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PIN

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PACIFIC ISLANDS NUTRITION

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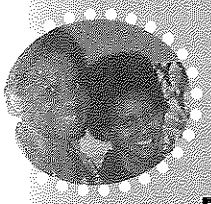
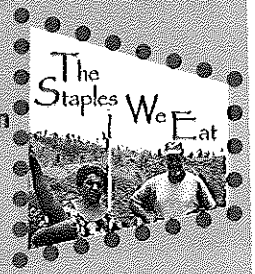




Editorial

DECEMBER

Editor's note: Dear Readers, I wish to pass on SPC Publications Section's sincere apologies for the lateness of this December issue, which was to press in November, but was delayed owing to a technical error.

Early Childhood Care:

Survival, Growth & Development Session Opening Statement SPC/UNICEF Nutritionists Workshop

Monday 20 September 1999
Auckland, New Zealand

Colleagues, this will be the last gathering of the Pacific nutritionists in the 20th Century and the last (but also the first) opportunity for us to share and open a dialogue with you about the priorities and course of UNICEF's path into the 21st Century – a path already paved by the progress and lessons learnt over the last decade in our work with our partners and children. Much of what will be discussed today grows out of our pursuit and commitments to the goals of the World Summit for Children in 1990 and the adoption and ratification of the Convention on the Rights of the Child 10 years ago this November. It is obvious that some goals that were agreed upon by many nations in the 1990s will not be met before the end of year 2000 – as we face many emerging challenges posed by increased poverty and socioeconomic inequity which are reflected in poor health and nutrition of children. But, it is also clear that we must renew and strengthen the commitments that we made to the world's children a decade ago.

In the area of nutrition this includes improving maternal nutrition, adolescent nutrition, increasing breast-feeding rates, increasing micronutrient supplementation coverage in countries undertaking micronutrient campaigns and addressing the psychosocial development of young children. To accelerate progress toward the World Summit Goals requires strong partnerships and collaborations.

A lot has been done to improve the health and nutrition status of children in the Pacific. Many Pacific nations have progressed and

Editorial

advanced the health and nutrition status of children and this is reflected in reduction of infant mortality rates. Successful programmes have been implemented and sustained: vitamin A supplementation, prevention and control of iodine deficiencies, improving access to education, especially for girls, and the ratification of the Convention on the Rights of the Child. Pacific nations are leading the way with evidence of accelerated progress toward the Summit Goals, especially in the area of immunisation, vitamin A deficiency and iodine deficiency. But more needs to be done as we come to better understand the complex aetiological factors of poor health and nutrition. We must look at the health service level, as well as the family and community environment, the psychosocial development and milestones of young children, the school and the role of leading community institutions such as the church.

UNICEF's mandate is to advocate for the protection and promotion of child rights and to champion the cause and needs of children. We will continue to participate fully with our partners and governments to ensure that children's health and well-being become an integral component of governments' policies and of all humanitarian and development activities.

Philayrath Phongsavan
Nutrition officer
UNICEF Suva

In the Pacific region, we are facing a double challenge – the consequences of nutritional deficiencies, poverty and socioeconomic inequity, and undernutrition, and the consequences of overnutrition. In many Pacific nations, this double disease burden co-exists side by side. Without doubt, many chronic diseases being experienced in our region are linked to diet. With all that is happening and the increasing resources being put into non-communicable or degenerative diseases of adults, we must not forget about our children. More importantly, we must not forget that many health-related habits and lifestyles of adults have their origin during infancy and childhood. The key is prevention. Prevention of ill health, disease and disability using appropriate strategies that are implemented in a timely manner is a good investment in the future, not only in humanitarian and development terms, but also in economic terms. As champions of child rights we are committed to do everything necessary to equip children and young people with the skills and knowledge they need to protect themselves from harm and to prepare for the challenges ahead.

There are many new and exciting initiatives underway in many parts of the globe.

Adi Davila Toganivalu

Given by Adi Davila Toganivalu, Education Officer, on behalf of Nancy Terreri, Unicef Pacific Representative

improved nutrition to help build immunity to communicable diseases

PNG NATIONAL NUTRITION FORUM AND WORKSHOPS:

More than 30 Primary Health Care (PHC) workers including nutritionists and health professionals from both government and NGOs met in Madang from Monday 24 May to 4 June 1999. The purpose of the workshop was to develop strategies and projects at community and district level to address public health problems such as malnutrition in young children, micronutrient deficiency disorders (iodine deficiency and anaemia), non-communicable diseases, and HIV AIDS.

Left to right: Enoch Posanai, Director of Health Improvement, NDOH; Cecily Dignan, Nutrition consultant, women & children's health Project; Dr Betty Amoa, Snr Lecturer in food technology, Lae Unitech; and Clementine Yaman and Wila Saweri, Nutritionists, NDOH.

The objectives of the workshop and forum were to assist provincial and district nutritionists and church health service providers in developing and improving their own programmes through, for example:

- Sharing and examining the lessons learnt from nutrition workers' programmes and current or proposed innovative community nutrition projects
- Analysing and reviewing the frameworks (nutrition policies and plans) within which nutrition workers are to carry out their programmes
- Providing information on resources available for carrying out nutrition improvement programmes
- Providing refresher training for nutrition workers.

The workshop and forum were jointly organised by the Health Prevention and Promotion section of the National Department of Health (NDOH) and the Waigani Catholic Women's Group. Funding was provided by NDOH, the Women and Children's Health Project (AusAID), and UNICEF.

The first week provided the participants with basic knowledge about common health problems within the family and the community and how to treat them. The second week focussed on planning, implementing, monitoring and evaluating community nutrition programmes.

The forum reviewed and summarised the PNG Food and Nutrition Policy document and recommended a number of actions. Some of the major actions are summarised below:

Actions to be taken

- MCH staff at district and provincial levels to be adequately trained to enable them to deal with the malnutrition problem in their area.
- Nutrition workers to be trained in participatory research methods for health education.
- The revised draft summary of the Food and Nutrition Policy to be submitted to the Senior Executive Management for endorsement, then circulated to Provincial Health Advisors, other health professionals and widely throughout the country.
- All nutrition health professionals to use the policy to help determine their own work plan and use it as an advocacy tool.
- The National Nutrition Section, Environmental Health and Health Promotion to pilot a Healthy Eating Places approach at the Kai bar used by NDOH staff to help make healthy eating choices easy choices.
- Nutrition and other health professionals to support community-based approaches to health and nutrition improvement and actively work with such programmes.
- Nutrition workers to use schools as entry points for collaborating with communities to improve the nutritional health of children and their families. Guidelines and materials produced by Health Promoting Schools should be used.
- Family Health Services to review the Baby Feeds Supplies Act to increase the penalties for breaches (i.e. sale of bottles, cups, dummies, etc. without a prescription from a health worker) and to license premises that wish to sell baby feed supplies. In order to become licensed, a premise must pay a fee, be instructed in the provisions of the Act and will be registered with the Department of Health, so that the premises can be monitored.
- Health inspectors to monitor and enforce the act, including taking action against misleading advertising.
- Support systems for nutrition workers in the form of a newsletter to be provided by the National Nutrition Section.
- The National Department of Health (NDOH) in collaboration with the University of Technology in Lae and the School of Medicine and Health Sciences, to develop, over the next 18 months, an appropriate in-country

Small group work: learning about the knowledge, skills & attitudes required by PNG community nutritionists.

Old friends meet-up in Moresby. Brenda Sio (right) visits NDOH while on assignment with girl guides Samoa. From left: Clementina Yaman, Malia Wat, Enoch Posanai.

training course in nutrition and dietetics and identify funding.

- NDOH (National Nutrition Section and Environmental Health) working closely with UNICEF and with technical support from the University of Technology, Lae, to plan, implement, monitor and evaluate a national IDDs reduction and prevention program.

In the short term, seven young, bright health staff, from the provinces that presently do not have nutritionists (Sandaun, Western, Gulf, Milne Bay, Southern Highlands, Chimbu, Oro) be sent to the Fiji School of Medicine to undertake the diploma in dietetics and public health nutrition course.

Adapted from materials provided by Vicky Oksen, Nutritionist, National Capital District

Participants relaxing during the workshop in beautiful Madang

THE RESULTS OF THE 1998 VANUATU NATIONAL NCD SURVEY

The results of the Vanuatu National NCD Survey were presented at a workshop held this year in Port Vila, August 24–27.

