

# **Salt sales survey: a simplified method to evaluate population salt reduction programs**

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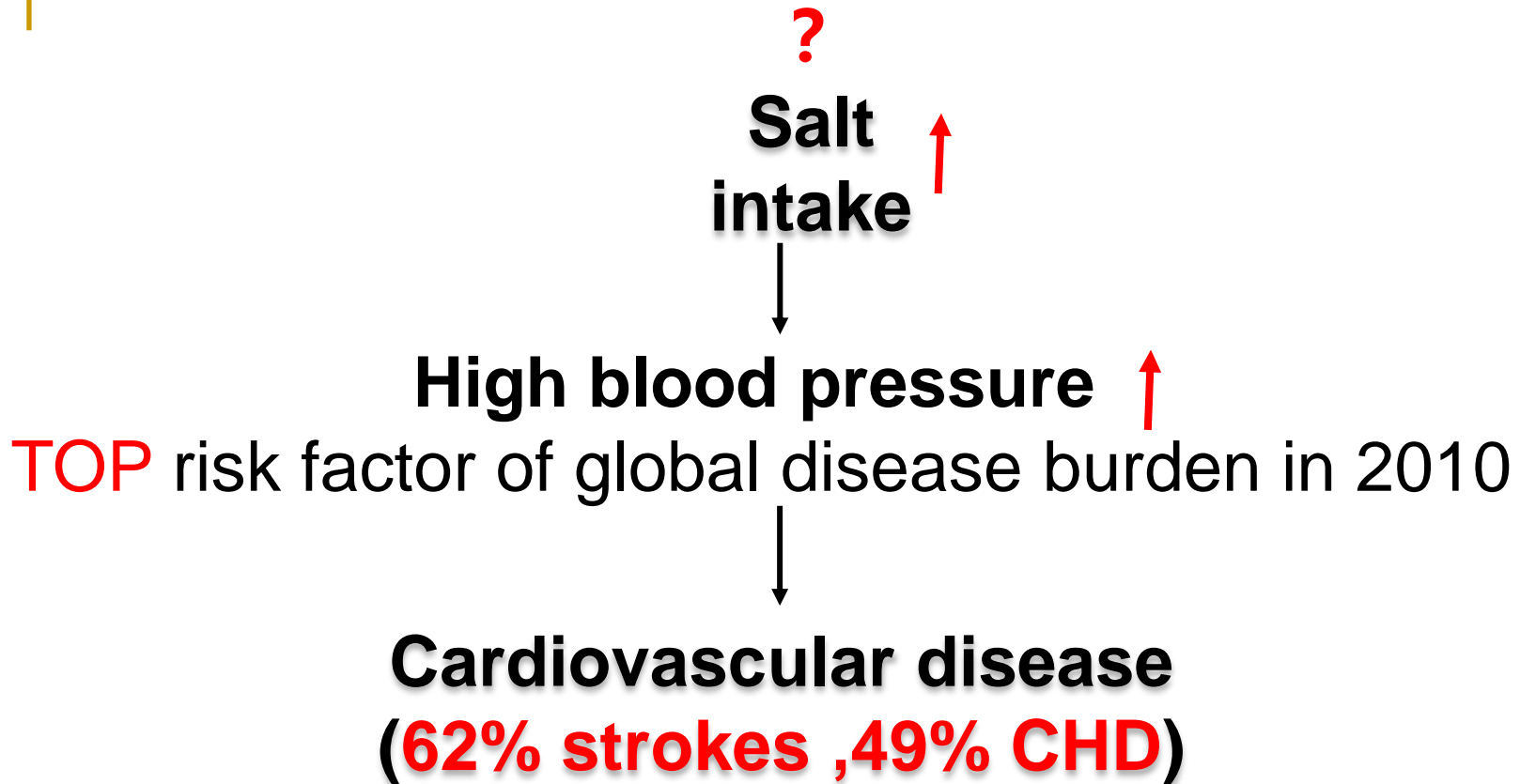
School of Public Health, Peking University

**5<sup>th</sup> August 2015, Valencia, Spain**



**“Cocaine? Thank God - I thought you were doing salt.”**

# Background



# Background

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- 24



12-14g/d)

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- “Cocaine? Thank God - I thought you were doing salt.”

