

# Nutrition training: needs and priorities in the Pacific

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## Introduction

The Pacific nutritionists and dietitians are often vulnerable because of their different training, unacceptable qualifications and small staff establishment in comparison with other groups<sup>1,2</sup>. They often work alone in the kitchen with no support staff other than the cooks. Consequently the impact of their services are sometimes overlooked, perceived as being non-effective, and merely judged by the hospital meals they produced. In order to elevate this cadre of health workers and ensure effective delivery of nutrition services in the hospital and the community, appropriate training and qualifications are essential<sup>3</sup>.

Nutrition and its application has been the domain of different groups including nutritionists, dietitians, nutrition educators, agricultural extension workers, home economics teachers, community workers, and other health professionals. It is essential that each of these functionaries are given the appropriate level of training in food and nutrition principles as well as different programme approaches<sup>4</sup>. The study of food must include its physical, social and psychological functions so that good health is achieved. The production, preservation and preparation of food must be an integral part of any nutrition training<sup>5</sup>.

Education and training has long been a major issue on the agenda of early nutritionists and dietitians working in the Pacific. Studies in the early fifties indicated widespread child malnutrition. This was mainly due to poor hygiene and lack of proper sanitation. These lead to increased prevalence of respiratory and intestinal infections exacerbating the already low nutritional status. The mother's lack of knowledge about proper nutrition were sometimes blamed for this situation. Recently, the Pacific diet have been blamed for the non-communicable disease epidemic. However it was not real-

ised that traditional eating and dietary patterns were being replaced by inappropriate new ones from outside the Pacific, and that local food was being relegated lower status in early nutrition training and national economic policies.

Food and nutrition training in the Pacific must be coordinated and relevant to the diverse situations of the different cultures and economies. This paper discusses the trends and impact of nutrition training programmes in the Pacific, problems with their delivery, and the needs and aspirations of providers of nutrition services. This is in an effort to define and understand the nutritionist's roles in relation to all the other health professionals and to address the concerns with their status within both the national and regional content.

The change in nutrition education started with the early Europeans and accelerated in the late twenties when most Pacific countries were under colonial rule. Because of high childhood morbidity and infant mortality, schemes were set up, for example in Fiji, through women's committees to train indigenous women in infant feeding practices and proper hygiene. In the early thirties, the League of Nations encouraged research on the state of nutrition in some countries. Simple nutrition principles on maternal child health and diet were recommended as guidelines for nutrition and health promotion in the Pacific. The nature of nutrition training reflected environmental health problems encountered at the time and the expertise of available trainers.

In the early forties, Western oriented dietary guidelines on food use and custom were introduced to provide more information on food value, ration scales for catering institutions and for labourers, and incorporate new technologies. These guidelines were based on research by foreign experts employed by the South Pacific Health Service. Some hospitals still utilise these ration scales today. With the reformation of the South Pacific Commission (SPC) in 1947, food and nutrition research continued – mainly on infant feeding patterns, anaemia and food composition. At present there are approximately three levels of nutrition workers: community nutrition workers, diplomats, graduates and post-graduate nutritionists and dietitians.

## Community nutrition workers

The training of Pacific people in health and nutrition education has been one of the major activities of the SPC Nutrition Programme since the early fifties. Two levels of

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**Table 1. The number of nutritionists and dietitians, by country, 1991**

Country	Indigenous	Expatriates
American Samoa	-	1
Cook Islands	1*	-
Fiji	41 (3*)	5
Guam	-	2
Federated States of Micronesia	1	-
Marshalls Island	-	1
Northern Marianas	-	1
Palau	-	1
Papua New Guinea	40	10
Kiribati	-	1
Naura	-	-
Solomon Islands	2	3
Tokelau	-	-
Tonga Islands	-	3
Tuvalu	1	-
Vanuatu	2 (1*)	1
Wallis and Futuna	-	-
Western Samoa	1*	1
French Polynesia	-	-
New Caledonia	-	4

\* Done post graduate training.

training were carried out<sup>7</sup>. At the territorial or national levels in service training through short courses were conducted for nurses, health inspectors, teachers, agriculture extension workers. At the regional level, the SPC Community Education and Training Centre (CETC) ran women development courses. In addition, a mobile training course in nutrition and home economics was also initiated in 1997 to provide in-service training and follow-up on CETC graduates. So far, 794 women have been trained<sup>8</sup>.

