Revisiting the Vitamin A Fiasco:
Going Local in Micronesia

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“Vitamin A Fiasco”

- Term used in Michael Latham’s article in World Nutrition, May 2010, 1, 1: 12-45. www.wphna.org which challenges the wisdom and validity of the universal supplementation of high-dose vitamin A capsules for children 6 mo to 5 y, a huge program in 100 countries

- Rationale has been to decrease overall child mortality: article shows weak scientific basis for this

- No study has shown the proof of success of programs

- This program has also blocked food-based approaches for improving vitamin A status, as in Micronesia (limited resources, plus mentality that the capsules have dealt with the problem)
Federated States of Micronesia: population ~107,000
4 states- Pohnpei, Chuuk, Yap and Kosrae; 607 islands
This presentation shows a success story of food:

- How we first used food composition studies on Micronesian foods and identified local foods including yellow- and orange-fleshed varieties rich in provitamin A carotenoid content that could be promoted to alleviate vitamin A deficiency

- How we developed our food-based Go Local program with the aim to improve nutrition and health....and showed success in a target community
Great lifestyle and diet shift since 1970s
Traditional local foods - many varieties

Taro  Breadfruit  Banana  Pandanus

Shift to nutrient-poor imported foods – Refined rice, flour, sugar, fatty meats, processed foods

NOTE: Rice became a staple and rice contains no provitamin A!
The shift from traditional foods to imported foods and lifestyle change in FSM led to serious health problems:

**Vitamin A deficiency (VAD)** - which causes increased death and infection, and vision problems

Prior to ~1970s: no documented Vitamin A deficiency. In 2000 over half of FSM under 5 year-olds had VAD

Green leafy vegetables: we first put a major focus on these but found that they were not eaten before and were not well accepted…food for the pigs!

What was it in the local foods that protected vs. VAD?
Research since 1998: Banana (*Karat, Utin lap*) varieties with 2230 to 8508 µg beta-carotene/100 g ...compared to 30 µg beta-carotene for common banana. Giant swamp taro, breadfruit, pandanus varieties also rich in beta-carotene...plus zinc, calcium, iron, and fiber. See Englberger et al. J Food Comp Analysis 2003, 2008, 2009.
“GO LOCAL”

- A slogan introduced in FSM in the 1980s

- Refers to a food-based approach
  Local food production and consumption
  Focus on rare yellow/orange fleshed varieties

- Island Food Community of Pohnpei (IFCP) was chartered as a non-governmental organization in 2004, and took up the slogan in 2005
Why go local?

Because of Local Food’s “CHEEF” Benefits

Culture
Health
Environment
Economic
Food security
The “Let’s Go Local” approach

- **Inter-agency, community approach**

- **Research-based**: nutrient analysis + characterization of foods/ varieties, traditional food system, diet, health

- **Awareness**: what you eat affects your health, nutrient values of foods

- **Provide information**: aim for attitude, action & habit changes

- **Local food policies**: introduce at all levels

- **Conservation**: gene banks and rare varieties
Pohnpei FSM case study, Mand Community: 
Rural, ~500 people, participatory, multiple methods

Part of a global health study led by the Centre for Indigenous Peoples’ Nutrition and Environment (CINE)

2005  High intake imported nutrient-poor food
Low intake of local nutrient-rich food

2007  Significant increase in banana, taro, dietary diversity, and improved attitude in the community towards local food
Community Meetings  Container Gardening  Cooking Classes
School Activities  Drama Club
Poster series: Presenting Varieties, Flesh Colors, and Health Benefits

POHNPEN BANANAS (UHT KAN EN Pohnpe): CAROTENOID-RICH VARIETIES

Kisin mwen ehn
Pohnpe kan me kolokol
“Vitamin A” lound
Pohnpe Carotenoid-Rich Foods

Pohnpe Pandanus (Kipar/Delpw en Pohnpe/Heleheu)
Carotenoid-Rich Varieties
T-shirt               Phone cards          Postal stamps

- Newspaper, radio, email releases on activities

Video                Pen                Pencil                Sticker
Going Yellow         Pencil              Sticker
Charcoal oven

Pohnpei case study: CINE global health project - Chapter 6.


Case study & “go local” are highlighted- Chapters 4 & 5.
Partners and Support Agencies:

FSM National and State Governments
College of Micronesia-FSM, Mand and other communities
V6AH Radio, Kaselehlie Press, local NGO’s and businesses

US Forestry/United States Department of Agriculture
Secretariat of Pacific Community (SPC) - Lifestyles Health, SPC CePaCT
Center for Indigenous People’s Nutrition and Environment (CINE)
GEF Small Grants Programme - Papa Ola Lokahi
Pac.German Reg. Forestry Project - PATS Foundation
US Peace Corps Micronesia - Global Greengrants Fund (GGF)
Pohnpei State Legislature - Bioversity International
CDC/UNICEF - Sight and Life - Food and Agriculture Org (FAO)
SPC CePaCT, SPC Forests and Trees Program, SPC Lifestyle Health,
Governments of Japan, Australia, New Zealand, and Germany
University of Queensland - University of Adelaide - Emory University
University of Hawaii - University of Sydney - University of Arizona
University of South Pacific - New York Botanical Garden - Project Eden
So let’s go local!
Support food-based programs!

Thank you!!
See our website: www.islandfood.org