



Island Food Community of Pohnpei

SCN Working Group on Micronutrients: Information Sharing Template for 2005 and Earlier Activities

Table 1: Demographic Information

<u>Name of Reporting Individual</u>	<i>Dr. Lois Englberger</i>
<u>Institution/Organization</u>	<i>Island Food Community of Pohnpei</i>
<u>Contact address (Email)</u>	nutrition@mail.fm
<u>Position</u>	<i>Research Advisor</i>
<u>Department/Section</u>	<i>Research/ Awareness/Program work</i>

Table 2: Measurement, assessment, monitoring and reporting micronutrient deficiencies:

<u>Geographic area(s) covered by this table (community, province, country, region)</u>	<i>Mand Community and Pohnpei State, Federated States of Micronesia (FSM), Pacific Islands</i>
<u>Project Name (if relevant)</u>	<i>Documentation of the Traditional System of Pohnpei</i>
<u>Supporting Agencies (if relevant)</u>	<i>Mand Community; Pohnpei Department of Economic Affairs; Pohnpei Department of Health; College of Micronesia-FSM; Pohnpei Department of Land and Natural Resources; Peace Corps Micronesia; Emory University; Centre for Indigenous Peoples' Nutrition and Environment; Sight and Life; Secretariat of the Pacific Community (SPC); Center of Disease Control and Prevention/UNICEF, Xyris Software; Japanese Overseas Cooperation Volunteers</i>
<u>Approximate # of beneficiaries</u>	<i>10,000</i>

	Micronutrients														
Activities	Iodine	Iron	Folate	Zinc	Calcium	Vit A	Vit B-12	Vit C	Vit D	Vit B-1	Vit B-2	Vit B-3	Vit B-6	Vit K	Vit E
Prevalence Assessment															
Assessment of diets of children and mothers/caretakers in 2005 comparing local and imported sources of energy, protein, fat, and vitamin A and C in random sample of households in Mand Community by two non-consecutive quantified 24-hour recalls; blood samples collected in 2005 for analysis for serum retinol of a random sample of children and mothers from Pohnpei including Mand and other villages (samples presently at CDC waiting analysis). The Pohnpei 2005 study adds to dietary study in Kosrae State, Federated States of Micronesia, reported in <i>Ecology of Food and Nutrition</i> July-Aug 2005, Vol 44(4) 307-338 and in a PhD thesis 2003 by Englberger L titled “A Community- and Laboratory-based Assessment of the Natural Food Sources of Vitamin A in the Federated States of Micronesia”															
Training/Capacity Building															
Training of local staff in dietary assessment methodology and understanding of micronutrient deficiency problems															
Monitoring and Evaluation															
Monitoring and evaluating vitamin A deficiency problems, in collaboration with local Micronesian government staff															
Analysis and Reporting															
Training of local Micronesian government and other staff in dietary assessment analysis and reporting of micronutrient deficiency problems. Preparation of comprehensive report titled “Documentation of the Traditional Food System of Pohnpei” compiling data relating to micronutrient status, the traditional food system, and information relevant to preparing an effective intervention for addressing micronutrient deficiency problems. Using this data, an intervention was initiated in September 2005 in Mand, as a model project for 2 years for addressing nutrition and health problems, in collaboration with the Centre of Indigenous Peoples’ Nutrition and Environment under a project of the International Union of Nutritional Sciences. A project is now in planning with Sight and Life for assisting in this intervention.															

Table 5: Dietary Diversity to Improve Micronutrient Nutrition:

<u>Geographic area(s) covered by this table (community, province, country, region)</u>	<i>Mand Community and Pohnpei State, Federated States of Micronesia (FSM), Pacific Islands, and two other independent Micronesian countries: Kiribati and the Republic of the Marshall Islands (RMI)</i>
<u>Project Name (if relevant)</u>	<i>In FSM: Documentation of the Traditional System of Pohnpei In Kiribati and RMI: a informal program for assessing the micronutrient content of varieties of pandanus fruit, an important staple food of Micronesia that is now neglected</i>
<u>Supporting Agencies (if relevant)</u>	<i>Pohnpei Department of Economic Affairs (including Pohnpei Agriculture); Pohnpei Departments of Health and Education; College of Micronesia-FSM; Conservation Society of Pohnpei; Pohnpei Historic Preservation Office; FSM, RMI, and Kiribati Governments; Centre for Indigenous Peoples' Nutrition and Environment (CINE); Sight and Life; Secretariat of the Pacific Community (SPC); SPC Pacific Agriculture Plant Genetic Resources Network (PAPGREN); SPC Regional Germplasm Centre; SPC Lifestyle Health Section; SPC Pacific German Regional Forestry Project; Food and Agriculture Organization (FAO) of the United Nations; New Zealand Embassy; Australian Embassy; German Embassy; Peace Corps Micronesia; KP Studios</i>
<u>Approximate # of subjects or beneficiaries for each project described</u>	10,000

	Micronutrients														
Activities	Iodine	Iron	Folate	Zinc	Calcium	Vit A	Vit B-12	Vit C	Vit D	Vit B-1	Vit B-2	Vit B-3	Vit B-6	Vit K	Vit E
<i>Dietary Policy and Advocacy</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>							

Regular messages through email network of ~150 interested leaders involved in food, nutrition/health, and dietary improvement. Focusing on three countries: Federated States of Micronesia, Kiribati, and the Republic of the Marshall Islands. Many messages further sent to the PAPGREN (Pacific Agriculture Plant Genetic Resources Network) email serve (over 500 participants) and to the Pacific Regional Medical Distribution List email serve (over 175 participants); in-country meetings and workshop trainings with health, education, agriculture, and conservation officers and specialists on micronutrient issues, in particular focusing on the “Yellow Varieties Message” to relay the concept that specific yellow-fleshed varieties of the staple foods have been found to be rich in provitamin A carotenoids and essential minerals (iron, zinc) and could contribute to an improved health, in particular, alleviation of vitamin A deficiency and anemia and also helping prevent diabetes, heart disease, and cancer.