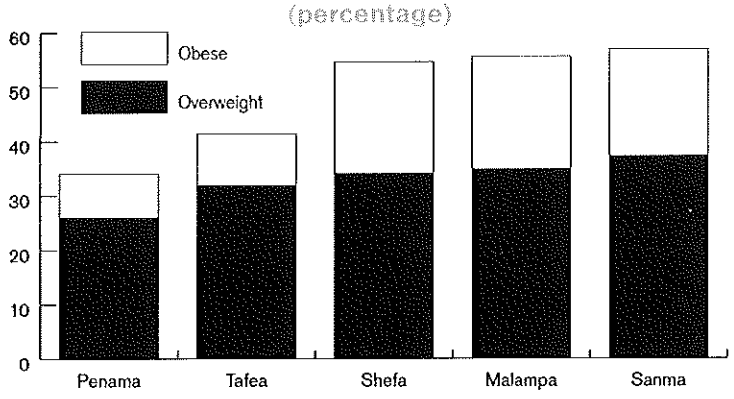
The workshop, funded by SPC Nutrition & Lifestyle Disease Section (Small Grants Scheme), also aimed to develop a draft NCD Plan of Action for Vanuatu.

Mr Keasipai Song, Minister of Health, opened the workshop, and Wan Smol Bag Theatre Company performed 'Switi Lady' – a play about the dangers of eating too much sugar.

The National NCD Survey was conducted from 10 August to 2 September, 1998.

The survey results were presented to the participants by Ms M Tary, National Nutrition Coordinator, and R. Hughes, Nutritionist/NCD Epidemiologist, SPC.

Obesity & overweight by province (percentage)



Summary of the 1998 NCD Survey Results

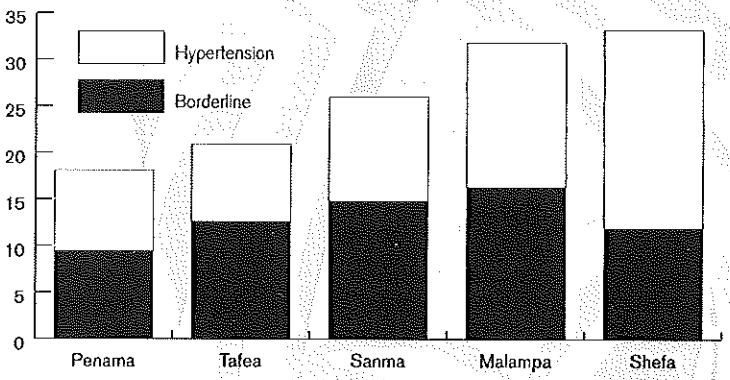
Obesity and overweight

- According to the WHO definition, one third of all respondents (33.0%) were classified as overweight and 15.9% as obese;
- More females (19.6%) than males (12.2%) were obese;
- Overweight and obesity combined appear to be higher in more developed centres or provinces as shown here.

From further analysis on obesity, it was determined that respondents were:

- 2.23 times more likely to be overweight or obese if they lived in urban areas;
- 2.02 times more likely to be overweight or obese if they did not smoke;
- 2.19 times more likely to be overweight or obese if they consumed non-traditional fat sources at least once a day; and
- 1.59 times more likely to be overweight/obese if they undertook only light physical activities.

Blood pressure by province (percentage)



Hypertension (High blood pressure)

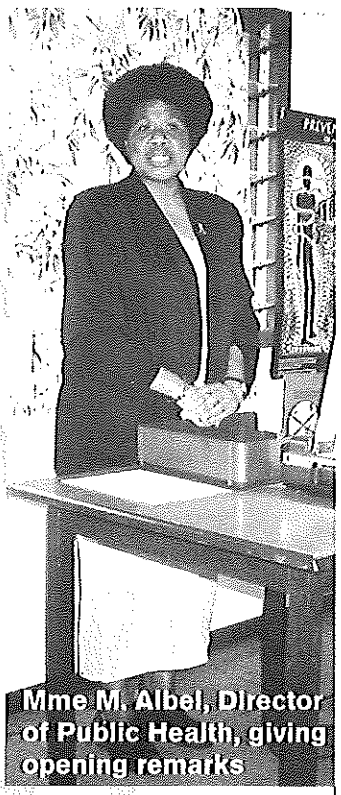
- About 13% of all respondents were defined as hypertensive. The proportion of those defined as borderline hypertensive was also around 13%.
- The prevalence of hypertension increased with age for both males and females. 41.4% of females and 32.1% of males aged sixty years and above, had high blood pressure.
- For both sexes, the prevalence of hypertension showed a significant increasing trend from rural to urban areas for both males and females.

Further analysis showed that respondents were:

- 2.8 times more likely to have borderline hypertension or hypertension if they are overweight or obese; and
- 2.36 times more likely to have borderline hypertension or hypertension if they have diabetes or impaired glucose tolerance (IGT).

Diabetes and Impaired Blood Glucose Tolerance (IGT)

- The prevalence of diabetes in Vanuatu is low (2.8%) and only 1.9% were in the IGT range.
- Diabetes amongst females was more than twice that of the males.
- A significant increasing trend in prevalence of diabetes was found from rural to urban areas amongst males and females, as shown in the graph below.



Mme M. Albel, Director of Public Health, giving opening remarks

For diabetes and IGT, respondents were:

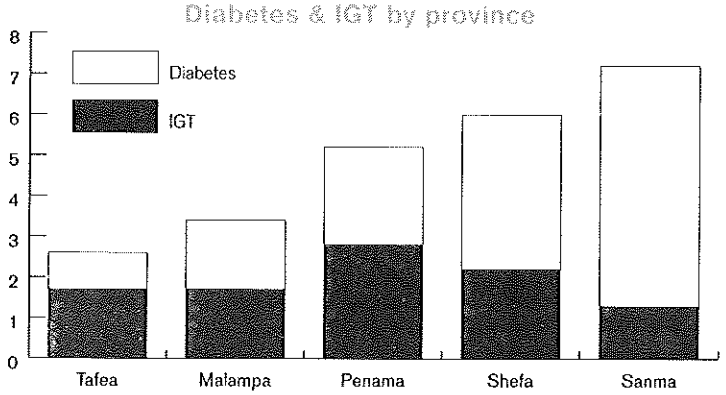
- 2.59 times more likely to be diabetic/IGT if they have high blood pressure;
- 2.16 times more likely to be diabetic/IGT if they are female;
- 1.94 times more likely to be diabetic/IGT if they consume from non-traditional fat sources at least once a day.

NCD Risk Factors: Alcohol, tobacco & kava use

- Males consume far more alcohol (50.4%), tobacco (49.1%) and kava (67.2%) than females (11.1%, 5.0% and 14.9% respectively).
- Young males (20–29 years) accounted for the largest proportion with 72.2% consuming alcohol, 60.9% tobacco and

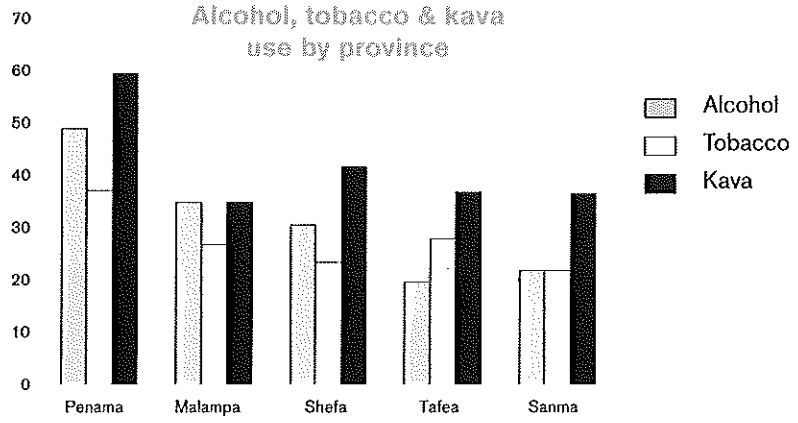
Van Smol Bag Theatre group performing "Switi Lady"

Vanuatu 1998: Diabetes & IGT by province



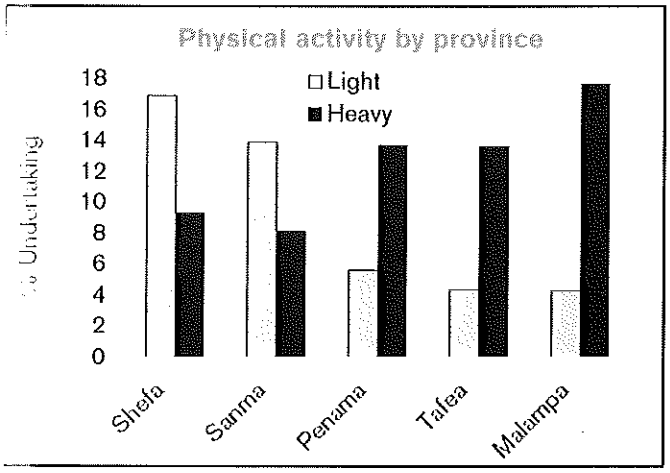
71.4% kava.

