Salt Intake, Nutrition and Health Status on Tongan Adolescence in The Process of Urbanization

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## Summary

64 subjects aged from twelve to nineteen years old were investigated in The Kingdom of Tonga. We obtained information on dietary salt intake and urinalysis of 3 males and 14 females living in 'UIHA area (rural area) and 20 males and 27 females living in KOLOFO'OU area (urban area).

- 1) Dietary salt intake were analyzed by means of 24 hour recall questionaire. Dietary salt intake estimated 0.3g male, 1.7g female in 'UIHA area and 6.7g male, 4.5g female in KOLOFO'OU area('UIHA < KOLOFO'OU: p<0.001).
- 2) Na/K ratio of second morning urine meaned 0.10 male, 0.90 female in 'UIHA area and 1.03 male, 1.16 female in KOLOFO'OU area ( 'UIHA male < KOLOFO'OU male :p<0.001 ).
- 3) Dietary salt intake per 1000kcal energy intake meaned 0.1g male, 0.7g female in 'UIHA area and 1.8g male, 1.6g female in KOLOFO'OU area ('UIHA male < KOLOFO'OU male : P<0.001).
- 4) The subjects took over 2.0g dietary salt showed the following compare with the subjects took dietary salt less than 2.0g.
  - a. They took much energy and other nutrients.
  - b. High nutritional unsuitable score was distributed.
  - c. They took smaller starchy roots, green vegetables, coconut cream, meat and cooking salt. On the other side, they took much cereals and tea or coffee.
  - d. They got dietary salt from mainly processed food ( bread, butter, corned beef etc.)
  - e. They took small number of dishes cooked in their own home.
  - f. They meaned one meal with starchy roots per day and twice meals with bread per day.
  - g.No difference found on food habit (frequency of intake of common foods ) and body and health status.