

# Relationship Between Obesity and Life Expectancy in Palau and Other Pacific Islands

## I World Obesity

- 1.9 billion people who are 18 years old or more are overweight (BMI of 25 or more) and 650 million of them are obese (BMI of 30 or more).
- Obesity is a cause arteriosclerosis which then cause cardiovascular diseases such as stroke and myocardial infraction.
- Obesity is caused by high calorie, protein and carbohydrate food.

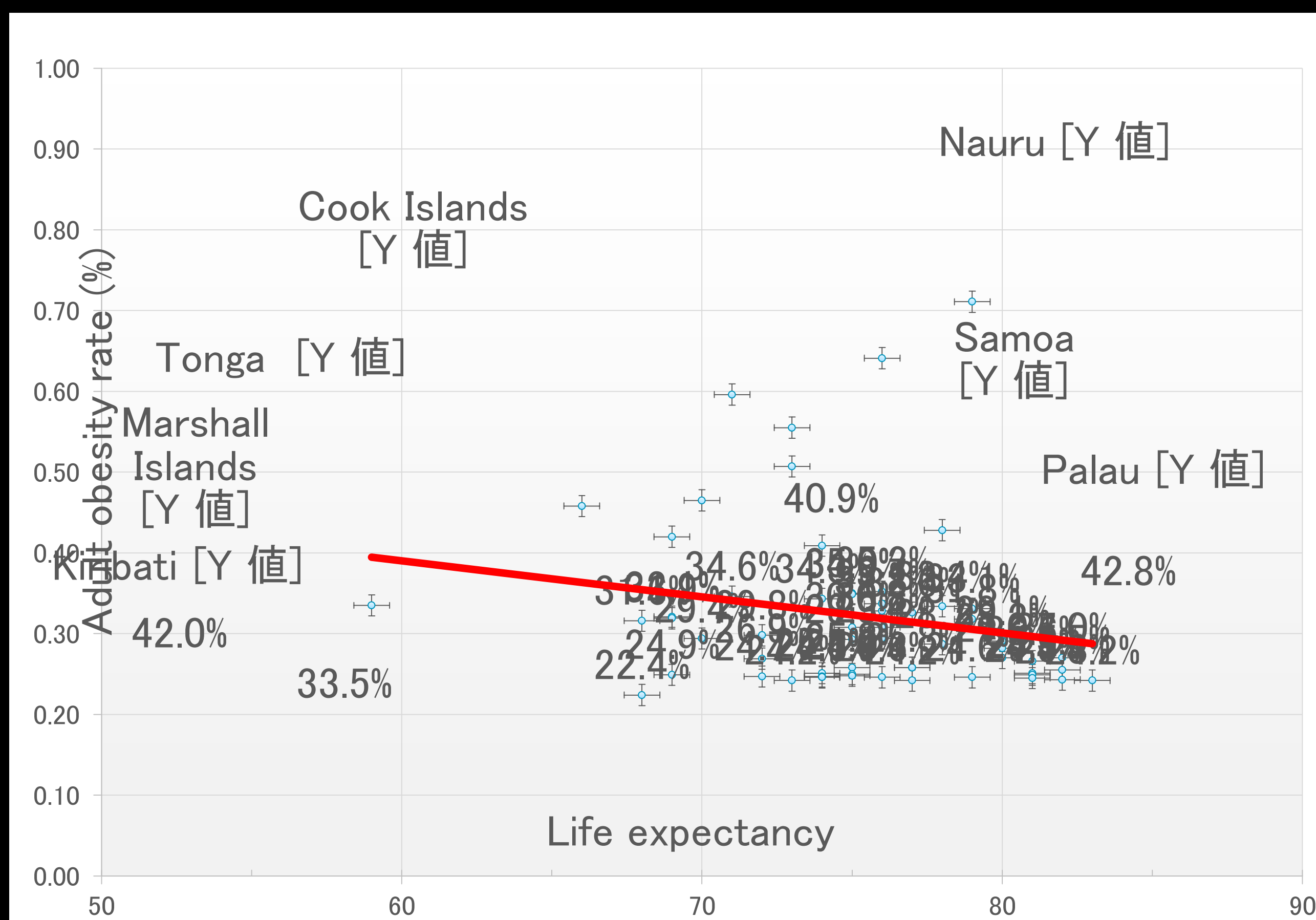


Figure 1 correlation between adult obesity rate and life expectancy in 50 obesity countries