- The prevalence rates of alcohol, tobacco and kava use by province show significant increasing trends in the proportion of male smokers and kava drinkers from urban to rural areas.



Risk Factor: Physical Activity

- There were significant differences found between males and females in the intensity of physical activity by level of urbanisation.
- There is an increasing trend in the proportion of people undertaking heavy physical activity from urban to rural areas.

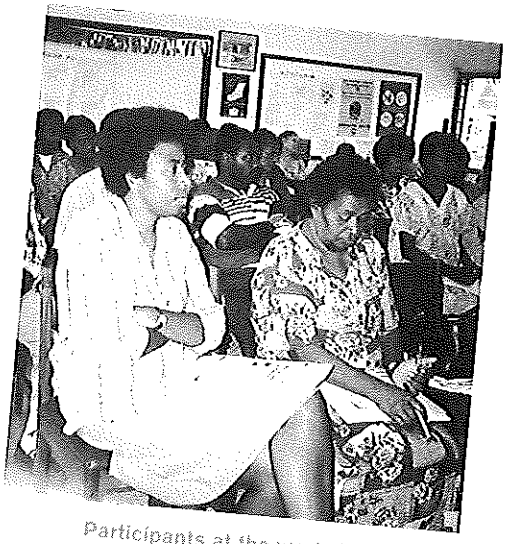


Food consumption

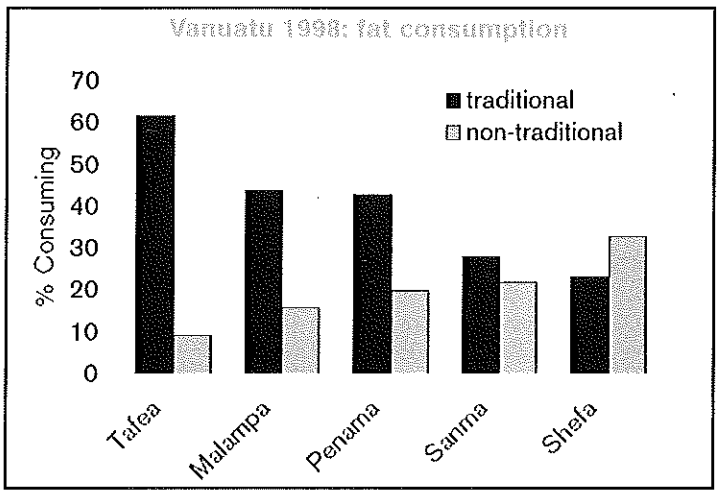
- Rice and bread are eaten daily by 56.4% of respondents compared to local dishes (17.1%).
- Coconut cream was reported used for cooking daily by 66.2% compared to 30.4% who reported using oil daily.
- 93% of respondents used salt everyday.
- Soft drinks, milk, milo, tea and coffee are not popular, everyday drinks for most respondents.
- The prevalence rate of reported sources of fat in the diet (traditional and western) show that more non-traditional fat was used in urban areas while more traditional sources were used in rural areas.

General

- Overweight and obese people are 2.74 times more likely to suffer from one or more of borderline hypertension, hypertension, diabetes and IGT.
- Individuals living in urban environments who consume foods of non-traditional fat sources and undertake only light physical activities daily are 7.7 times more likely to be obese or overweight.
- More importantly, urban males' physical activity levels are 11 times, and females' 28 times lower than their rural counterparts.



Participants at the workshop



For further details, contact
Ms Maturine Carlos-Tary,
National Nutrition Coordinator,
Ministry of Health,
Vanuatu

FRENCH POLYNESIA: OBESITY CONTROL PROGRAMME 1999-2003 ACTION PLAN

Ministry of Health and Research, **Health Department**
Papeete, September 1999.

In French Polynesia, the NCD Action Plan of the Health Department is well underway. The plan is based on the results of a number of surveys of both adults and children.

Key results on which the Action Plan is based are summarised below:

1. The study of adults revealed high prevalence rates of diseases due to being overweight.

Table 1 Prevalence rates (in %) of "overweight" disease in adults aged 16 years and older in French Polynesia, 1995

Overweight diseases	Women %	Men %	Total %
Obesity (I.Q ≥30)	43	35	39
Overweight (25≤I.Q<30)	28	39	34
Diabetes	22	14	18
Glucose intolerance	43	25	33
HBP	16	20	18
Hyperlipidemia	24	28	26
Hypercholesterolemia	14	12	13
Hyperuricemia	9	31	21

- The mean BMI for the study population was 29.4±6.6 kg/m².
- Excess weight begins early. More than one third of young people aged 16–19 were overweight and about one third of those aged 20–29 were obese.

2. Results of surveys of children conducted in 1996, 1997, and 1998 revealed the following:
- The obesity prevalence rate for urban Tahiti children with average age 11 was 27%.
- Some 12% of the children were overweight.
- Retrospective analysis showed that about 13% of them were already obese at the age of 5 or 6.
- The 1998 data from 1560 children aged 5–6 from the same area found 15% of them were obese.
- The 1997 study conducted in a rural area found 8% of children were obese.

The overall long-term objectives of the Obesity Control Programme are as follows:

- **For children**

1. Stabilise the prevalence of obesity in children about 10 years old.
2. Stabilise the prevalence of obesity in pre-school children (<3yrs).

- **For overweight people**

3. Increase the number of corpulent adults who have stabilised their weight or experienced a weight loss of 0 to 5%.
4. Increase the number of obese adults who have experienced a weight loss of 5 to 10%.

Weight stabilisation or loss must be sustainable (at least 3 months after the weight plateau has been attained).

- **For pregnant women**

5. Increase the number of women whose weight gain during pregnancy does not exceed 12 to 15 kg.

In order to reach these objectives over the long-term, five-year action plans will be implemented.

The timetable for the Action Plan is already in place:
- 1999 Year of preparation (the Action Plan being a result of that preparation plan);
- 2000 to 2002 is the implementation stage;
- 2003 is the evaluation stage.

For further information, contact
Dr My-Mai Cao, Medicine de santé publique, Director de la Santé,
BP 611, Papeete,
Tahiti

Training

TRAINING OPPORTUNITIES: FIJI SCHOOL OF MEDICINE

Nutrition & Dietetics Programme

At present, the Fiji School of Medicine (FSM) offers a two-tier programme in Nutrition and Dietetics.

1. Certificate – a one-year programme. Graduating students can work as assistant nutrition workers in the community.
2. Diploma – an additional two years to the successful completion of the certificate programme. Graduating students can work as dietitians/nutritionists in hospitals, institutions or in Public Health.

Entry level

- Students who have passed the Form 7 examination which is equivalent to the University of the South Pacific Foundation year, with passes in Chemistry, Biology and English. Preference will be given to those with a pass in Food and Nutrition in Form 7.

OR

- Students with relevant work experience in any health-related field, or those showing special aptitude and interest in nutrition from other fields.

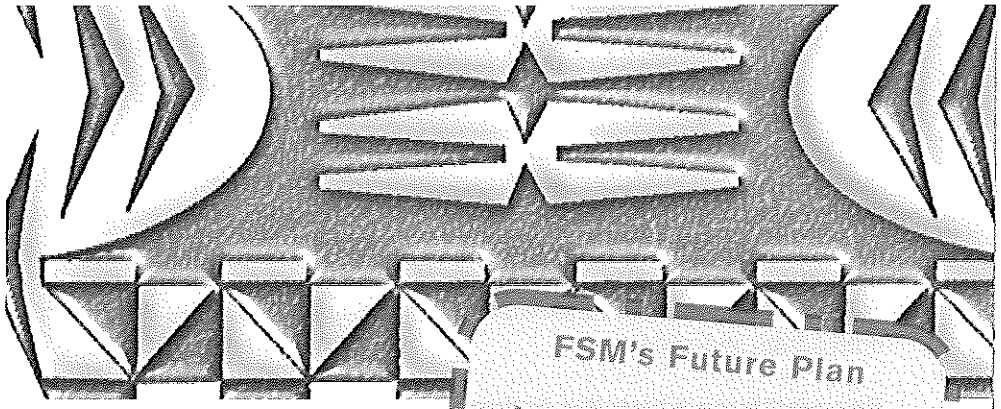
Programme units

Major concepts covered in the programme are:

Year One Units

- Principles of Basic Nutrition
- Introductory Foods
- Community Nutrition Practicum
- Nutrition in the Life Cycle
- Food Handling and Food Hygiene
- Introductory Diet and Disease
- Introduction to Food Service
- Anatomy and Physiology
- Social Survey Methods

Note: Those enrolled in the certificate programme graduate at the successful completion of the first year.