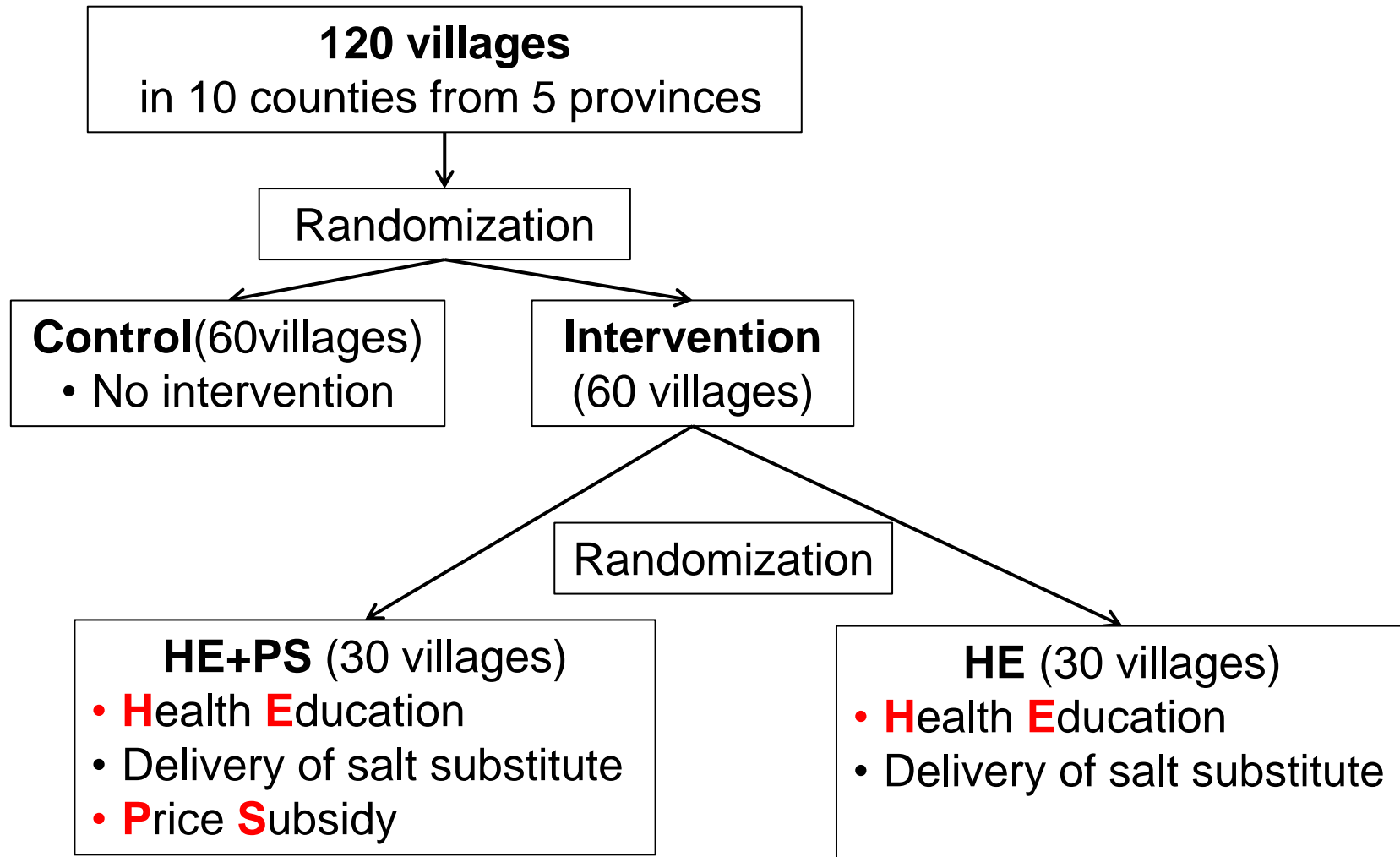
- ×: High participant burden; costly;

- ×: Completeness?

