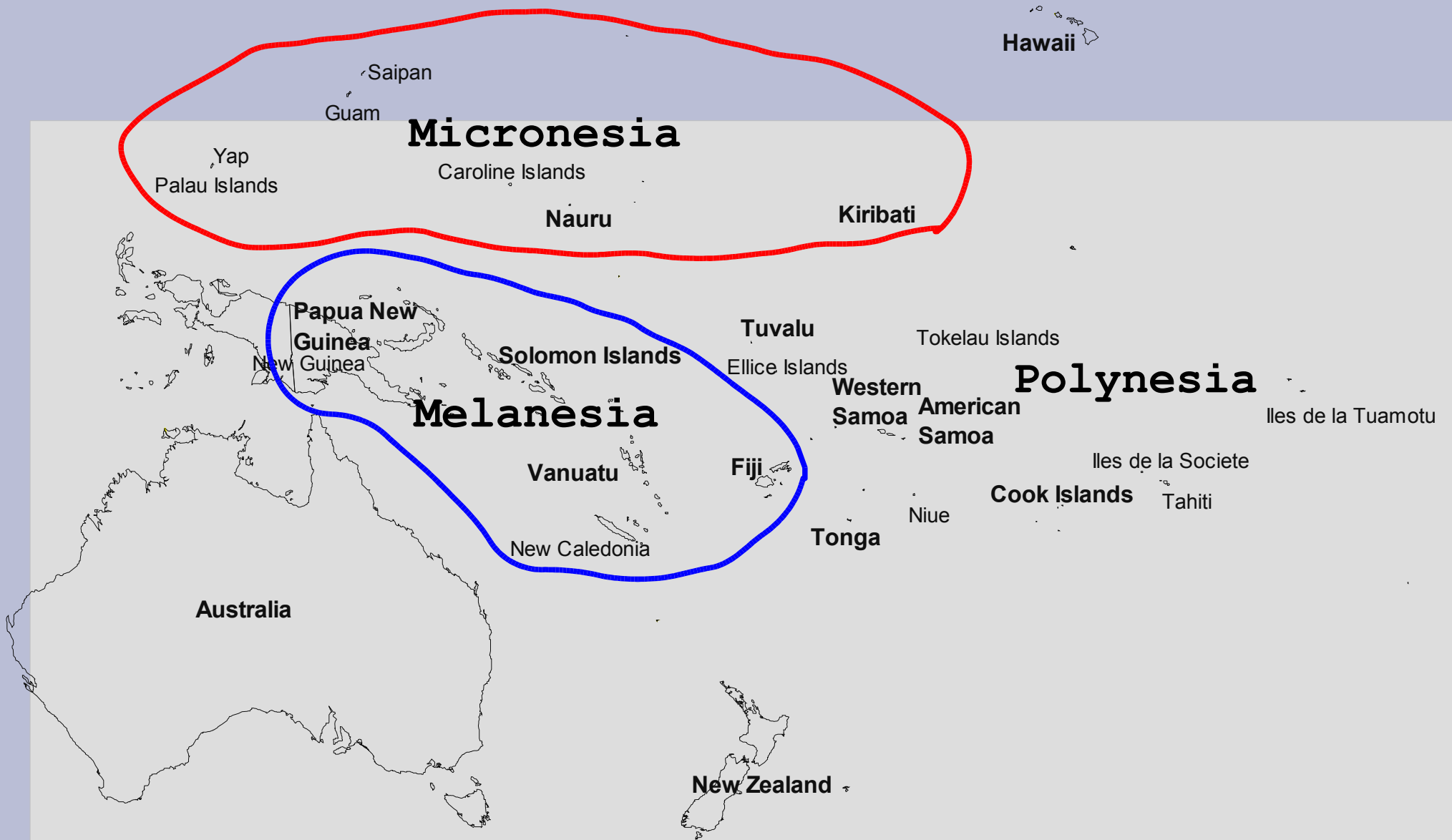


People's health in Oceania

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Oceania



Regional Characteristics

Region	Melanesia (1): PNG and Solomon Islands	Melanesia (2): Vanuatu, Fiji, New Caledonia	Polynesia	Micronesia
First Human Arrival	60000~40000 yrs ago	5000~2000 yrs ago	3000~2000 yrs ago	3500~2000 yrs ago
Majority	Non-Austronesian	Austronesian	Austronesian	Austronesian / Core Micronesian
Christianity	Late	Middle	Early	Early
Modernization	Late	Middle	Early	Early
Geology	Volcano	Volcano	Coral	Volcano / Coral
Anopheles	exists	partly exists	none	none

