



# LOCAL FOOD TRENDS

## Photography Team Visits Pohnpei to Document Traditional Food System by Amy Levendusky

An exciting project documenting and promoting the traditional foods of Pohnpei is going on right now in the village of Mand, Madolenihmw. As part of the project, the "Documentation of the Traditional Food System of Pohnpei", coordinated by the IFCP in collaboration with the Centre for Indigenous People's Nutrition and Environment (CINE), Lisa and Peter Kuhnlein of KP Studios, Oregon, USA, were invited to visit Pohnpei to photograph and film the local food crops, the preparation of traditional local dishes, and the residents of Mand.

During Phase I of the project, May through August 2005, all the foods and the varieties of those foods were documented, along with food preferences, food costs, and a dietary study and assessment of the percentage of the energy derived from local compared to imported foods. Phase 2, which began in September, is a two-year intervention (using a mixture of methods) promoting those foods with the highest potential health benefits and greatest acceptability. The overall purpose of the project is to increase the production and consumption of locally grown foods and to improve health. Certain indicators of health will be assessed at the onset of the project and at the end in order to evaluate the impact of the project.



*Pohnpei airport from left to right: Dr. Lois Englberger, IFCP Research Advisor, Serako and Podis Pedrus, traditional leader of Mand, Peter and Lisa Kuhnlein, Pelihna Moses of Mand, and Amy Levendusky, IFCP.*

This project in Mand is the twelfth case study in a series of studies going on around the world sponsored by CINE. The other case studies in the project include groups in Canada, Peru, Colombia, Japan, Kenya, India, Nigeria, and Thailand. Peter and Lisa worked with the Mand community from 22-30 August 2005. During their stay, they were able to film an interview with Podis Pedrus, traditional leader of Mand, in which he discusses the past and present situation in Mand with regards to the production and consumption of local foods. They also filmed an interview with a diabetic amputee living in Mand in which he discusses the hardship of living with diabetes. These interviews are meant to show that there has been a change in the diet from the local indigenous foods to imported western foods along with changes in lifestyle that have caused an epidemic of non-communicable diseases such as diabetes, heart disease, certain cancers and also vitamin A deficiency. A Mand Working Group community meeting, the making of *mar* or preserved breadfruit, and a cooking demonstration given to Mand residents using the *Karat* and *Taiwang* bananas were also captured on film. Peter and Lisa also took

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## New Pohnpei Banana Poster Arrives

By Dr. Lois Englberger

Copies of the one and only Pohnpei Banana Poster have now arrived in Pohnpei. This poster identifies 15 varieties of carotenoid rich bananas. Epidemiological research shows that carotenoid-rich foods protect against a number of chronic diseases, including diabetes, heart disease, and certain cancers. So these local carotenoid-rich foods provide double benefits, against vitamin A deficiency

and chronic diseases.

Analysis of these 15 varieties began in 1998 with the *Karat*. All bananas were from Pohnpei and Kosrae, except one banana from Chuuk. The analyses for carotenoid content were carried out at five laboratories, the Cancer Research Center of Hawaii, Honolulu, Hawaii; University of the South Pacific, Suva, Fiji; Roche Vitamins Ltd, Basel, Switzerland;

Covance Laboratory, Madison, Wisconsin; and Food and Drug Administration Atlanta Center of Nutrient Analysis, Atlanta, Georgia.

Yellow and orange coloration of the edible portion of the banana was very much related to the amount of carotenoid contained.

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### Learn more about Bananas - buy the Pohnpei Bananas Book!



### POHNPEI BANANAS (UHT KAN EN POHNPEI): CAROTENOID-RICH VARIETIES



Grow and eat orange- and yellow-fleshed varieties for your health to help protect against diabetes, heart disease, certain cancers, vitamin A deficiency, and anemia.

Pohleik oh sakan soanigan uht kan ma nangofing pwele sewese soot mesan: soamemba en haka, soamemba en mangofing, cancers, witehwa en witehwa A, oh soatlar en rite.