# Aim

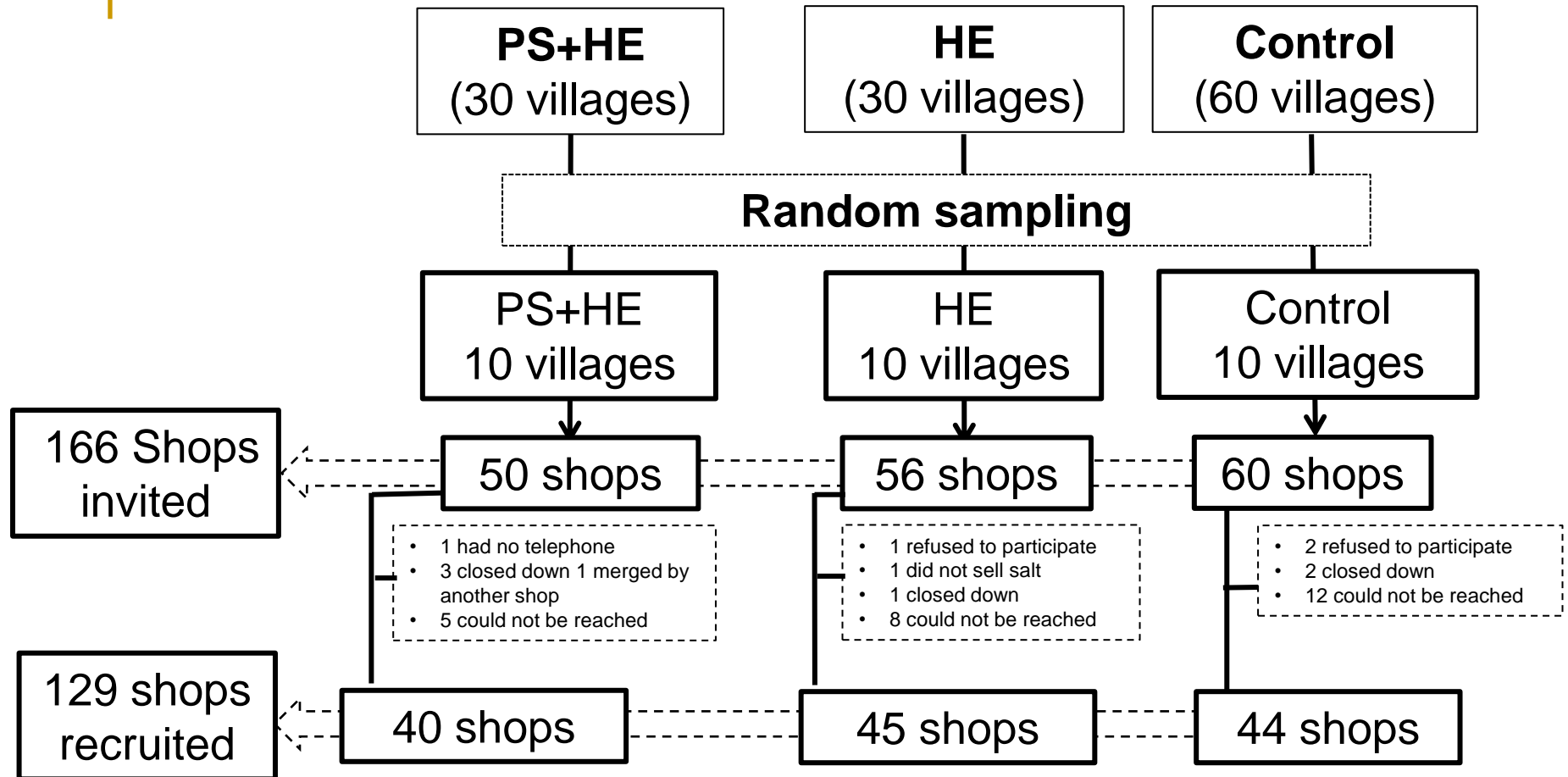
**To determine whether a salt sales survey could serve as a simplified method to evaluate community-based salt reduction programs**