Originally CETC gave women a general understanding of family food and nutrition needs, food preparation and preservation, and home gardening. An in-house review in 1989/90 of the health and nutrition course produced a revised draft curriculum prescription on food, nutrition and development. This revised curriculum is to produce trainers with the necessary basic knowledge and skills to develop further into the nutrition field. The course concentrates on a more in-depth study of nutrition principles and practices enabling students to recognise current nutritional problems and priorities in

their own communities, and be able to provide culturally appropriate solutions. It would enable trainees to:

- have a sound understanding of nutrients (what food is made out of) and how they are used by the body;
- how diet affects growth, development and health;
- improve skills in food preparation, storage and preservation;
- have the necessary skill to promote the importance of locally grown traditional foods, methods of preparation, storage and preservation and nutritional values;
- promote traditional Pacific dietary habits, their evaluation and methods of integrating traditional and modern food practices to provide nutritionally sound methods;
- develop effective communication skills; and
- plan, implement and evaluate community health and nutrition programmes.

## Dietitians and nutrition diplomats

In 1956, the Fiji School of Medicine (FSM) dietetic course began. This has trained approximately 68 women in the Pacific to date, 16% of which are outside Fiji. Many of these women make up the bulk of the nutrition workforce in the Pacific today (see Table 1). Originally, the dietetic course aimed at improving standards of food and nutrition in hospitals. The emphasis was on clinical aspects and a high proportion of the time was devoted to the hospital kitchen and food preparation services.

## Graduates and post graduate nutritionists

In the late seventies and early eighties, several regional meetings recommended the need for further training in nutrition and to upgrade current level of nutrition training to keep pace with rapid changes in lifestyle and economic developments. The increase in prevalence of non-infectious and nutrition-related diseases made public health nutrition an important component of community health promotion activities. In order for food and nutrition to progress in the Pacific, the nutrition professionals must improve their qualifications, status, skills and venture out of the hospital kitchens into the arena of public policy. For this to happen, a different type of approach to nutrition must replace the didactic teacher-oriented methods of the past.

A lot of effort has been devoted to the training of different functionaries in agriculture, health, education and community services. Much non-formal nutrition training has taken place. There were many agencies involved in nutrition education and this produced a plethora of activity in the form of in-country courses, seminars and workshops with participants of varying academic and practical level. In spite of all these non-formal and formal activities, institutions such as the Fiji School of Medicine still has difficulty finding a Pacific nutritionist to teach, manage and develop its nutritional programme.

In the late eighties expert health and nutrition advocates in the Pacific realised that applied nutrition education and training should be taught from a Pacific perspective. This must involve utilising local experts in developing content and teaching materials and resources for use in non-formal training. The South Pacific Community Nutrition Training Project (SPCNT) in 1986 hoped to bridge the gap between the community training and the university degree programmes in food and nutrition. This has produced 13 nutritional modules and a basis for a community nutrition programme.

In 1986, USP Home Economics Department became part of the school of Pure and Applied Science. This restructuring enabled USP to offer courses which aimed to provide students with a better understanding of the main concepts and principles of food and nutrition in a Pacific context. This had more food and nutrition in the content than the existing home economics programme.

## Problems with nutrition training in the Pacific today

Generally, training of nutritionists and dietitians has always been given a low priority in the region despite widespread recommendations and concerns for an increase in community health human resources development. Many have and are debating the exact mechanisms but most agree the following are important co-factors:

**Lack of co-ordination and collaboration:** Although there have been a lot of nutrition education activities over the last 40 years, there seemed to be no systematic plan of ensuring who's responsible for the different levels of training within the region nor to ensure continuity of training. Most regional and international agencies involved in nutrition training are not very interested in long-term commitment. As a result, past and existing nutrition training has mainly concentrated on short-intensive non-formal training workshops. Although plans for a more formalised course were discussed between various institutions, collaboration was difficult due to differences in academic rules, regulations and lack of dialogue between academic staff to develop and promote appropriate nutrition-related courses.

**Inconsistencies of nutrition information:** With rapid changes in health and nutrition information, it is very difficult to keep up with some of the scientific developments in nutrition. What may be good and sound advice today could be detrimental to the health and nutritional well-being of future Pacific people. Nutrition information depends largely on the emphasis of visiting expert or limited literature accessible in the isolated working situations<sup>10</sup>.

There is also a tendency in nutrition education and training to tell people what they should and should not eat. We teach them about nutritive values but we often forget that people eat foods and not nutrients. Few people eat food simply

because they are nutritious and healthy but tend to choose foods that are tasty, colourful, not too costly, and easy to prepare. Thus "the whole education system in interventionist"<sup>11</sup>. The negative approach often employed tends to put people off.

Dietary behaviour within the overall concept of health, can be viewed in two broad categories: healthy or unhealthy behaviour. However, what may seem unhealthy to us may not be perceived as unhealthy by some individuals. Certain risk behaviours such as excessive alcohol consumption or overeating may be an accepted form of adaptation to stress which some individuals may accept as a normal part of everyday life. Others may not make the connection between an "unhealthy" action and possible consequences to their health. On the other hand, certain individuals may be consuming too much food without putting on weight while others may become overweight. This may be due to differences in their metabolic rates and energy expenditure. Thus there are many variables and inconsistencies in our knowledge and attitudes to health and health practices. This may result in the individual becoming sceptical of the information that we, the so-called 'experts' in nutrition, try to give them. They are told that everything they enjoy is unhealthy and detrimental to their health. This of course is not unique to the Pacific or nutrition, but it is compounded by the sociocultural environment and physical size of the islands.

