# Risk factors for dietary diversity in Kiribati, a Pacific Island country

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### Introduction

- The double burden of malnutrition is highly prevalent in the south Pacific region, with both undernourished children and overweight or obese adults coexisting in the same population
- Dietary diversity, defined as the number of unique foods consumed over a given time period, can be a useful indicator of household food security.

#### Aim

• To identify household characteristics associated with dietary diversity in Betio, Kiribati.



#### Methods

- Data were collected from 61 households in Betio, the largest urban centre in Kiribati.
- Interviews with a household member were conducted by a trained fieldworker in the local language
- Household demographics and food consumption information was collected and a dietary diversity score (range = 0-12) was calculated for each household
- Ordinal logistic regression was performed to identify predictors of low dietary diversity scores.

#### Results

- Mean overall, household dietary diversity was 6.1; SD 1.13.
- 72% of households were headed by males,
- 57% of households accessed fish from markets 26% of participants reported low confidence in accessing sufficient, healthy food in the future.
- Households categorized as having low or medium dietary diversity scores rarely consumed nutrient rich food sources such as eggs, legumes/nuts, roots/tubers and meat/poultry/offal.

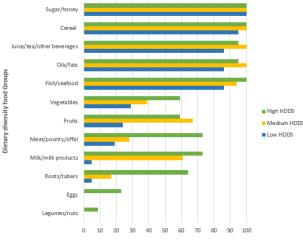




Figure: Proportion of households consuming individual food groups by household dietary diversity status (HDDS)

References: Charlton et al 2016 BMC Public Health, 16, 285

Table: Household predictors of higher household dietary diversity scores

Risk Factor	Multivariate Odds Ratio (95% Confidence Interval)
Gender of Head of Household Male Female	Ref 4.81 (1.34, 17.30)
Number of Years living in Betio, Kiribati < 1 year ≥ 1 year	Ref 0.91 (0.865, 0.963)
Household raising livestock No Yes	Ref 21.91 (2.63, 182.67)

## **Discussion/Conclusion**

- Dietary diversity in an urban centre of a remote Pacific Island country is low suggesting households are at risk of both food and nutrition insecurity.
- Targeted interventions are required to improve not only access to but availability of safe and nutritious diets with greater diversity in this small Pacific Island that has few natural resources.