Year Two Units

- Nutrition in Health
- Food Science I
- Introductory Food Service Systems
- Nutrition in Development
- Food Science II
- Food Service Administration
- Community Education
- Biochemistry

Year Three Units

- Epidemiology and Nutrition Research
- Clinical Dietetics
- Advanced Food Service Systems
- Applied Community Nutrition Project
- Applied Research in Clinical Dietetics
- Applied Research in Institutional Food Service Management
- Introduction to Management

A bridging programme will be available for those workers already in the field who wish to enrol in the degree programme. The introduction of the programme is planned for the year 2001.

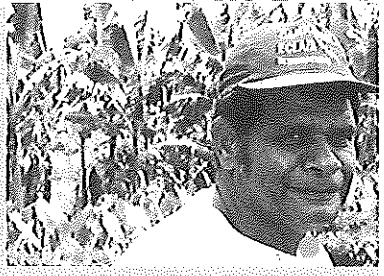
FSM's Future Plan

- In relation to the programme offered, two options are currently being explored:
  1. Upgrade the present programme to degree level, or
  2. Develop a new degree programme.
- FSM plans to conduct a training needs assessment to enable the institution to match the curriculum to the needs of the service sector.

The new degree programme will have the following structure:

- Students enrolled for the Certificate – will exit after one year.
- Students enrolled for the Diploma – will exit after two years.
- Students enrolled for the Degree – will exit after three years.

For further information, contact Ms Seini Seniloli, Coordinator, Nutrition and Dietetics Programme, Fiji School of Medicine. School of Public Health and Primary Care, Private Mail Bag, SUVA, Fiji.



YAMS: A GUIDE TO 12 VARIETIES

Tour de côte focusses on a variety of yam certain from there best known for their taste and characteristics. **Tour de côte** is a monthly magazine in Nouméa by Pacifique Presse Communication. Each one covers a wide range of subjects from health tourism, agriculture and others.

This is the second yam variety to be decribed in the PIN newsletter.

Installed on the edges of the left bank of the Tiwaka River not far from its mouth, Pierre Tidjite and his son Alexandre are beginning to carve out a good niche for themselves in the still-limited circle of large-scale yam producers on the East Coast of New Caledonia. With 5000 yam plants in their fields they were counting on a harvest of more than 10 metric tonnes in 1998. But in 1999, with the acquisition of a 55 CV tractor, they will be able to triple the size of the farm and their production. The *Kökö̈ci* is well-placed among the varieties they grow, as it is on other farms. Their farm has some 2200 *Kökö̈ci* yam plants which they are expecting will produce yields of 3 to 4 kg per plant.

The Tiwaka producers are very satisfied after three years of work with this variety, even if it does require a great deal of attention and frequent treatment against anthracnose. *Kökö̈ci* offers farmers a number of advantages. First, it does not pose any marketing problems as it is very sought-after for its excellent quality. Second, since it is an early maturing variety, it arrives on the market at the very beginning of the yam season when prices are the highest, so it pays well and allows a rapid supply of income to the farm's accounts.

Kökö̈ci, which is a local variety, is grown throughout the Territory. Still little-known to the general public, it is beginning to be marketed by those producers on the East Coast involved in growing high-quality yams. Delicate to grow, sensitive to diseases, this yam, which requires a lot of care, is highly sought after by connoisseurs.
An early variety, it is planted in July or August and its harvest runs from late March, early April to the end of May.

It is difficult to store as its fine skin is extremely delicate and the elongated tuber breaks easily. *Kökö̈ci* must be handled with a great deal of care.

Learning how to recognise it

Kökö̈ci comes in the form of an elongated tuber, 30 cm to more than one metre in length, with a diameter of 6 to 15 cm and a weight of 800 g to more than 3 kg.

The skin, which is perfectly smooth and quite presentable, is also very fine. The flesh is completely white on the inside but if the skin is scratched with a fingernail, a thin, yellow layer can be seen directly under the skin.

How to cook it

Kökö̈ci is an excellent-quality yam. It has a delicate taste and its fine flesh is completely free of any fibre. This ranks it among the best in taste tests and makes it highly sought-after by connoisseurs. The delicate flesh of *Kökö̈ci* falls apart easily when cooked for too long, so this yam should not be used for bougnas. Its full flavour is brought out by roasting, boiling, or steaming in its skin. Served in slices, it is the perfect side dish to accompany beef and game stews, or tender fish.

Purple or white:
the colour doesn't matter

Yams come in more than 100 different colours, ranging from the purest white to the deepest purple, with all the variations in between. Each variety has its own qualities and people who prefer them. In reality, colour is not a reliable indicator of taste.

Kökö̈ci:
a noble variety which requires care

With a seven-and-a-half month cycle, the *Kökö̈ci* is an early maturing variety. To take the best advantage of this, it should be planted in mid-August so that it can be harvested in late March, or early April. With a production

YAMS
a guide to 12 varieties

level

of 2.5 to 4 kg per plant, depending on the weight of the seed-plant, its yields are good for an early yam. As it must survive the entire dry season, it is best to use seed-plants weighing at least 200–300 grams. These must be watered regularly as soon as their sprouts can be clearly seen.

Because it is sensitive to anthracnose, a disease caused by a microscopic fungus which gives a burned appearance to the leaves and stems, *Kököci* does not like having "wet feet". For that reason, high ridges must be raised in an area which is free of flooding, and care must be taken to ensure that puddles of water do not form in the field after rain or watering.

A new, fertile piece of land is preferable for planting or, for instance, a sorghum patch which has been cut several times. The soil should be fine with very few rocks so as to avoid deforming or damaging the very fragile tubers.

The best yields are obtained by staking the plants up high on poles or nets.

Throughout the growing cycle, particularly during the hot, wet season, the plants must be carefully monitored for the least sign of anthracnose. Farmers must not hesitate to consult Rural Development Department technicians at the sign of disease as they will provide advice on appropriate treatments. In order to prevent outbreaks of this disease, do not allow vines to run onto the moist spaces between ridges and avoid passing between the ridges when it is wet, so as not to spread the disease throughout the field. For the same reasons, try to select a field which is protected from prevailing winds.

Since the tubers are fragile, the risk of breaking them during harvest is very high, which is why mechanised harvesting is strongly discouraged.

Alexandre and Pierre Tidjite

NON-COMMUNICABLE DISEASES: PRESENT SITUATION ON NIUE

Keti Hetutu,
Principal nursing officer, Niue

Non-communicable diseases continue to be a health concern for the Health Department, the Government and the people.

The concerns and awareness raised in the 1980s have now become a reality to individuals, families, the Health Department and the country. The complications of diabetes which affect the eyes and the kidneys, cannot be managed in Niue, therefore patients are referred to New Zealand for specialist treatment which costs money, and is a burden to the country's economy.

Although activities were implemented by the health department with the assistance of community groups to educate the people to lead a healthy life-style by not over eating, by exercising, and reducing alcohol consumption, they do not appear to have been effective. People continue to practise healthy living as they perceive it, which is usually the opposite to how health professionals see it. The dietary intake of the people does not change. Niueans enjoy the food they eat, as food is easily available and in abundance, especially the type that contributes to NCDs.

Doctor Laura's review of OPD records from July – October 1996 reported that:

- 18.1% of women and 13.2% of men are treated for hypertension;
- 4.6% men and 10.5% women have diabetes; and
- 3.8% suffer from gout, mostly men.

The latest figures on NCDs taken from the OPD attendance records showed that between July 1998 and June 1999:

- 12% were diabetics, and
- 13% were hypertensive.

Between January and August 1999, there were:

- Four new cases of diabetes, and three of hypertension.

The figures above clearly show that non-communicable diseases on Niue will continue to increase and should be a concern for the Department of Health, the people and the government as a whole. The long-term effects can be identified as a drain on the economy of the country, the family and the individual.

The introduction of the Healthy Island Project funded by AusAID, has been welcome. It recognises the existence of NCDs, and its Plan of Action focuses on control, prevention and awareness of NCDs and their long-term effects.

Programmes for Non-Communicable Diseases

Niue's commitment to address the problem is illustrated in programs being organised by the Health Department and the Healthy Island Committee.

1. Non-Communicable Disease Awareness Workshop for the Health Workers

- Radio Programmes
- Matua Manala Sports Activities
- Weight-loss Competition
- Smoke-free Campaign
- Alcohol and Substance Abuse.