# CRHI-SRS main study design



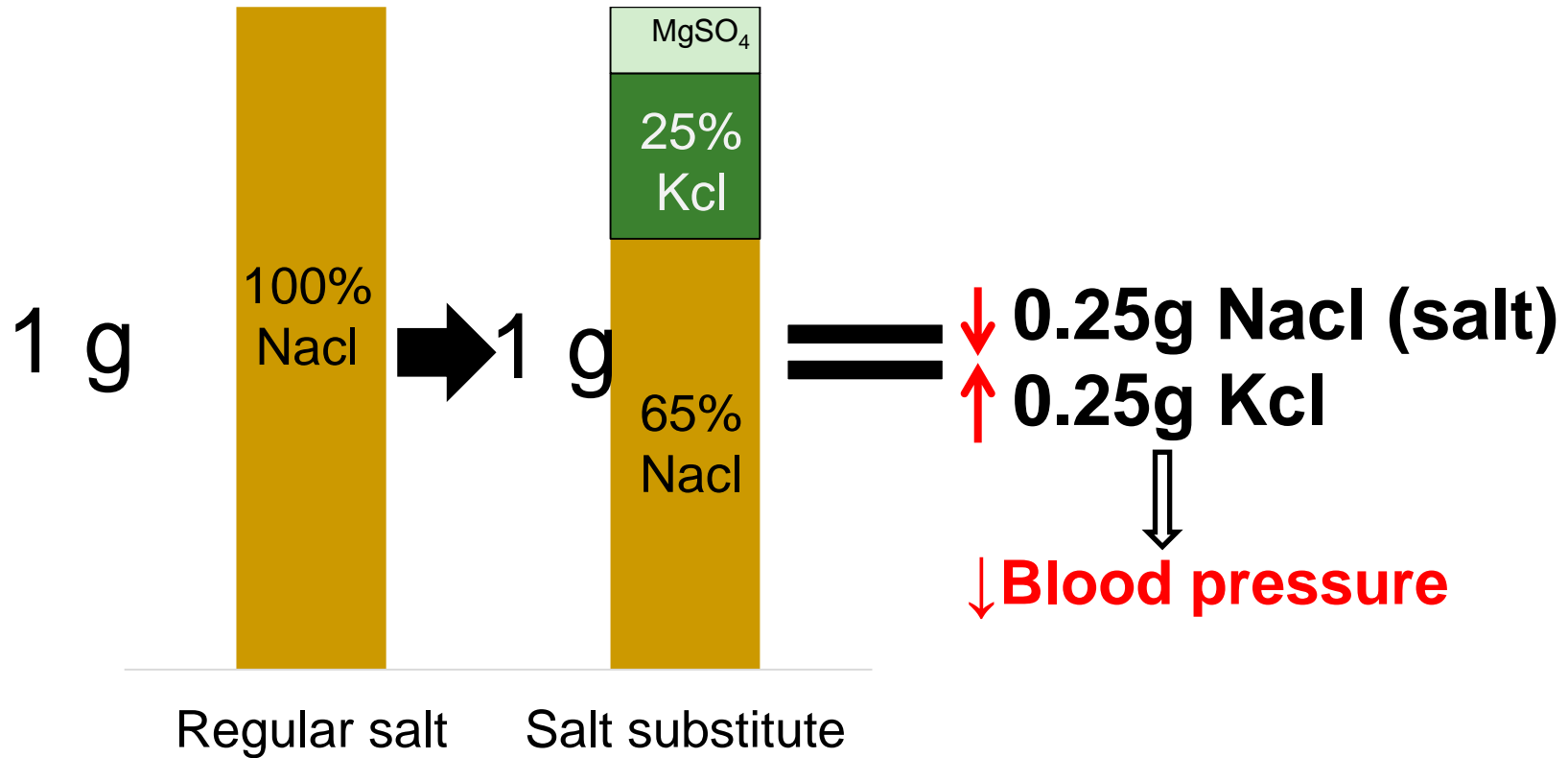
≈2400 individuals collected one 24h urine collection at the end of the trial

