as a result of increasing urbanisation and the adoption of western foods. A regional meeting on The Effects of Urbanisation and Western Diet on the Health of Pacific Island Populations was organised to partially fulfil this objective.

3. At the kind invitation of the Government of Fiji, the meeting was held in Suva, co-ordinated by the South Pacific Commission.

4. The meeting was officially opened on Monday 7 December by the Honourable Mohammed Ramzan, Minister for Health, Government of Fiji and by Dr Richard Taylor on behalf of the Secretary-General of the South Pacific Commission.

5. The objectives of the meeting were as follows:

- (a) To describe changes which have been and are taking place in dietary patterns, health and nutrition in Pacific Islands in relation to changes in population, westernisation and/or urbanisation, food systems, food imports and exports, and socio-economic factors;
- (b) To analyse the beneficial and detrimental consequences of the above changes upon health and nutrition;
- (c) To identify potential solutions to health and nutrition problems and discuss the development of national food and nutrition policies as they relate to dietary goals, food production, food imports and exports, and community and professional nutrition education;
- (d) To consider the provisions for developing and implementing successful food and nutrition policies in relation to manpower development and other components including training needs, educational needs, legislative actions, advisory services and assistance from local, regional and international agencies and organisations, and evaluation of national food and nutrition policies including surveillance of health status, food imports, exports and production;

- (e) To identify gaps in existing information and research needs concerning nutrition and dietary patterns related to health in Pacific Island populations;
- (f) To make recommendations toward the successful formulation and implementation of food and nutrition policies in the region.

6. The consultants for the meeting were Dr Peter Bennett, Chief, Epidemiology and Field Studies Branch, National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases, Phoenix, Arizona; Dr John Connell, Co-ordinator ILO/SPC Project on Migration, Employment and Development in the South Pacific, Noumea, New Caledonia; Mrs Ruth English, Principal Nutritionist, Commonwealth Department of Health, Canberra, Australia; Dr Peter Heywood, Deputy Director, Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea; Mr Julian Lambert, Nutrition Planner, Fiji National Food and Nutrition Committee, Suva, Fiji; Mrs Susan Parkinson, Nutritionist, member Fiji National Food and Nutrition Committee, Suva, Fiji; Dr Macu Salato, former Director of Curative Medicine Services, Suva, Fiji, and Dr Randy Thaman, School of Social and Economic Development, University of the South Pacific, Suva, Fiji.

7. Ms Terry Coyne, Food and Nutrition Planning and Research Assistant, South Pacific Commission, was director of the meeting.

## II. AGENDA

Monday, 7 December 1981  
morning

: Chairperson: Dr Macu Salato  
Registration

Opening welcome  
Honourable M. Ramzan  
Minister for Health  
Government of Fiji.

Dr Richard Taylor  
South Pacific Commission

Introduction of participants and observers

A general and historic overview of the effects of urbanisation and westernisation on the health and nutrition of Pacific Island populations.

Dr Macu Salato.

afternoon

: The changes in food systems from traditional subsistence agriculture and fishing to cash crop economy. Trends in imports and exports of foodstuffs and the economic implications of these changes.  
Randy Thaman, Ph.D.

- Tuesday, 8 December 1981 : Chairperson: Ms N. Short  
morning
- A fatal movement? Migration, urbanisation, nutrition and health in the South Pacific.  
John Connell, Ph.D. (Geography).
- Major health problems in the Pacific which are related to urbanisation and a western way of life.  
Dr Peter H. Bennett.
- afternoon : Chairperson: Dr E. Pretrick
- Country statements.
- Wednesday, 9 December 1981 : Chairperson: Dr J. Foi  
morning
- Changes in food patterns in the Pacific.  
Mrs Susan Parkinson.
- The effect of the changing diet on the nutritional health in the Pacific.  
Peter Heywood, Ph.D. (Nutrition).
- afternoon : Chairperson: Dr S. Deo
- Country statements.
- Thursday, 10 December 1981 : Chairperson: Mlle A. Guifford  
morning
- The effect of urbanisation and western foods on infant and maternal nutrition.  
Julian Lambert, M.Sc.
- Country statements.
- afternoon : Small group discussions.
- Friday, 11 December 1981 : Chairperson: Dr A.K. Seluka  
morning
- National food and nutrition policy - what are the components for planning, developing and implementing?  
Julian Lambert, M.Sc.
- Group reports.
- afternoon : Small group discussions and recommendations.