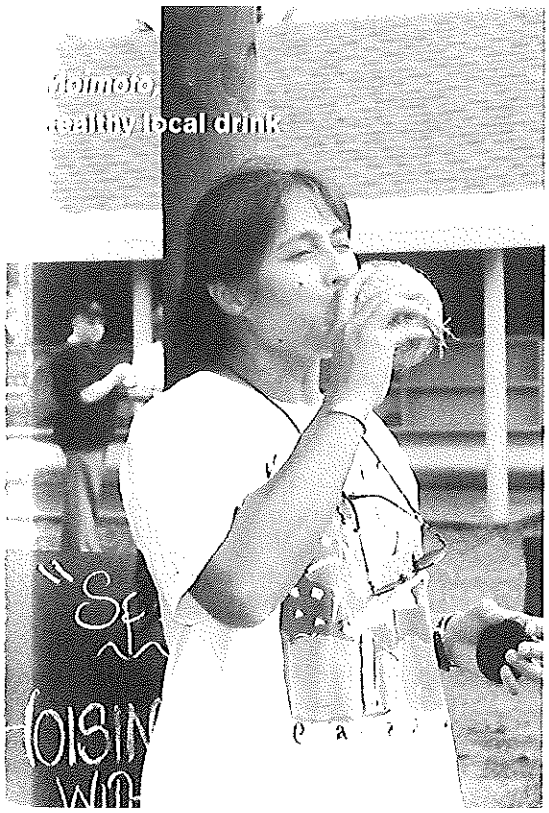
2. Nutrition Programs include:

- the *Moui Olaola Project* to enable health workers to undertake a Community Nutrition Certificate Course at USP;
- small projects initiated by Agriculture to assist with home vegetable gardens, promoting local food;
- using a participatory approach to educate and encourage the people to control eating habits, exercise more, and eat vegetables.

Recommendations for future actions include

- Health Department to undertake study on the current situation of NCDs on Niue;
- To evaluate the effectiveness of the current Health Education Program for improvements;
- The Health Department to be more active with Health Education Programs on NCDs;
- To identify the appropriate Department which will be responsible for all nutritional matters;
- A person to be trained as a nutritionist; and
- To undertake a study on the current nutritional status of children to include information on Vitamin A, iodine deficiency and anaemia.

K. Hetutu (Mrs),
Principal Nursing Officer.
Prepared for the
SPC Regional Nutrition Workshop.
Auckland.
18–20 September, 1999.



CHILD SURVIVAL PROJECT:

FOUNDATION OF THE PEOPLES OF THE SOUTH PACIFIC (FSP), KIRIBATI

Background:

FSP's Child Survival Project began in 1992. In 1995 a Knowledge, Attitude and Practices Survey was done with the assistance and advice of the Ministry of Health, to identify target populations and topics for the project. The survey was carried out on South Tarawa, Butaritari and Onotoa. As a result of the survey, FSP, together with the Ministry of Health selected four project islands: Betio in south Tarawa; Butaritari; Onotoa; and Maiana. Funding for the project came from USAid, British ODA, Jersey Overseas Aid, Kindermissionswerk, and a private British Trust. This project phase officially finished in 1997. Activities continued however, and further funding was secured in 1998 from UNICEF to continue work in the outer islands. Workshops have changed into a stronger participatory model and during the last two years a stronger focus has been placed on the creation of IEC materials.

At the end of 1998 new project outer islands were selected using MoH statistics. These are: the outer islands of Beru, Abemama, North Tabituea and Nonouti.

Current Activities:

Current FSP focus is on:

- Nutrition-Vitamin-A rich foods, breast-feeding and leafy greens – all life-style choices;
- Immunisation – awareness and importance of immunisation this is always done in partnership with the Ministry of Health; the outer island nursing staff are part of the workshop;
- CDD–awareness and education on prevention and treatment and the importance of getting to the clinic early. Includes food management, and environmental health;
- Respiratory infections – awareness and education, e.g. fires and smoking; dust; keeping babies in a positive environment; life-style choices; how to identify signs of respiratory distress; and again early intervention at the clinic.

These four themes are integrated with: Atoll Agriculture via home gardening; the introduction of vitamin-rich foods into the diets; and encouragement of local foods.

Since 1997 the following materials have been used to develop to support the messages and work of the Child Survival Project: Cook book (in press); garden book reprint by LTN Fiji; cooking demonstrations; posters; handouts; the Rehydration pamphlet; and the Respiratory Awareness poster (in press).

Successes:

It has been difficult to measure changes in community attitudes and practices. However, the following might be used as indicators of FSP's success:

- The steady increase in home gardening and the increased consumption of leafy green and yellow vegetables;
- Improved practices in nutrition and immunisation of children; and
- The supportive and co-operative relationship established between the Ministry of Health's Nutrition Centre and the FSP CS Team.

Constraints:

- FSP will run out of direct project funds at the end of 2000 and access to salary and overhead costs are difficult. Funding for on-the-ground activities is much easier to access but worthless unless the support and salary costs are met;
- Travel costs to the outer islands are high;
- The time it takes to tour thoroughly, and small staffing numbers, limit touring;
- The shortage of transport on the outer islands is a barrier to successful implementation;
- High costs of on-island transport are also constraints for Island Councils and FSP.

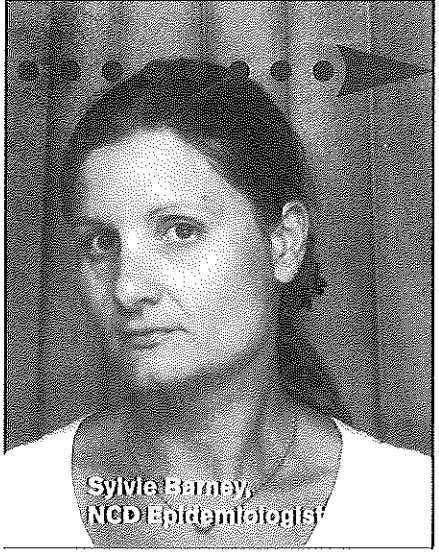
Future Plans:

- To seek funding for a three-year project focusing on nutrition, life-style choices and dietary reduction of health problems;
- To target the whole family as it is adults, including men and youths, who influence what and how children eat. This project will be combined with atoll agriculture and home gardening;
- To select further project islands;
- To appoint another Nutrition Educator to share the work load.

For further details, contact Taoniti Irata, Child Survival Officer, FSP Kiribati, PO Box 43, BAIRIKI, Tarawa, Republic of Kiribati.

NUTRITIONAL SITUATION IN NEW CALEDONIA

Review and proposals for action



Summary

Territorial Resolution No. 490 dated 14 October 1994 set up the New Caledonia Prevention Committee responsible for conducting research into nine major public health problems in the Territory and making proposals for prevention work designed to reduce their frequency and the severity of their consequences. Within this context, a working group was established to assess the nutritional status of New Caledonia's population with the goal of proposing preventive actions aimed at reducing the prevalence of diseases associated with poor diet—diabetes and hypertension, in particular.

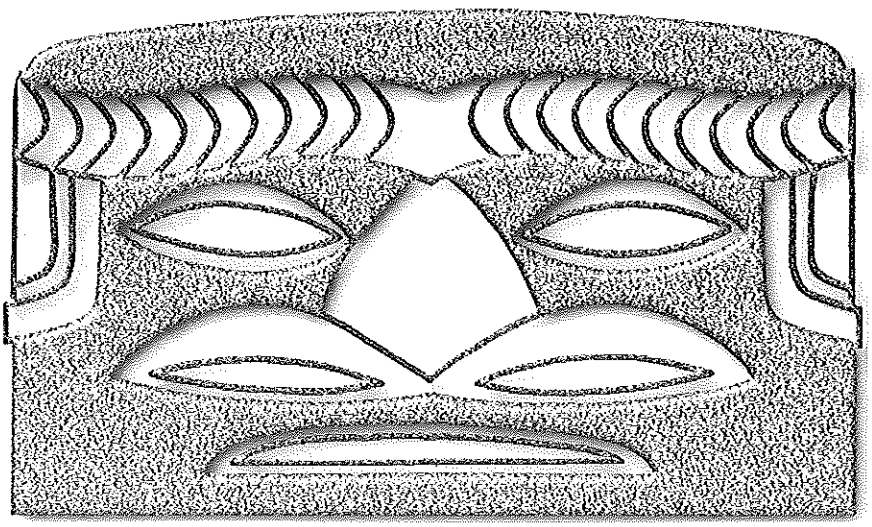
1) Nutritional and dietary situation in New Caledonia

As determined on the basis of various surveys or data collection exercises, the nutritional situation is as follows:

- The adult population essentially suffers from obesity. These rates, which vary by ethnic group and gender (from 43 to 72% of the male population and from 52 to 83% of the female population), are higher in urban than in rural areas.
- In children, depending on the age and type of population studied, cases of retarded growth may be encountered. Although not a major source of concern, this situation is due to insufficient protein intake, especially in young children, rather than an energy deficiency (in terms of calories). Also, breastfeeding is not widely practised.
- There would not appear to be any vitamin-A deficiency in the Territory. Some micronutrients are, however, often lacking, such as iron, a lack of which causes anaemia.