It is also important that when health and nutrition training programmes are developed considerations must be given to the individual's cultural values and beliefs. For example, some ethnic groups view obesity as a sign of power and social status, happiness and success in their marital relationships. Therefore to intervene in an individual's cultural beliefs may not result in any observed behaviour change. Although the individual may understand the detrimental effects to health of being overweight, their own perception of the importance of their traditional and cultural values far outweighs the scientific facts about obesity. This raises the question of what is the most effective way for nutrition education and training in order to make nutritionists and dietitians effective in behaviour modification.

**Narrow mindedness and career orientation of experts:** Formal nutrition training in the past and the present is still being carried out by some career minded experts who are not sensitive to the nutritional problems, issues and priority needs of the Pacific. Most of what and is being taught is largely from a non-Pacific perspective. Although western ideologies advocate systematic and long range planning in programme development, training programmes such as FSM's Nutrition and Dietetic course has not had the concept of course sustainability built into its administrative structure. The failure to produce a graduate to steer this programme is a case in point. Although more than 60 dietitian/nutritionists have been trained, the observation is that 'no one is good enough' or up to the level expected (by Western standards) to

undertake such a responsibility and be qualified as trained professionals in their own right. The non-recognition of some training programme designed for developing countries, by professional bodies, in Australia is a good example of this narrow minded arrogance.

**Need for credibility and status of nutrition educators:** Basically training of nutritionists in the Pacific has two purposes. Firstly, the acquisition of nutrition knowledge in order to improve nutritional well-being of the community. Secondly, to improve their effectiveness and efficiency. Improvement of nutritional status of the community will largely depend on effectiveness and efficiency of nutritionists. For nutrition training and services to be effective in the Pacific, the focus should be on improving the qualifications of nutritionists and dietitians. This would provide the needed human resource urgently required to fill managerial and teaching roles in nutrition within the region. The number of nutrition professionals needed is very limited and therefore every effort must be made to produce the best.

Recommendations from the SPC Regional Nutrition Workshop in April, 1991 indicated the need to establish a regional association of nutritionists, dietitians and nutrition educators to promote and encourage appropriate professional development, self sufficiency and training in food and nutrition in the Pacific. The association would also foster a sharing and supportive relationship between individual members, act as an advisory body to regional nutrition programmes and encourage affiliation with other relevant professional groups. This initiative is an excellent investment for future professional development and training in the region.

**Need for managerial and communication skills:** For improved efficiency and effectiveness, nutritionists need to be proficient not only in their technical capabilities but they must also possess skills in designing, implementing and evaluating community nutrition programmes. They need to become managers of nutrition and dietary services. In order to do this they need to "perform certain functions which lead other people to getting things done"<sup>12</sup>. These functions include planning, implementing, evaluating, communicating and making decisions. To perform these functions nutritionists need a new set of skills (technical, human, and conceptual).

## Existing nutrition courses

Existing nutrition training courses currently available in the Pacific include:

- **Community level non-formal training:** often carried out

in the form of national workshops organised by health departments, NGO's, Rural Training Centres, Women's Club's etc. At the regional level, this is provided through CETC and USP, utilising the SPCNT project training books. The number of non-formal training programmes (national and regional) are numerous. However there have been no formal reviews or evaluations of their effectiveness. There is no co-ordination between content, location and method training.

- **Institutional training for health and community workers:** these paramedical and community health courses emphasise nutrition both at in-country and regional levels. These are being provided by the nursing schools, medical/education training programmes (e.g. Fiji School of Medicine and Pacific Basin Medical Officers Training Programme), home economic diplomas and certificate courses (e.g. USP and Papua New Guinea).
- **Degree courses at USP with a nutrition component:** in 1980, Food and Nutrition courses increased when the Home Economic Department became part of the School of Pure and Applied Science. In 1990, USP began offering BSc degree courses to provide students with better understanding of main concepts and principles of food and nutrition in a Pacific context. The course also aims to develop skills in teaching (an area lacking in the current training of nutritionists and dietitians), developing of food and nutrition policy, nutrition planning, monitoring and quality control in the Pacific.
- **The Diploma course at FSM:** sets out to produce nutrition workers who will be able to:
  - i) plan and supervise the preparation of diets for individuals or groups.
  - ii) supervise and evaluate nutrition elements of health programmes.
  - iii) and assist in appraising the various factors related to nutrition and food problems in the community.

