

Unique Foods of the Pacific: The Pacific Island Food Composition Tables

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Setting the Scene

- South Pacific region 12 countries
- Population range 1,200 – 1,000,000
- High volcanic islands and coral atolls
- Large number of endemic species and unique foods, especially green leaves, nuts and some fruits
- Multiple cultivars of taro, cassava, bananas, yams, sweet potatoes, breadfruit
- Asian dietary influence, now Western

History of Pacific Food Composition Tables

- 1950s Analysis by SPC (South Pacific Commission)
- 1960s Fiji School of Medicine
 - “Food Compositional Tables for use in the South Pacific” – 200 foods, borrowed values
- 1970s Concern about NCD increase
- 1980s Tables reprinted – work on new table
- 7 Publication of First Edition of “Pacific Island Food Composition Tables”
- 2004 Publication of Second Edition

Characteristics of Pacific Food Tables

- Over 1,000 foods
- About 150 locally analyzed
- 20 categories of food
- Mainly raw, single foods
- Energy, moisture, protein, fat, av. Carb, TDF, beta-carotene eq., retinol, ret. eq., thiamine, riboflavin, niacin, B₁₂, vit C, vit. E, cholesterol, 8 minerals
- Food Works software for diets, recipes

Uses of Data

- Food charts (starch in staples, iron and protein in green leaves, vitamin C in fruits)
- National Nutrition Surveys (1994, 2004)
- Low income diets
- Nutrient labels
- Promote superior cultivar e.g. carotenes
- Health food project – Fat in tinned meat

Nutrient Laboratory Development

- (1977-1985) proximates, minerals
- (1986-1994) carbohydrates, vitamins (USAID)
- (1994-2000) vitamins by HPLC, QA (ACIAR) local foods
- (2000-2005) international accreditation (FAO) missing foods and nutrients, contaminants
- 2005-on folates, trans fatty acids

Examples of Green Leaves

	Protein (%)	Fe (mg/100g)
fern	3.4	4.0
taro	5.8	2.8
tropical spinach	3.4	1.5
drumstick	7.6	2.7
Eng. cabbage	1.3	0.6
Ch. cabbage	2.2	1.0
amaranth	3.7	4.9

Examples of Bananas

	β -carotene eq. $\mu\text{g}/100\text{g}$)
Utimwahs	8100
Karat Buchw	2500
Mangat	3612
Taiwang	1314
Utim Menihle	128



Uti m wahs - 14

Karat Puehu - 10

Mangat - 9

Talwang - 6

Uti n Menihle - 1

Yolk Colour Fan



Cawaki (Sea urchin)
(Source: J.Seeto)



Dairo (Sea Cucumbers)
(Source: J.Seeto)



Nama
(Source: J.Seeto)



Veata
(Source: J.Seeto)



Yaga
(Source: J.Seeto)



Lumi



Kuita (Octopus)
Source: J. Seeto.