Under the influence of westernisation and modernisation, dietary habits have changed considerably in recent decades. This process of change, initially beneficial because it led to the disappearance of deficiency diseases, now exposes the community to other illnesses, brought on by overeating, the so-called "excess-weight illnesses", such as diabetes and hypertension.

Overeating mainly concerns very rich, high-energy foods (fats, delicatessen meats, canned foods) and those with a high refined-sugar content (cakes, sweets, soft drinks), which are favoured to the detriment of other foods such as fruits, vegetables and cereals. Excessive alcohol consumption also contributes to problems of excess weight.



These consumption patterns, which are more pronounced in urban areas, are influenced by the accessibility of products and household resources, but also by the community's dietary habits and preferences, which are determined by material and economic factors as well as cultural and sociological ones.

2) Heath situation in New Caledonia

Obesity is recognised as a major risk factor in the onset of non-insulin-dependant diabetes. In fact, the prevalence of this disease in the Territory is high (9 to 16% of the population, depending on ethnic group). In addition to the considerable human impact of the complications of this disease (blindness, kidney damage, amputation), the cost to society of treating this type of diabetes can be estimated at approximately one billion francs per year, while more than half of all diabetics do not realise that they have the disease, are not being treated and therefore will probably suffer from complications of the disease.

Hypertension affects approximately one third of the adult population. Obesity and alcohol abuse are recognised as risk factors for this disease, as is excessive salt intake in some segments of the community (elderly people, diabetics and hypertension sufferers).

Hypertension is responsible for very debilitating complications such as

hemiplegia and kidney damage and has a high mortality level due to the heart diseases it causes. It also generates significant costs to society.

And, of course, it should not be forgotten that in addition to the dietary risk factors which play a determining role in the onset of such diseases, other types of behaviour which are harmful to health should be noted, in particular, smoking and a sedentary lifestyle.

3) Proposals

Two types of prevention activity can be considered in order to change dietary habits, and related excesses and imbalances and to reduce the prevalence of certain diseases.

1. Informing the community
   - of the very concept of a balanced diet
   - of the connexion between diet and health.

2. Providing the community with easier access to products more closely matching their physiological needs (green vegetables, fruits, health diet foods).

This preventive approach should be carried out in partnership with the various sectors of society concerned (e.g. educational institutes, the agro-foodstuff industry, decision-makers) so as to ensure a certain level of efficiency and sustainability.

Provided by Sylvie Barney,
NCD Epidemiologist,
DTASS,
BP 3278,
Nouméa, Nouvelle-Calédonie

Commonwealth of the Northern Marianas (CNMI) Health Education & Nutrition Program Activities

January – September 1999

A. Collaborative work

In partnership, various sectors and groups (government and non government) assisted and coordinated numerous Food and Nutrition and Health conferences in order to:

- **provide knowledge and skills on food and nutrition issues;**
- **secure support from community leaders and decision makers;**
- **ensure council sustainability and its activity;**
- **inform the community on Food and Nutrition activities.**

B. Nutrition education in schools and community groups:

Public Health workers gave talks to school children on food and nutrition topics including:

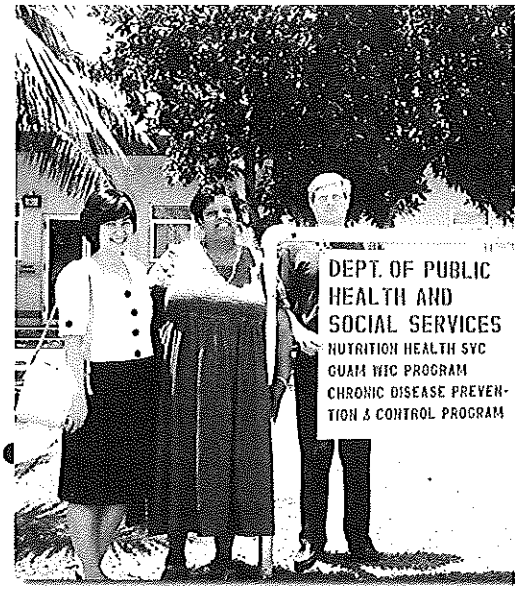
- **The CNMI food guide pyramid;**
- **Our culture and values, related to food, nutrition and physical activity;**
- **Nutrition and exercise;**
- **Nutrition and health;**
- **Nutrition and aging; and**
- **AIDS/HIV.**

C. Nutrition education material development

Weekly health radio spots were developed.
Pamphlets, videos and crossword puzzles related to cancers in general were provided.
Brochures were produced on a number of topics e.g. Walking for Health, Date Rape Tips for Teens, Breastfeeding, Your Child and Antibiotics, Nutrition During Pregnancy, Asthma for the Young and Old, Fun in the Sun: Keep your Baby Safe, Chickenpox, Head Lice, Help for Common Problems in Pregnancy and STDS.

Provided by David Rosario,
Public Health Adviser,
Department of Public Health,
PO Box 409 CK, Saipan MP 96 950

NON-COMMUNICABLE DISEASES ON GUAM: A SUMMARY



Guam is an ethnically diverse (Chamorro, Filipino, Caucasian, Micronesian, and Asian) island of 214 square miles (30 x 8) with an estimated population of 149,101 persons in 1999. There are 19 villages ranging in population from 17,000 to 2,000. There are still many areas on Guam that can be classified as rural/agricultural.

Leading causes of death

Table 1. Ten Leading Causes of Death for Females and Males on Guam, 1998

Rank	Females	Males
1	Heart disease	Heart disease
2	Cancer	Cancer
3	Cerebrovascular disease	Accidental unintentional injuries
4	Diabetes	Suicide
5	Other respiratory conditions	Cerebrovascular diseases
6	Pneumonia	Chronic obstructive lung disease
7	Accidents and unintentional injuries	Diabetes
8	Suicide	Chronic liver disease
9	Parkinson's disease	Pneumonia
10	Other urinary disorders	Parkinson's disease

As Table 1 shows, for a number of years, heart disease has been the leading cause of death on Guam, followed by cancer. Diabetes is the 4th leading cause of death for women and the 7th leading cause of death for males.

Comparative Age-Adjusted Mortality Rates for four selected chronic diseases for Guam and the United States are shown in Table 2.

For all four diseases, Guam's rates are higher than the mainland US.

The Behavioral Risk Factor Surveillance Surveys (BRFSS) in 1991, 1996, and 1999, show that:

- The prevalence of overweight has increased steadily between 1991 and 1999;
- Guam has no specific objective for the reduction of overweight prevalence in the population;
- Hypertension continues to rise despite the worksite wellness programs on offer;
- The increase of diabetes between 1996 and 1999 has nearly doubled that of the previous period 1991 and 1996;
- Diabetes was the fourth leading cause of death among women and the seventh leading cause of death among men on Guam in 1998;
- Almost 25% of deaths due to heart disease on Guam have diabetes as a secondary cause;
- The prevalence of smoking has increased over the past 3 years to 30.7 percent compared to 22.9 percent in the US.

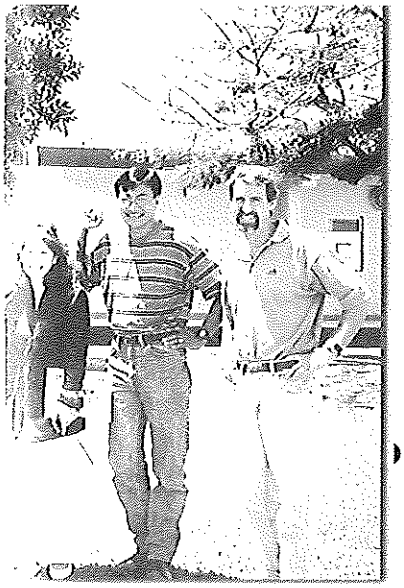
In addition to Guam's first goal to decrease smoking prevalence to 15% among adults, a goal for those aged 14 to 17 years, to decrease smoking prevalence from 41 percent to 25 percent by the year 2000 has now been developed.

Common dietary patterns have also been identified.