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*“Those banana varieties with a deeper yellow or orange coloration had a higher carotenoid content.”*

## Film team Visits Pohnpei (article continued)

hundreds of photographs of local foods including varieties of bananas, breadfruit, giant swamp taro, pandanus, sugarcane, coconuts, local fruits and nuts, local peppers, and many more. In addition, photographs were made of the weaving of traditional baskets. Mand residents, young and old, were also captured on camera. The images captured on film and in the photographs will be combined to make a DVD, entitled “Mand Yesterday and Today”. This DVD will show the significant change in the production and consumption of locally grown foods comparing the past with the present situation in Mand. The IFCP would like to thank the people of Mand for making this project possible. We would also like to thank Peter and Lisa for contributing their professional talents to help us successfully complete Phase I, the documentation portion of this project.

## Recipe

### Three Banana Fruit Salad



8 ripe, *Utin lap* or *Karat* optional  
8 ripe, *Taiwang*  
3 ripe, *Utin Menihle* or *Utin Pihsi* optional  
10 Karertik (Kalamansi) citrus

1. Select banana varieties with lighter coloration than *Utin lap* for a contrast of colors. *Taiwang* is a very sweet tasting banana and fits well with *Utin lap*, which is less sweet.
2. Peel bananas and cut in round slices into bowl.
3. Squeeze the juice of the Karertik citrus in a glass or cup. Use a strainer to separate the seeds from the juice.
4. Pour the Karertik citrus juice over the cut banana slices.
5. Be sure to mix citrus juice well with all banana slices to prevent darkening.
6. Chill or serve directly.

## Pohnpei Banana Poster by Dr. Lois Englberger (article continued)

Those banana varieties with a deeper yellow or orange coloration had a higher carotenoid content. For example, *Utin lap* has the darkest coloration of all, and it had by far the highest carotenoid content. This means that people in the community can use coloration of the banana flesh as a rough indicator of the carotenoid content.

The purpose of the poster is to show people which varieties of Pohnpei bananas are the best to grow and eat in terms of health benefits. All 15 varieties of bananas are illustrated with close up

photographs of the bunch. Underneath each photo, the following information is listed: the Pohnpeian name; the International Classification; the amount of beta-carotene in micrograms contained in the flesh; and the color of the flesh.

The bananas are ordered according to the amount of beta-carotene contained inside the flesh, from greatest to least. The main message on the poster reads as follows, “Grow and eat orange- and yellow-fleshed varieties for your health to help protect against

diabetes, heart disease, certain cancers, vitamin A deficiency, and anemia.”

This poster was a project of the Island Food Community of Pohnpei with funding support by the Centers for Disease Control and Prevention (CDC), United Nations Children’s Fund (UNICEF), Sight and Life, Australian Embassy, the Secretariat of the Pacific Community (SPC), and the Pacific German Regional Forestry Program (PGRFP). If you are interested in obtaining a copy of the poster, please contact Amy Levendusky at 320-7523.

## Mand Community Makes Mar Together by Dr. Lois Englberger

Working together and sharing are cornerstones of the traditional food system of Pohnpei. On 24 August, 2005, the Mand Community Working Group led by Kiped Albert joined together to prepare a number of Pingelapese delicacies using the raw preserved breadfruit, *mar*. This was held at the home of Francisco and Ramona Rosario in Mand.

The preparation of the Mand recipes, as well as the preparation of a traditional earth oven, was filmed and photographed by the professional photographers Peter

and Lisa Kuhnlein. Their visit to Pohnpei from 22-30 August, 2005, was to conduct a visual documentation of the traditional food system of Pohnpei as part of the project led by the Island Food Community of Pohnpei in conjunction with local agencies and the Centre for Indigenous Peoples’ Nutrition and Environment.

There are some distinct differences in the Pingelapese and Pohnpei methods of preparing *mar* recipes, including the thorough washing of the raw breadfruit mixture for making Pingelapese

*mar* without the sour taste. Notice there is also a spelling difference between Pohnpei and Pingelapese preserved breadfruit!