- Monday, 14 December 1981  
morning
- : Chairperson: Ms B. Sio
- Legislative policies and strategies which relate to nutrition and health.  
Ruth English, M.Sc.
- The development of policies and strategies related to food production and food imports and exports in the Pacific.  
Feleti Sevele, Ph.D.
- afternoon
- : Small group discussions and recommendations.
- Tuesday, 15 December 1981  
morning
- : Chairperson: Dr Macu Salato
- Are dietary goals or guidelines appropriate for the Pacific?  
Peter Heywood, Ph.D. (Nutrition).
- Group reports.
- afternoon
- : Group discussions and recommendations.
- Wednesday, 16 December 1981
- : Chairperson: Dr Macu Salato
- Final recommendations.
- Closing statements.

III. LIST OF PARTICIPANTS

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Ms N. Short  
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FEDERATED STATES OF  
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Economist

Dr Richard Taylor  
Epidemiologist

Mme Marie-Claude Teissier  
Health Education Officer

M. Daniel Gile  
Interpreter

Miss Teresa Markovitch  
Interpreter

M. Hervé Pichon  
Interpreter

Miss Efi Rex  
Secretary to the meeting

#### IV. SUMMARY OF DISCUSSIONS

8. The edited content of the discussions from this meeting will form the basis of a more detailed SPC Information Document dealing with the effects of western diet on the health of Pacific Island populations. Brief summaries of the meeting's discussions are given below.

9. The participants and consultants discussed changes occurring in the Pacific which have or are effecting health and nutrition. Some points from the information and discussion which should be highlighted include:

- (a) Migration from rural to urban areas, from country to country, and international migration, is resulting in a breakdown of traditional social systems, a decline in agricultural production and an increased dependence on imported foodstuffs.
- (b) The major problems associated with a decline in the production of local foods include: (1) a lack of promotion of local foods; (2) the lack of appropriate technology to improve agriculture; (3) a shortage of fuel (wood) resources; (4) land being used for commercial ventures (e.g. cattle farming) at the expense of local food production; (5) the lack of long-term planning at the national level for nutritional needs, and (6) the higher cost of local foods compared to imported foods.
- (c) Increased rates of chronic degenerative diseases such as diabetes, hypertension, gout and ischaemic heart disease are being reported in many Pacific Island countries, but particularly in "urbanised" communities. The risk factors associated with increased rates of these diseases include obesity, reduced physical activity and a change from the traditional diet to a diet consisting predominantly of imported foods.
- (d) The major dietary changes which may be associated with increased rates of degenerative diseases are: replacement of high fibre root vegetables with refined cereal staple foods such as rice and bread; increased sugar consumption; increased salt consumption; replacement of fresh fish with higher-fat tinned meat; and an increase in alcohol consumption.
- (e) Malnutrition may be increasing among infants and young children in urban areas in the Pacific. Poor nutritional status of the mother, a breakdown in traditional methods of family spacing, bottle feeding replacing breast feeding, and inadequate or inappropriate health services were considered important factors. There is very little data on the nutritional status of women in the Pacific.

## V. RECOMMENDATIONS

### Preamble

The participants at this meeting recommended that the development of food and nutrition policies receive high priority by the countries in the region. Other recommendations were also made, but it was recognised that the relative priority given to these recommendations by individual countries will depend on local conditions.

The meeting recommended that:

### Food and nutrition policies

#### Recommendation No. 1

Each country establish a national food and nutrition committee/council or other appropriate body to formulate a national food and nutrition policy.

- (a) This body should consist of personnel at political decision-making level and/or of very senior government officials. The body should also include traditional and other community representation.
- (b) The body should devise policies to suit the particular needs of the country.
- (c) The body should focus on health promotion and preventive measures against malnutrition and nutrition-related chronic diseases.
- (d) The body should initiate policies to coordinate the use of available resources and personnel (government and non-government) already working in the field of nutrition.
- (e) This body should liaise with government on all matters related to legislation concerning food and nutrition.
- (f) In view of the fact that some imported foods are of poor nutritional value, we recommend that this body should monitor the quality and nutritional value of imported foods.
- (g) That policies should be developed to promote the sale of nutritious foods within school premises and discourage the sale of food items of poor nutritive value.