Four separate studies funded by USDA through the Cooperative

Table 2. Comparative Age-Adjusted Mortality Rates for Four Selected Chronic Diseases for Guam and the United States (per 100,000 population)

Diseases Condition (all persons)	Guam Rate (1997)	US Rate (1997)	No. Times US Rate
Heart Disease	154.32	130.5	1.18
Cancer	70.34	125.6	0.56
Cerebrovascular Disease	43.69	25.9	1.69
Diabetes	26.25	13.5	1.94



Research, Education, and Extension system at the University of Guam in conjunction with the Department of Education and Department of Public Health and Social Services have been conducted. The results of the studies of adult, adolescent and school age Guam population showed the following dietary patterns:

- Simple carbohydrate consumption (> 10% of all carbohydrates)
- Low fiber consumption (<30% recommendation)
- High protein consumption (30-45% of total kcal)
- Low calcium consumption (<60% of RDA for age)
- Obesity (>60% of all age groups)
- Elevated blood glucose
- Lack of exercise.

Programs to address nutritional problems in Guam include:

- The "Five-A-Day for Better Health" Program
- A collaborative programme with the community
- A national diabetes registry.

For further information, contact Dawn Oakley, Nutrition/Dietitian, Department of Public Health Nutrition Health Services.
Tel: (671) 475-0284;
Fax: (671) 477-794;
E-mail: doakley@ns.gu

PINDA NEWS

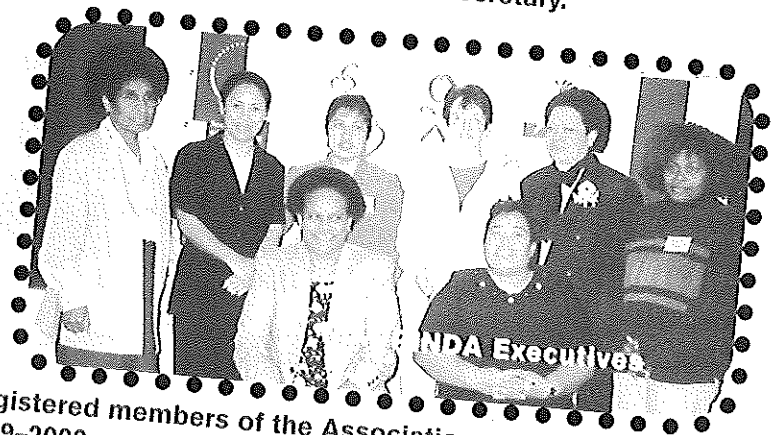
The PINDA Annual General Meeting was convened on the afternoon of the first day of the SPC Regional Nutritionists Workshop held at the Kiwi International Hotel, Auckland, New Zealand, 18–20 September, 1999. Both the Vice President (Nirmala Nand, Fiji) and the Secretary (Brenda Sio, Samoa) were present.

The meeting endorsed last year's recommendation to move the role of secretariat of the Association to SPC, to facilitate communication with members. However, the Association will still be run by its Executive Committee. SPC will act as a clearing house through the PIN Newsletter.

A new Executive was elected during the meeting. The representatives from the region are

Melanesia:	Annette Aqorau – Solomon Islands
	Kiti Bulamaibau – Fiji (Vice President)
	Anaisi R Delai – Fiji
Micronesia:	Jane Elymore – FSM (President)
	Tinai Iuta – Kiribati
Polynesia:	Vizo Halavatau – Tonga
	Kerry Fa'amoe – Samoa

An SPC representative will act as Secretary.

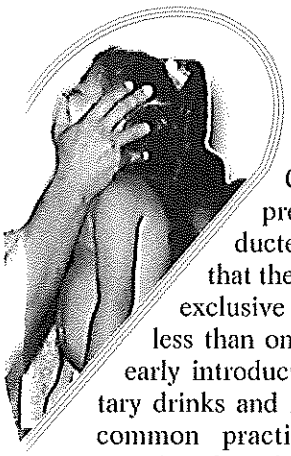


PINDA Executives

Registered members of the Association were asked to pay their 1999–2000 annual subscription while those not registered were encouraged to join. As a result, a number of new members were recruited. PINDA accounts still need to be sorted out.

The PIN has allocated two pages to PINDA. PINDA members are encouraged to use this provision for regular professional contributions, and the Executives to use it to disseminate notices to members.

SUMMARY OF THE 1998 RAROTONGA INFANT FEEDING SURVEY



Little is documented on infant feeding practices in the Cook Islands. One previous survey conducted in 1989 indicated that the average duration of exclusive breastfeeding was less than one month. The very early introduction of complementary drinks and foods seemed to be common practice. Additionally, questions have been raised about the associations between infant feeding practice and the high rates of adult overweight experienced in the Cook Islands. In 1992, Public Health Department policy was to follow the 1989 WHO/UNICEF initiative on promoting exclusive breast-feeding for infants for the first four to six months of life. This was supported by the provision of infant feeding information materials, education, support and advice for Public Health Nurses (PHN) and women of childbearing age.

A survey undertaken to provide baseline information on infant feeding practices, evaluate the effectiveness of the 1992 policy and programme and form the foundation for future policies and programme was undertaken in Rarotonga between 20 April and 21 May, 1998. Data were collected from 222 women with infants less than 24 months of age attending the 32 Community Health Clinics (CHC) in Rarotonga via face-to-face interviews and group discussions. Simultaneous assessment of the growth of Rarotongan infants less than 14 months of age was carried out as part of the project.

Results

The survey showed that nearly 57% of all mothers in the study were currently breast-feeding their infants. Amongst those with infants less than four months old, 90.6% were breastfeeding. However, amongst mothers with infants less than one month of age, only 36% were exclusively breastfeeding; and of the mothers with infants between one and four months old, only 14.3% were exclusively breast-feeding.

The median duration of breast-feeding in the survey sample was seven to eight months. In other words, half of the mothers in the study stopped breastfeeding entirely before the end of the eighth month of life of their infant.

Nearly 59% of mothers in the survey recalled initiating breast-feeding within one hour after birth. Of those with infants less than 4 months of age, 45.0% were exclusively breastfeeding compared with only 4.3% who initiated breastfeeding more than one hour after birth.

Over 20% of mothers had some problems breastfeeding Of these, nearly 60% reported that they had milk-supply and breast problems.

Over half of the mothers introduced drinks to their infants before one month of age and 41% of mothers introduced solid foods to their infant before four months. By far the most common first drink given to infants was *nu* (coconut water), followed by water and juice. The most common foods given were commercial baby foods, cereals, rice and fruits. The most common reason for the early introduction of drinks and food was insufficient breast-milk supply. There was a significant increase in the number of mothers who breast-fed their infants between 1992 and 1998. The greatest influences on mother's breastfeeding practice were family members, mother's knowledge and confidence about breast-milk supply, traditions, and work commitments.

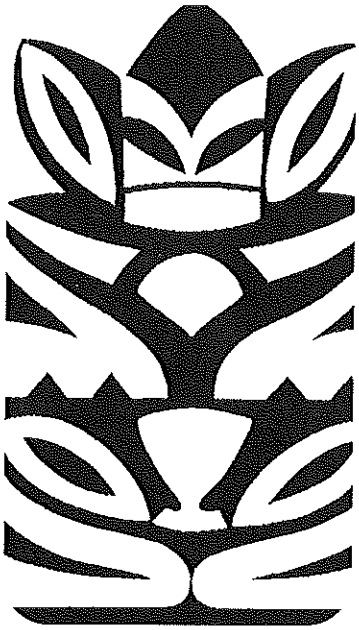
It was concluded that compliance with UNICEF/WHO breast-feeding recommendations was low and many infants were introduced to complementary drinks and foods far too early in life. The large proportion (90.6%) of mothers breastfeeding their infants up to four months of age suggests that the majority already know that breast is best. It is common practice to feed very young infants (on the first day of life) with *nu*. This should be discouraged, especially in hospitals and CHCs. Breast-milk is the only food that provides for an infant's needs for the first four to six months of life.

Mothers who breast-fed their infants within one hour of birth were found to be ten times more likely to exclusively breast-feed their infants for up to four months of age. This result emphasises the importance of providing breast-feeding support for mothers directly after birth. Knowledge alone of the importance of breast-feeding does not overcome the barriers.

Recommendations

Recommendations based on the survey results include the following:

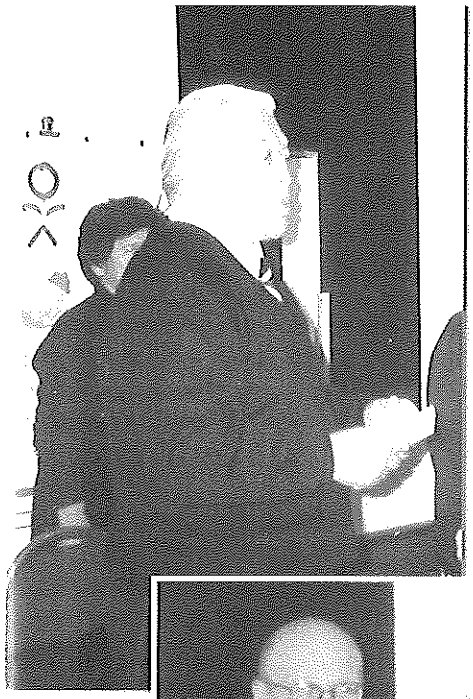
- The Public Health Department continues to support the



UNICEF/WHO recommendations on breast-feeding practice, especially exclusive breast-feeding.