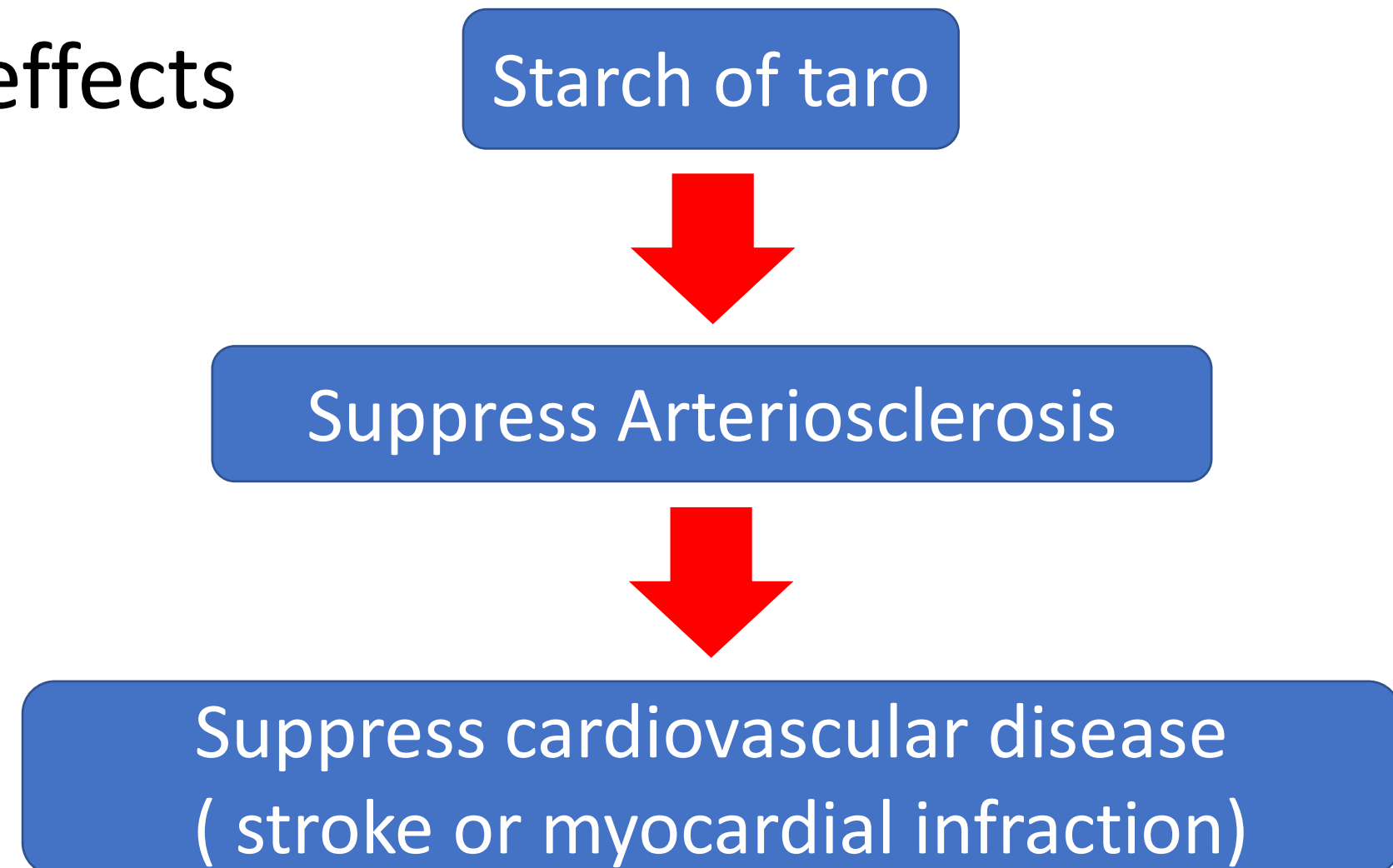
## II Purpose and Background of Study

- Palau and other pacific islands didn't show a correlation between the adult obesity rate (2014 WHO data) and life expectancy (2008 WHO data)
- Uncover the reason why life expectancy did not decrease with the increase of obesity rate in Pacific islands.
- Make a model of lifestyle habits and contribute to the prevention of decrease caused by life style habits diseases in pacific islands.

## III Effects of Taro Consumption

- Reduces plasma cholesterol composing 55% of blood.
- Suppresses liver hypertrophy.
- Suppresses arteriosclerosis.

Chart1: System of taro's effects



Naoko Gejima, Eri Soeda, Naoko Hirota, Ayae Takazawa, Yuko Shimada, Junko Izawa, and Setsuko Tokuda.(2004). Effects of Starches from Four Kinds of Root Crops on Plasma Cholesterol Levels in Rats, Japan Society of Nutrition and Food Science 57: 141-145 (2004)

## IV Oceanian Staple Food: TARO

- Water 70~80% • Carbohydrate, starch 18~24%

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## V Comparing cardiovascular rate of the death between Palau and other countries

- Deaths caused by chaotic disease in Palau are cardiovascular diseases 37%, cancer 9%, chronic respiratory diseases 7% and diabetes 5%.
- In Palau the rate of cardiovascular disease is low.
- It is considered the low rate is due to the consumption of taro.
- Among the countries in which taro is regularly consumed countries with a wider obesity rate also have a high cardiovascular disease rate.
- It is not possible to prevent diseases caused by life style completely by taking in taro.
- However , Oceania islands' cardiovascular diseases rate is low despite its obesity rate being high.

Table 1 the cardiovascular rate in chaotic disease death

	Adult obesity rate (%)	Life Expectancy (years)	Cardiovascular Disease among deaths (%)
Nauru	71.1	79	44
Palau	50.7	73	37
Marshall	46.1	70	36
Kiribati	45.8	66	20
Kuwait	42.8	78	38
Jordan	34.3	74	32
Egypt	34.6	71	42

the impact of chronic disease

[http://www.who.int/chp/chronic\\_disease\\_report/en/](http://www.who.int/chp/chronic_disease_report/en/)

## VI The limitation of my study

- There are a lot of factors which could effect health in Pacific islands such as smoking ,alcohol and exercise. However, I focused on just food habits.
- There is little data on Pacific islands and the date is low quality. It was hard to keep to the focus of my research.

## VII Acknowledgement

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