Statistics (Source: WHO, 2001)

Region / Items	PNG (Melanesia1)	Samoa (Polynesia)	Palau (Micronesia)
GDP per capita (Intl \$)	3567	3328	7559
Life expectancy at birth (m/f)	58.4 / 61.3	67.0 / 69.9	66.9 / 70.5
Healthy Life expectancy (yr) at birth (m/f)	47.9 / 51.8	56.0 / 59.5	55.5 / 59.9
Child (<5 yr) mortality per 1000 (m/f)	100 / 93	24 / 19	24 / 22
Per capita health expenditure (\$)	31	81	263
% Health Expenditure per GDP	4.1	6.6	6.4

Leading causes of death

	PNG1977 (Melanesia1)	Fiji 1978 (Melanesia2)	Samoa 1980 (Polynesia)	Palau 1999 (Micronesia)	Guam 1999 (Micronesia)
1	Respiratory 27.7%	Circulatory 29.4%	Circulatory 32%	Circulatory 32.1%	Heart disease 28.3%
2	Infection 24.4%	Undiagnosed 17.4%	Respiratory 11%	Neoplasms 16.8%	Neoplasms 14.8%
3	Undiagnosed 13.5%	Respiratory 8.9%	Accidents 11%	Endocrine, metabolic, etc. 8.4%	Cerebrovascular 9.4%
4	Perinatal 6.0%	Perinatal 7.4%	Neoplasms 10%	Ill-defined 7.6%	Suicide 5.0%

Melanesia

- People in PNG and Solomon Islands villages
 - Mostly suffering from ARI, malaria, filariasis, typhoid, hookworm infection, HB.
 - G6PD deficiency is frequently seen in malaria endemic area.
 - There were some endemic diseases. Kuru in PNG highland (Fore), endemic cretinism, etc.
- People in PNG towns and Fiji, Vanuatu and New Caledonia
 - Cardiovascular / Cerebrovascular disease are prevailing. Diabetes / Obesity are frequently seen.

Polynesia / Micronesia

- Cardiovascular / Cerebrovascular disease and Cancer mortalities are high.
- Diabetes / Obesity / Hypertension are frequently seen especially in town: relating with Westernized lifestyle coupled with “thrifty” genotype.
- Malaria is absent. Filariasis, Dengue, and some other mosquito-borne diseases are still present: Vector mosquito differs.

Malaria

- Only seen in PNG, Solomon Islands, Vanuatu due to geographical distribution of *Anopheles* mosquito. PNG mountainous area higher than 2100 m a.s.l. has no malaria due to the lack of *Anopheles* mosquito.
- Hypoferremia was seen in some of the Gidra-speaking population, despite that they had extraordinary high iron intake (particularly cycad seeds).
- Mosquito-net is not readily acceptable partly because community meeting after sunset is necessary in cultural context.
- Deforestation brought new water pools for larva/pupa, to increase *Anopheles* mosquito and malaria epidemics (e.g., Malaita, Solomon Islands).

Diabetes / Obesity

- Much more seen in Polynesia / Micronesia than in Melanesia.
- “Thrifty” genotype (Neel, 1960) selected by frequent starvation / lower ambient temperature during ancient travels expanding over Pacific islands.
- Westernization brought
 - lower activity in daily life
 - high fat and high energy diet

CNS degeneration

- Like Kuru (Fore), CNS degeneration is sometimes seen in Oceania.
- One possible etiology is the complex of
 - excess Mn and Al intakes (from soils)
 - shortage of Ca, thiamine, vitamin C intakes
 - genetically metal accumulative tendency