# Salt sales Survey



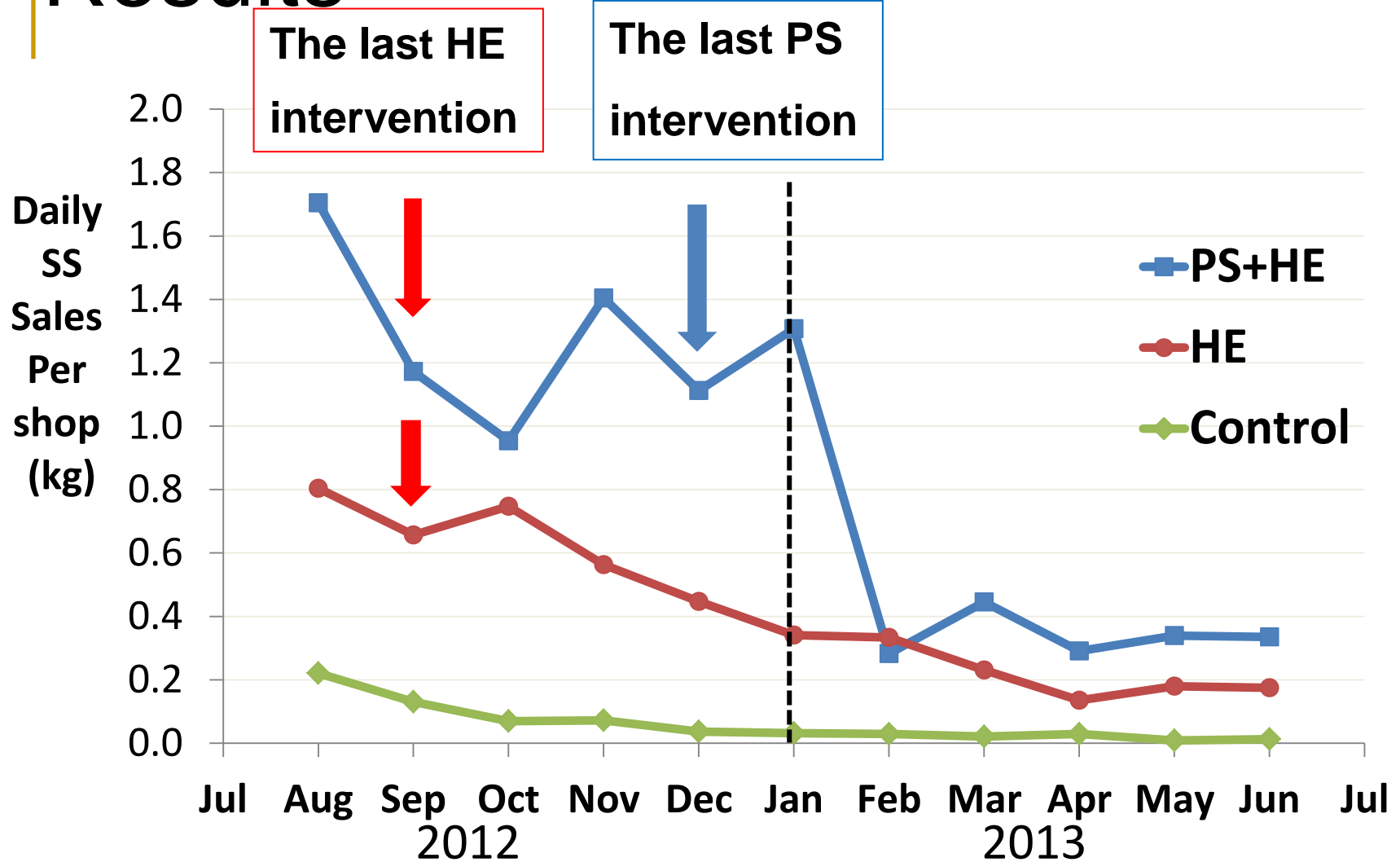
**An independent researcher called the shopkeepers monthly to collect salt sales data**

