#### Dietary Salt Intake in Suburban Community of Nepal: Findings from a 24-Hour Urinary Sodium Excretion



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## **Background and Objective**

- Most people consume nearly double the recommended amount of salt, averaging 9–12 grams daily, despite the World Health Organization's suggested <5.0 grams per day.
- A systematic review and meta-analysis show that consumption of daily recommended salt intake would lower blood pressure BP by 7/4 and 4/2 mmHg in high blood pressure and normal blood pressure subjects respectively.

### **Background and Objective**

- Despite the high prevalence of hypertension and CVD in Nepal, there is insufficient evidence regarding actual salt intake using robust methods like 24-hour urinary sodium collection.
- Thus, the main objective of the study is to accurately assess the dietary salt intake in a suburban Nepali community by measuring 24-hour urinary sodium excretion.

## Methodology

- This cross-sectional study was conducted in Dhulikhel municipality of Bagmati province Nepal.
- Anthropometric data, and blood pressure, were collected along with a semi-structured questionnaire related to daily salt consumption.
- All inclusion criteria matched participants were well instructed about 24hours urine collection procedure.



#### Methodology Cont...



- Collected 24-hour urine sample was transported immediately to Dhulikhel Hospital-Kathmandu University Hospital (DH-KUH).
- Descriptive statistics were employed to summarize participants' characteristics and estimated salt intake levels.
- Categorical variables are reported as number (%), while continuous variables are expressed as means ± standard deviations.





#### Results



- A total of 309 participants (197 female and 112 males) met all the criteria for 24-hours urinary sodium measurements.
- Mean age was 49.9 ±15.5, Mean urine volume 1905.1 ± 688.8 mL in 24 hours.
- Mean of estimated daily NaCl intake was 9.55 ±3.2 g/day.
- 97.1% of participants consumed >5gm of salt/day

#### Results

- There was statistically significant (P=0.0005) difference between daily salt consumption in different ethnic groups and dining out habits.
- 24 hours salt consumption by female and male participants was 9.2±3 and 10.2±3.6 respectively



#### Conclusion



- The study reveals that the average daily salt (NaCl) intake in this suburban Nepali community is nearly double then the recommended daily intake.
- Immediate action on community-based awareness, interventions and policies are essential to reduce salt consumption and the CVD burden.





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# **Thank You**