Several recipes of *mar* mixtures were prepared: washing out the sour substances and adding banana and coconut cream (see recipe below); or preparing with grated coconut (either *Mar Kamwer* or *Mar Mahn*). *Mar Kamwer* is made with about 4 cups of rinsed raw *mar* and 2 cups grated coconut, and is then baked. *Mar Mahn* is made with about 4 cups of unrinsed raw *mar* (to give the sour

taste) and 2 cups grated coconut.

The most commonly prepared Pingelapese *mar* product is made with a proportion of about 4 cups of rinsed raw *mar* and 3 cups of coconut cream, and these days processed sugar is added. However, for health benefits it is advised to avoid this and to use either coconut juice or the water from mature coconut for sweetness.

What delicacies, let’s eat more *mar*!

(article continued on page 4)



# New FSM Postal Stamps Feature Karat

By Dr. Lois Englberger

Through efforts of the FSM Philatelic Bureau of the FSM Postal Services and support by the Island Food Community of Pohnpei an exciting new issue of Karat banana postal stamps has now arrived. This commemorative issue was released on October 16, in conjunction with World Food Day, to create awareness of the high health and cultural values of this local food. A First Day of Issue Ceremony, organized by Mr. Bethwel Henry, FSM Postmaster General, took place on Friday 14 October at 3 p. m. at the PMA Studio, with Lt. Governor Jack Yakana presenting the main address. Special tribute was given to the late Mr. Sintaro K. Ezra, who was instrumental in developing the series. The issue was developed by the Inter-Governmental Philatelic Corporation of New York.

Karat banana has been common in Micronesia for centuries and is still well-known in Pohnpei as the traditional infant food. It is known as Uscr Kulasr in Kosrae, Taanaan in Chuuk, and Arai in Yap. A French scientist came to Kosrae in 1824 and documented that it was the most common banana in Kosrae at that time. However, it has become rare in all of Micronesia in recent years.

The FSM Karat stamp issue features four different stamps at commonly used denominations: 4 cents, 10 cents, 22 cents, and 37 cents. The photos, contributed by Dr. Lois Englberger and Mr. Luigi Guarino, demonstrate the deep yellow-orange color of Karat flesh, a Karat bunch and plant, and a mother feeding her child with Karat banana. It is very fitting that the person presented in the mother-child photo is Ms. Mihne Pretrick, who wrote a paper on the importance of Karat banana and presented it at the Pacific Science Symposium in Hawaii in 2004. She is also the granddaughter of Dr. Eliuel Pretrick, who has done much to promote Karat and healthy island foods. This special message is printed on each stamp sheet: "Karat has a very unusual texture for a banana. It is very smooth, and thus perfect for babies as their first food to complement breast milk, at around six months."

Analyses on ripe Karat were initiated in 1998, finding that it is a rich source of the precursor to vitamin A, beta-carotene, up to 100 times higher than levels in white-fleshed bananas. It also contains other carotenoids. Further research showed that Karat contains high levels of riboflavin (Vitamin B2), niacin (another B vitamin), and alpha-tocopherol (Vitamin E), all essential for good health. Consuming Karat can help protect against diabetes, heart disease, cancer, vitamin A deficiency disorders, and weak blood (anemia).

So buy the unique Karat stamps for adorning your next letter or card and help create more awareness of this very valuable and unique Micronesian food! ... and if you have land, plant Karat, and help provide Karat for your family and others.



## “Going Yellow” Film Promotes Local Food by Amy Levendusky

The Micronesian Seminar completed filming for the “Going Yellow” drama/documentary October 2005, as a joint project with IFCP and Sight and Life. Sight and Life is a humanitarian organization based in Switzerland which aims to combat all forms of vitamin A deficiency and to work for a healthy nutrition for all.