Recommendation No. 2

Government consider measures to promote breast feeding by all available means, such as:

- (a) Adopt the WHO Code of Marketing of breast milk substitutes.
- (b) Facilitate continued lactation of working mothers by providing appropriate maternity benefits, such as flexible working hours for at least six months after birth, paid maternity leave and the establishment of infant care facilities close to the working place of mothers in urban areas.
- (c) Control importation of infant formula and weaning food.
- (d) Control sale of bottles and teats by prescription.

Recommendation No. 3

Government consider the health, nutrition, cultural, social and agricultural implications in addition to economic factors when approving development projects, food import policies, foreign aid programmes and food aid programmes.

Recommendation No. 4

Each country take steps to formulate and enact food standards and hygiene legislation taking, where appropriate, guidance from other countries (such as United States of America, New Zealand and France) and the Codex Alimentarius. Consideration should be given to such topics as prohibiting the importation of foods that do not meet the food standards of the country of origin, the possibility of introducing information on the expiration date and composition of packaged foods, and the requirements for proper storage, transportation and handling of imported and locally produced foodstuffs.

Health and nutrition education

Recommendation No. 5

- (a) Efforts be made to increase awareness in the community of the importance of nutrition in relation to maternal and child health and adult conditions such as obesity, diabetes, hypertension, cardiovascular disease and alcoholism;
- (b) There is a need for increased health and nutrition education by:
  - (i) Incorporating nutrition education in school curriculum at all levels.
  - (ii) Reviewing, improving and increasing use of mass media, audio and visual material for nutrition education purposes.
  - (iii) Direct community/consumer nutrition education utilising available resources and trained personnel already working in the field of nutrition.

Recommendation No. 6

Nutrition education be included in training courses for doctors, nurses, agricultural extension workers, teachers, and other community workers.

Recommendation No. 7

New recipes be developed which feature local foods and use modern cooking methods. "La Nouvelle Cuisine Océanienne" would be the result.

Training

Recommendation No. 8

A regional training programme in nutrition and health education be established in conjunction with the Fiji School of Medicine and/or the University of the South Pacific, which would accept students from all Pacific Island countries. Such training should include local training in the home country, as well as formal training in Suva.

Recommendation No. 9

Government use available regional training courses on nutrition for the continuing education of personnel, and make effective use of these trained personnel.

Data Collection

Recommendation No. 10

A start be made by countries (with assistance from international, regional and academic institutions) to collect data on nutritional status with particular emphasis on mothers and children, the incidence of degenerative diseases, and the food and trade balance, for the purpose of formulating a national nutrition policy.

Food production, processing and distribution

Recommendation No. 11

Owing to the detrimental decline in food crop production, which often occurs in association with increase in non-food cash crops, the production of food crops at the national and family level be stressed in order to break this vicious circle.

Recommendation No. 12

A significant number of agricultural, health and nutrition extension workers be allocated to the technological improvement and encouragement of local, commercial, and home food production.

Recommendation No. 13

Policies be developed with regard to the promotion, production, processing, preservation, transportation and marketing of local foods. For example, this would include dehydration of root crops.

Recommendation No. 14

Consideration be given to conservation of the ecological system. This would include:

- (a) the recognition that in most cases traditional methods of agriculture conserve soil fertility and are sustainable in the long term;
- (b) the controlled use of pesticides, herbicides and fertilisers;
- (c) the production of cooking fuel and the development of alternative sources of energy for cooking foods, e.g. solar;
- (d) the practices of blasting and poisoning for killing of fish be prohibited and that these measures be effectively policed.

Recommendation No. 15

Governments actively encourage both large-scale (possibly nationalised) food production for local consumption and/or encourage increased production of local foods for commercial purposes by small holders.

Recommendation No. 16

Governments actively encourage the expansion of subsistence home food gardening, in both urban and rural areas, as one of the most direct avenues to greater self-sufficiency and improved nutrition. Cultivation of available land by youth and community committees and institutions such as schools should also be encouraged.

Recommendation No. 17

Nurseries be established to provide a wide range of food and tree crops to be actively propagated and distributed to home and institutional gardens.

Recommendation No. 18

There be research in appropriate technology in agriculture. A balance should be struck between local food production and cash crops (for example, rotation of crops and intercropping of cash crops with food crops).

Recommendation No. 19

Appropriate technology in fisheries be expanded and research into fish poisoning receive continued support.