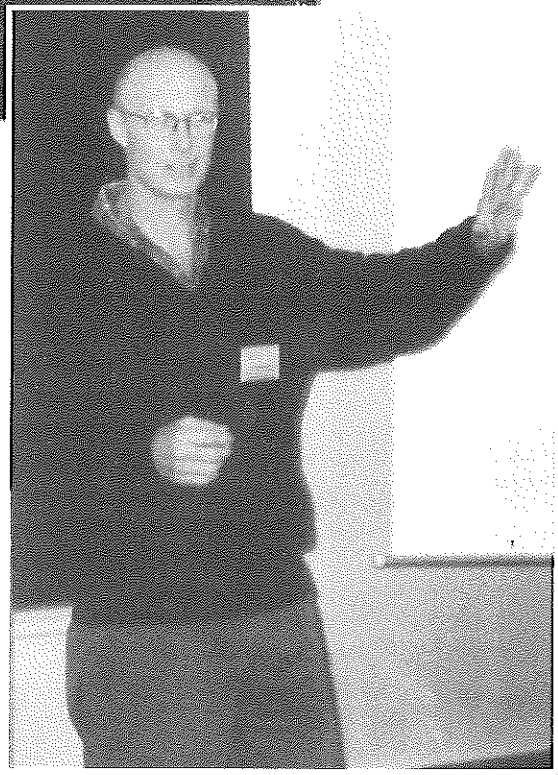
- Due to the early introduction of complementary drinks and foods, the Cook Islands breast-feeding programme focuses more on ensuring that barriers to exclusively breast-feeding babies up to six months of age and continuing breast-feeding up to two years and beyond are addressed.
- Clear guidelines are developed for both PHNs and mothers, explaining clearly that the premature administration of drinks and foods is not the best for infants. The benefits of feeding infants breast-milk as opposed to *nu* should be clearly explained. The best advice on breast-feeding can be given by the Public Health Department and hospital maternity nurses.
- The Cook Islands Hospital Services intensify current support of mothers at the time of the birth of their infants. This support should be in terms of readily available expertise on breast-feeding and positioning that provides for the psychological and emotional needs of mothers at the time of the birth of their infants.
- The Cook Islands Public Health Department intensifies current support of mothers at the first postnatal home visit, within the first week of the infant's life. This support should be in terms of readily available expertise on breast-feeding that provides for the psychological and emotional needs of mothers within the first few weeks of their infants' life.
- Regular assessment of services is conducted of both the Cook Islands Hospital and Public Health Department to evaluate compliance to the infant feeding policy of the Ministry of Health (MOH).
- A follow-up experimental study of a cohort of Cook Island infants needs to be undertaken to determine whether the early introduction of drinks and foods contributes to overweight in infancy, childhood and/or adulthood.

For further details contact Karen Tairea, Nutritionist, Public Health Department, Ministry of Health, PO Box 109, Rarotonga, Cook Islands



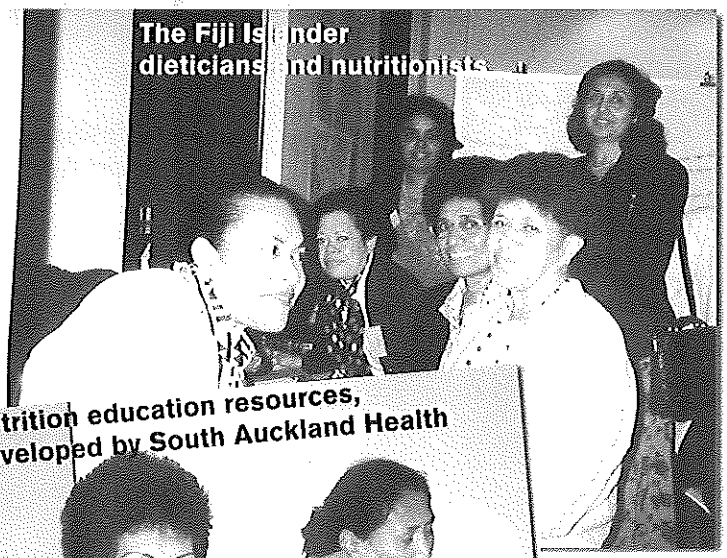
Kaumatua Danny Tumai opening the workshop

Kiribati representatives

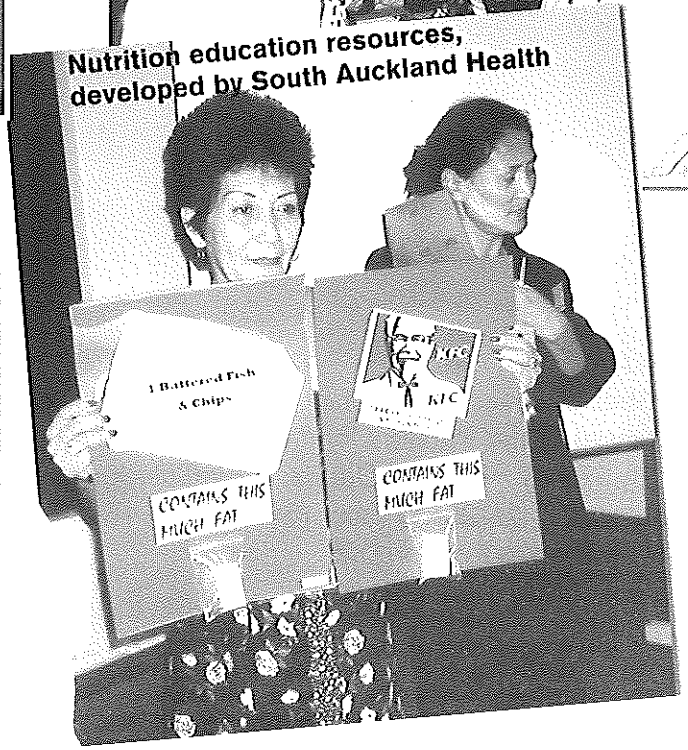


Boyd Swinburn,
NZ National Heart Foundation

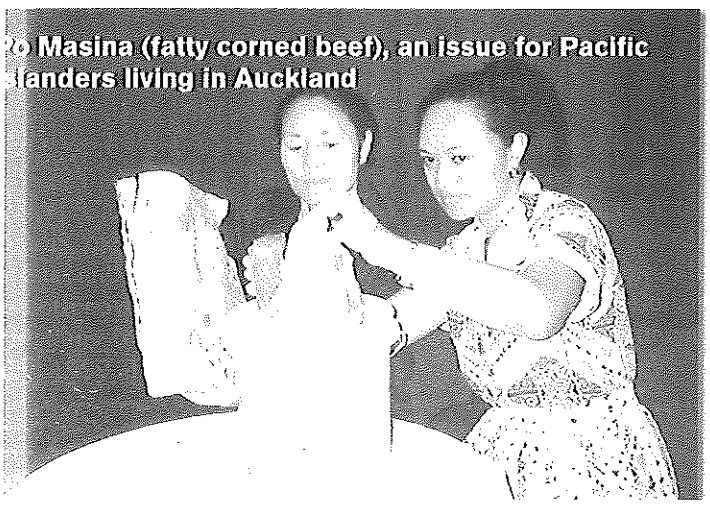
The Fiji Islander dieticians and nutritionists



Nutrition education resources, developed by South Auckland Health



o Masina (fatty corned beef), an issue for Pacific landers living in Auckland



SECRETARIAT OF THE PACIFIC COMMUNITY

Annual Health Promotion PIN Award

Nomination Form

Criteria for selection

- Recognition of outstanding contribution to improve nutrition and health in the Pacific;
- Candidate(s) working in harmony with the whole population in the community and in the island(s);
- Individual or groups are eligible for the award;
- Work is well known or having an impact in the island;
- 'Environmentally friendly' features in activities highly considered.

Name of candidate .....
A photo of the candidate(s) to be provided with the resumé

Reason for your nomination:

Your name and contact details:

Contacts:
Mr Robert Hughes, Nutritionist & NCD Epidemiologist
Secretariat of the Pacific Community,
BP D5, 98848, Noumea Cedex, New Caledonia
Phone: (687) 26-20-00 Fax: (687) 26-38-18
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