“Going Yellow” focuses on raising public awareness about the problem of vitamin A deficiency and other nutritionally-related

diseases, such as diabetes, heart disease, and cancer, through an exciting combination of scientific information on food and health, humor and entertainment. Growing and eating yellow varieties of local foods are emphasized as they help to protect against these health problems. Father Fran Hezel and Eugenia Samuel developed the script with support by IFCP and Sight and Life, and Eric Steffen and Eugene Augustine were responsible for coordinating the cast and for filming the scenes. The cast in-

cludes: Mina Phillip (Grandma), Anida Defang (Mom), Wehns Billen (the father), Franny Peter and Maria Movick (the daughters), Mark Pangelinan (the son), Eugene Pangelinan (newscaster), Narlie Santos as Miss Pacifica 2005, and Doug Hastings as Mr. Bubba, the Texan.

The story unfolds with a televised News Report on vitamin A deficiency and other serious health problems in Micronesia, which are related to the shift to consuming refined imported

foods. A family is watching the T.V. program which then shows a young beauty queen, Miss Pacifica. She explains she eats Karat and other local foods to help keep her strong and beautiful. This encourages one of the daughters to start eating better and leads into a drama that humorously explores Micronesian eating habits. The family, who is used to eating mainly rice, ramen, corned beef, and turkey tails, slowly learns to add more local



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*Promoting healthy home-grown foods on the island of Pohnpei.*

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#### IFCP FOOD TRENDS Newsletter

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## “Going Yellow” Film Promotes Local Foods by A. Levendusky

foods to their diet. A cast of goofy characters, including a grandmother who cries (in a comical and nostalgic way) because she misses the local foods that used to be so plentiful, helps make the serious issue of nutrition entertaining and fun.

Watch for special appearances by Uncle Domingko, a farmer who still grows all his own food, and Mr. Bubba, a Texan who has flown all the way to Micronesia just to see the famous Karat banana!!! He meets the family and joins them to celebrate “World Traditional Food Day.” At the end all “go local”, and happily eat breadfruit, Karat, pandanus, taro rolls, and other local food delicacies. Other scenes in the video show activities of the Island Food Community of Pohnpei and local agencies, International Women’s Day, Pohnpei Cultural Day, the Youth to Youth Program, the Mand Community local food project, and traditional island food ceremonies.

The video will be aired on the local T.V. station, channel 6 and a number of copies have been provided throughout Micronesia for public use. Copies are also available on tape or DVD for \$10 each from MicSem and some Pohnpei shops.

IFCP extends a warm thank you to Sight and Life for initiating and for funding the project. A special thanks to Micronesian Seminar for producing the film. We also would like to extend our gratitude to all the cast members for volunteering their precious time to make the film a success. Special thanks also to Mr. Gibson Santos who wrote the feature song “Let’s Go Local” which is sung by his daughter Nazarene, and to the Mercedarian Sisters and Ellen’s Market for the film sites. And last but not least, thank you to Dr. Lois Englberger for sharing her knowledge on vitamin A deficiency and nutrition for an accurate depiction in the film and for providing all the fresh local foods, whenever required, throughout the period of filming.

## Mand Community Makes Mar Together

By Dr. Lois Englberger (article cont.)

### Mar Pikipik dol Wis

#### Ingredients:

- 4 cups of preserved breadfruit mixture (mar)
- 4 cups pounded ripe banana, preferably a sweet one as *Taiwang*, *Utin* *Pihi*, or *Kaimana*
- 3 cups coconut cream

**Note: No sugar is needed because of the natural sweetness of the ripe banana. For health reasons, it is best to avoid adding processed sugar.**

#### Method:

- Put the mar in a clean cloth, thoroughly rinsing, washing, and squeezing. At the end, squeeze out all of the water.
- Knead the washed mar mixture on a strong hard surface, such as a sakau rock, until it has a sticky dry texture.



Ramona Rosario, of Mand, Madolenihmw, holding a basket of preserved breadfruit for making mar.

- Add the banana and coconut cream, thoroughly combining.
- Shape into a loaf, about 5 inches wide and 12 inches long, place on banana leaves and wrap up tightly.
- Bake in oven or uhmw for about 1 hour until done and serve.