Recommendation No. 20

Incentive schemes be established by governments to make social, cultural and economic conditions in rural areas more attractive to the community. These would include:

- (a) creation of jobs in rural areas, which in turn would assist with the control of migration, inflation, alcoholism and juvenile delinquency;
- (b) decentralisation into villages and outer atolls of training facilities for health and agricultural administrators. This will enable them to become more familiar with the production and use of local foods.

Recommendations for regional organisations

Recommendation No. 21

The South Pacific Commission employ a Regional Adviser in nutrition to assist countries in nutrition policy planning, to co-ordinate nutrition activities in the region, monitor nutrition training at the Community Education Training Centre and monitor the implementation of the recommendations of this meeting.

Recommendation No. 22

The South Pacific Commission provide advice and assistance in planning and implementing national food and nutrition policies which aim to increase self-sufficiency of individual countries in the region. This should include advice on such areas as nutritional requirements, food technology, food marketing and agricultural strategies. The South Pacific Commission should also provide advice and assistance to individual countries with other problems relating to nutrition, upon request.

Recommendation No. 23

The South Pacific Commission organise a regional workshop in 1982 on strategies in nutrition education. Such a workshop should devise and improve educational methods, and advise on the development of educational materials for use throughout the region.

Recommendation No. 24

The SPC Community Education Training Centre place increased emphasis on nutrition, and upgrade the existing curriculum to achieve this end.

Recommendation No. 25

The South Pacific Commission organise a technical workshop to gather, review and make available existing (but often unpublished) data on the nutrient composition of Pacific foods, and make recommendations concerning needs for additional food composition data in the region.

Recommendation No. 26

The South Pacific Commission investigate the facilities available in the region for food nutrient and food contaminant analysis with the aim of upgrading existing facilities to ensure that a prompt food analysis service is available within the region.

Recommendation No. 27

Additional appropriate nutrition education materials be developed and these and existing materials be widely distributed by SPC and UN agencies.

Recommendation No. 28

United Nations agencies, the South Pacific Commission and the Foundation for the Peoples of the South Pacific include all the Pacific countries in their mailing list for the latest publications on nutrition. Mailing of multiple copies to appropriate people should be considered.

VI. LIST OF WORKING PAPERS PRESENTED AT THE MEETING

- UNDP/SPC/Nutrition/WP. 1 - The Effect of Urbanisation and Western Diet on the Health of Pacific Island Populations. Prepared by Ms Terry Coyne.
- WP. 2 - A Fatal Movement? Migration, Urbanisation, Nutrition and Health in the South Pacific. By Dr John Connell.
- WP. 3 - A general and historic overview of the effects of urbanisation and westernisation on the health and nutrition of Pacific Island populations. By Dr Macu Salato.
- WP. 4 - Subsistence Affluence to Food Dependency and Malnutrition: Deterioration of Traditional Pacific Island Food Systems. By Dr Randy Thaman.
- WP. 5 - Country Statement - Cook Islands.
- WP. 6 - Country Statement - Federated States of Micronesia.
- WP. 7 - Major health problems in the Pacific which are related to urbanisation and a western way of life. By Dr Peter H. Bennett.
- WP. 8 - Country Statement - Fiji.
- WP. 9 - Country Statement - French Polynesia.
- WP.10 - Nutrition in the South Pacific - Past and Present. By Mrs Susan Parkinson.
- WP.11 - Country Statement - New Caledonia.
- WP.12 - Country Statement - Tokelau.
- WP.13 - The Effect of the Changing Diet on the Nutritional Health in the Pacific. By Dr Peter Heywood.
- WP.14 - The Effect of Urbanisation and Western Foods on Infant and Maternal Nutrition. By Mr Julian Lambert.

- UNDP/SPC/Nutrition/WP.15 - The Components Necessary for Planning, Developing and Implementing a National Food and Nutrition Policy.  
By Mr Julian Lambert.
- WP.16 - Country Statement - Wallis and Futuna.
- WP.17 - Country Statement - Western Samoa.
- WP.18 - Legislative policies and strategies which relate to nutrition and health.  
By Mrs Ruth English.
- WP.19 - Food Imports and Exports in the South Pacific : An Overview.  
By Dr Feleti V. Sevele.
- WP.20 - National Policy Development for Nutrition Education.  
Prepared by Mrs Nancy Rody.
- WP.21 - Are Dietary Goals or Guidelines Appropriate for the Pacific?  
By Dr Peter Heywood.
-