The programme is for 3 years with emphasis on dietetics and food service administration. The first and second year of the diploma could easily be integrated into the USP degree course as most of the subjects overlap. There are also other courses at USP which would provide a more broad-based knowledge and skills on current food and nutrition needs/priorities in the Pacific.

## Gaps in existing courses

One of the gaps in nutrition training in the Pacific is the lack of post-graduate training. With so many groups infiltrating

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Table 2. The functions and activities of a Pacific nutritionist

Functions	Activities
<b>Nutritionist</b>	- promotion of good nutrition at community, family and individual levels (primary prevention) - nutrition counselling of patients (secondary prevention) - consumer education - nutrition talks
<i>Educator and trainer</i>	- assessment of community needs - develop or collect appropriate nutrition education resources - train other health workers - nutrition education and training of communities and families - participate in other health and nutrition related programmes
<i>Manager</i>	- organisation of public health nutrition unit - plan and develop community nutrition programmes - evaluate nutrition education programmes - co-ordinate national food and nutrition committees - liaise with other health, education and agricultural sectors
<i>Resource person</i>	- participate in meetings and workshops
<b>Dietitian</b>	- interpret diets prescribed by medical officers - diet counselling of patients (primary and secondary prevention)
<i>Educator and trainer</i>	- develop diet advisory resources - train catering staff on menu planning and special diet preparations - develop training packages for catering staff
<i>Manager</i>	- organise in-service training of kitchen staff - organise dietary services - supervise kitchen staff - supervise ordering and delivery of food supply
<i>Resource person</i>	- participate in hospital ward rounds - liaise with other health and medical staff

the field of nutrition, the major issues and scientific principles are often overlooked. The nutrition specialists must be proficient in many areas. He/she must possess not only the technical skills but also managerial and administrative capabilities. There is a need to address this with new or revised courses, for example the revised FSM course, to provide a post-graduate qualification that would enable graduates to have:

- i) managerial skills in administration and policy planning and formulations.
- ii) communications skills in patient education/counselling, facilitating in-service training programmes, report writing and materials development, etc.
- iii) skills in planning, implementation, evaluation and monitoring of nutrition programmes and activities.
- iv) technical expertise in therapeutic dietetics and public health nutrition in a Pacific environment.
- v) skills in research and nutrition epidemiology appropriate for the Pacific environment.
- vi) knowledge and skills in health education methods and techniques and social mobilisation.

However, the different levels of training and competencies proposed by FSM are already offered by existing institutions and in-country non-formal courses. This is a classic case of

'expert' self interest or lack of appropriate expertise. National and regional institutions are providing the competencies proposed by FSM:

- i) Institutional (hospitals, school) caterers, cooks and kitchen hands - These would be supplied by catering schools, formal and non-formal in-country training course, etc.
- ii) Community level food and nutrition workers - These would be supplied by CETC graduates, and SPCNT Project.
- iii) Nutrition Educators - These would be supplied by health, education and agricultural extension workers trained within their particular discipline (with a strong nutrition component integrated into their courses). Also by the SPCNT project.
- iv) University trained nutritionists. USP and many Pacific rim institutions are supplying these. Pacific governments must be encouraged to utilise these services.

Therefore the FSM or any new training in the Pacific should have a different focus. The knowledge and skills must be taught and integrated into a formalised course structure in order to ensure credibility and status of the nutrition profession in the Pacific. The expectation from the nutrition specialist is twofold: clinical nutrition/dietetics and community/public health nutrition. Therefore the proposed func-

tions of a graduate trained to become a specialist in dietetics or public health nutrition should incorporate the divergence of functions. Table 2 shows the functions and activities expected on graduation from any new FSM programme.

## Conclusion

It is obvious that the training of food and nutrition workers in the Pacific has not kept pace with the changing needs of the community. Therefore Pacific oriented programmes are needed to address the special needs, diversity and smallness of the communities of the region. Many existing courses (e.g. CETC and USP) are addressing some of these food and nutrition issues, but the largest gap remains at the leadership and managerial level. This has been almost always the domain of expatriates. Therefore any new training programme should fill this void by giving Pacific nutritionists the necessary post-graduate specialist skills and qualifications. It is only when the leadership has been localised that a Pacific reality be reflected in the national and international decisions on food and nutrition. The involvement of appropriately trained Pacific nutrition specialists in the high level policy decisions and training is the path to food and nutritional independence and an end to food colonialism. New programmes like the FSM nutrition and dietetic training should aspire to this high level. The other alternative is to keep producing intermediate levels workers, continue as kitchen executive, or stay on the apron strings of other training programmes. Appropriate regionally based training with a recognised, credible qualification is the way into the future for the promotion of food and nutrition in the Pacific way.

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