Some of the promotional materials produced include: Pohnpei Bananas: A Photo Collection: Carotenoid-rich Varieties booklet; Pohnpei Bananas: Carotenoid-rich Varieties poster; IFCP website at <http://www.islandfood.org>; Kiribati Pandanus poster (supported by FAO, see also IPGRI and PAPGREN websites); IFCP Food Trends Newsletter Vol 1 Issues 1 and 2; IFCP brochures in English and Pohnpeian, GOING YELLOW video produced in collaboration with Sight and Life/Micronesian Seminar; on-going newspaper column in the bi-weekly Kaselehlle Press; articles in the SPC Pacific Islands Nutrition newsletter.

International publications and electronic websites have publicized the Pohnpei Bananas booklet, IFCP website and IFCP promotional activities. See IPGRI Geneflow 2005, CTA’s SPORE issue 120 December 2005. Many international publications have publicized findings of the carotenoid-rich Karat banana, including the New Scientist, Dr. Joseph Mercola’s website, IPGRI Public Awareness, UK’s Guardian, HindustanTimes, Die Welt, L’Actualite, VnExpress (Vietnam).

The SPC Regional Germplasm Centre have assisted greatly in the coordination of publication of the Pohnpei Bananas booklet and poster and in publicizing it; also PAPGREN and the SPC Lifestyle Health Section have assisted greatly in publicizing the campaign and promotional materials.

The nutrient-rich Karat banana was also included in the FAO/CINE/IDRC/CRDI Poster Set titled: International Decade of the World’s Indigenous Peoples: Celebrate Diversity in Global Indigenous Foods.

Two further unique ways used to promote the nutrient-rich Karat banana included:

- A postal stamp produced in collaboration with the FSM Postal Services/Philatelic Bureau.
- Proclamation of Karat as the Pohnpei State Banana.

Agricultural Initiatives

Genebank collection of nutrient-rich banana, giant swamp taro, and pandanus varieties

In collaboration with Pohnpei Agriculture, Pacific Agriculture Plant Genetic Resources Network, and Secretariat of the Pacific Community, IFCP has established and is maintaining a genebank collection of nutrient-rich banana, giant swamp taro and pandanus fruit varieties at the Pilot Farm, Madolenihmw, Pohnpei, FSM for conservation of rare varieties, provision of planting material, teaching purposes, and research.

Analysis of indigenous foods for nutrient content

Analysis of indigenous foods for identification of foods and varieties rich in selected micronutrients, and promotion of those with potential for alleviating micronutrient deficiency, including an awareness program. Papers published/in press include: "Carotenoid content of pandanus fruit cultivars and other foods of the Republic of Kiribati" by Englberger et al, Public Health Nutrition; "Carotenoid content of different edible pandanus fruit cultivars of the Republic of the Marshall Islands" by Englberger et al, in press in the Journal of Food Composition and Analysis "Food composition data from the Federated States of Micronesia" by Englberger et al. Micronesica 37(2)1-19, 2005.

Documentation and promotion of recipes of indigenous foods that have been neglected

A recipe booklet was prepared including photographs of the dish and the person preparing the recipe, in order to promote indigenous foods that are presently neglected and for which indigenous knowledge is being lost. The booklet is in draft form and is being used locally in the village of Mand, as part of the Documentation of the Traditional System of Pohnpei and Local Foods for Health intervention project.

Small-scale food processing

A workshop on small-scale food processing supported by FAO was held in order to help stimulate preservation of local food that otherwise might be wasted and to increase convenience, and overall greater use of local food.

Table 6: Other Public Health Intervention Links:

Geographic area(s)
covered by this table
(community, province,
country, region)

Mand Community and Pohnpei State, Federated States of Micronesia (FSM), Pacific Islands

<u>Project Name (if relevant)</u>	<i>In FSM: Documentation of the Traditional System of Pohnpei</i>														
<u>Supporting Agencies (if relevant)</u>	<i>Centre for Indigenous Peoples' Nutrition and Environment (CINE), Sight and Life, Secretariat of the Pacific Community (SPC)</i>														
<u>Approximate # of beneficiaries</u>	<i>Mand Community and Pohnpei State, Federated States of Micronesia (FSM), Pacific Islands</i>														
	Micronutrients														
<u>Activities</u>	Iodine	Iron	Folate	Zinc	Calcium	Vit A	Vit B-12	Vit C	Vit D	Vit B-1	Vit B-2	Vit B-3	Vit B-6	Vit K	Vit E
<i>Baby Friendly Hospital Initiative</i>						<input checked="" type="checkbox"/>									
Awareness-raising: newspaper articles and email network															