# Regular salt vs Salt Substitute



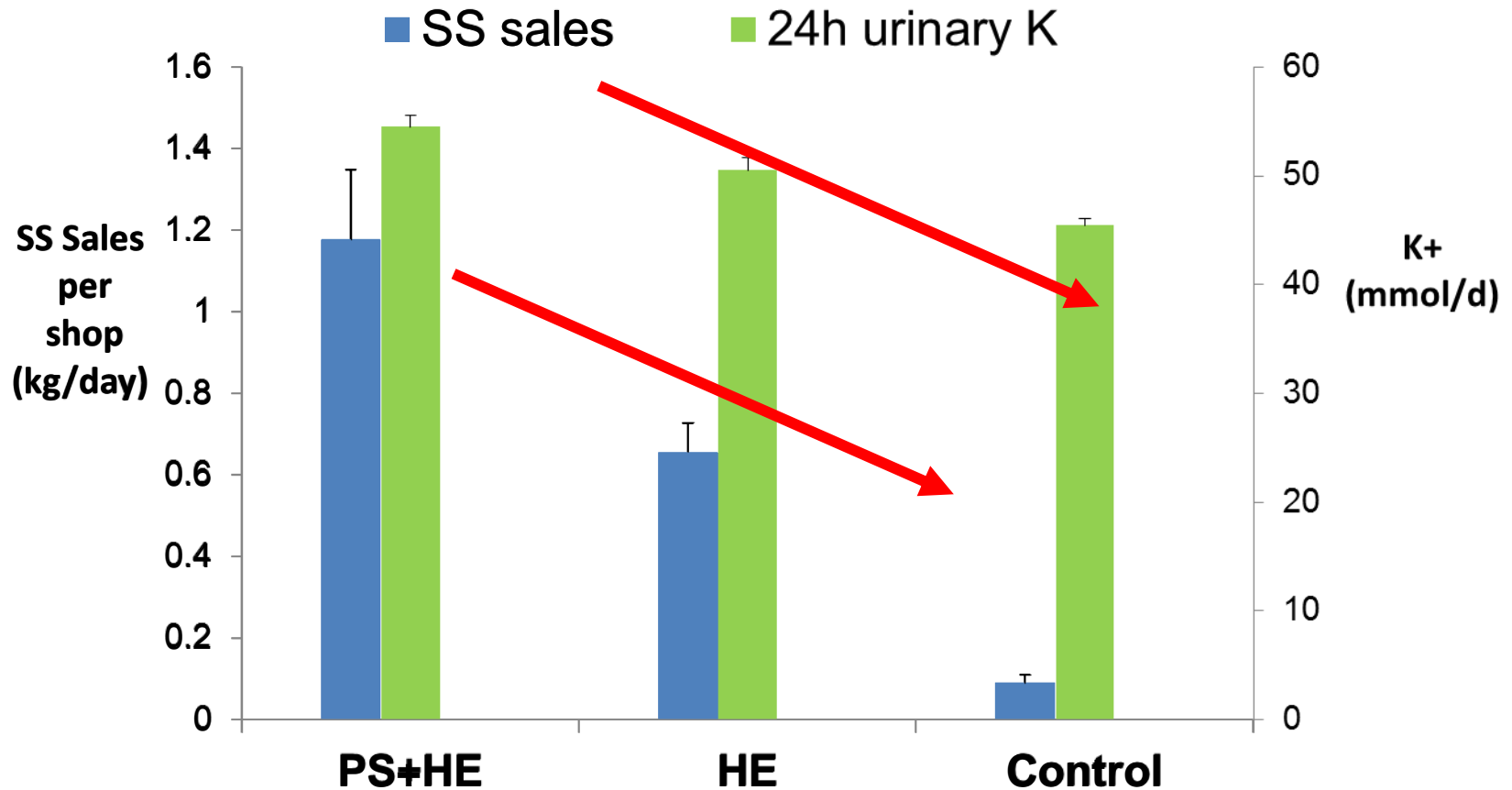


# Results



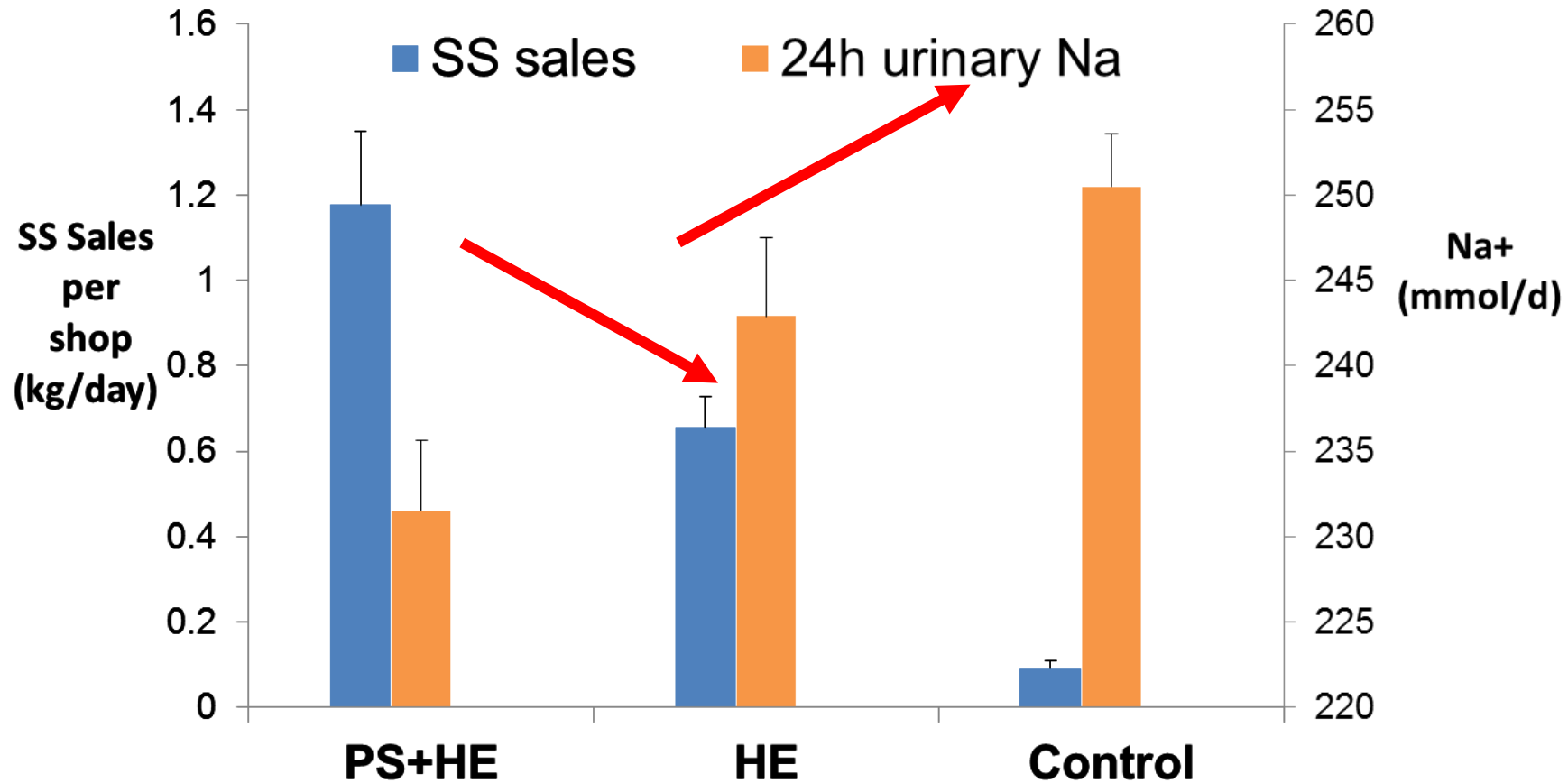
**Salt substitute sales trend by group**

# Results



**Salt substitute sales vs 24h urinary K**

# Results

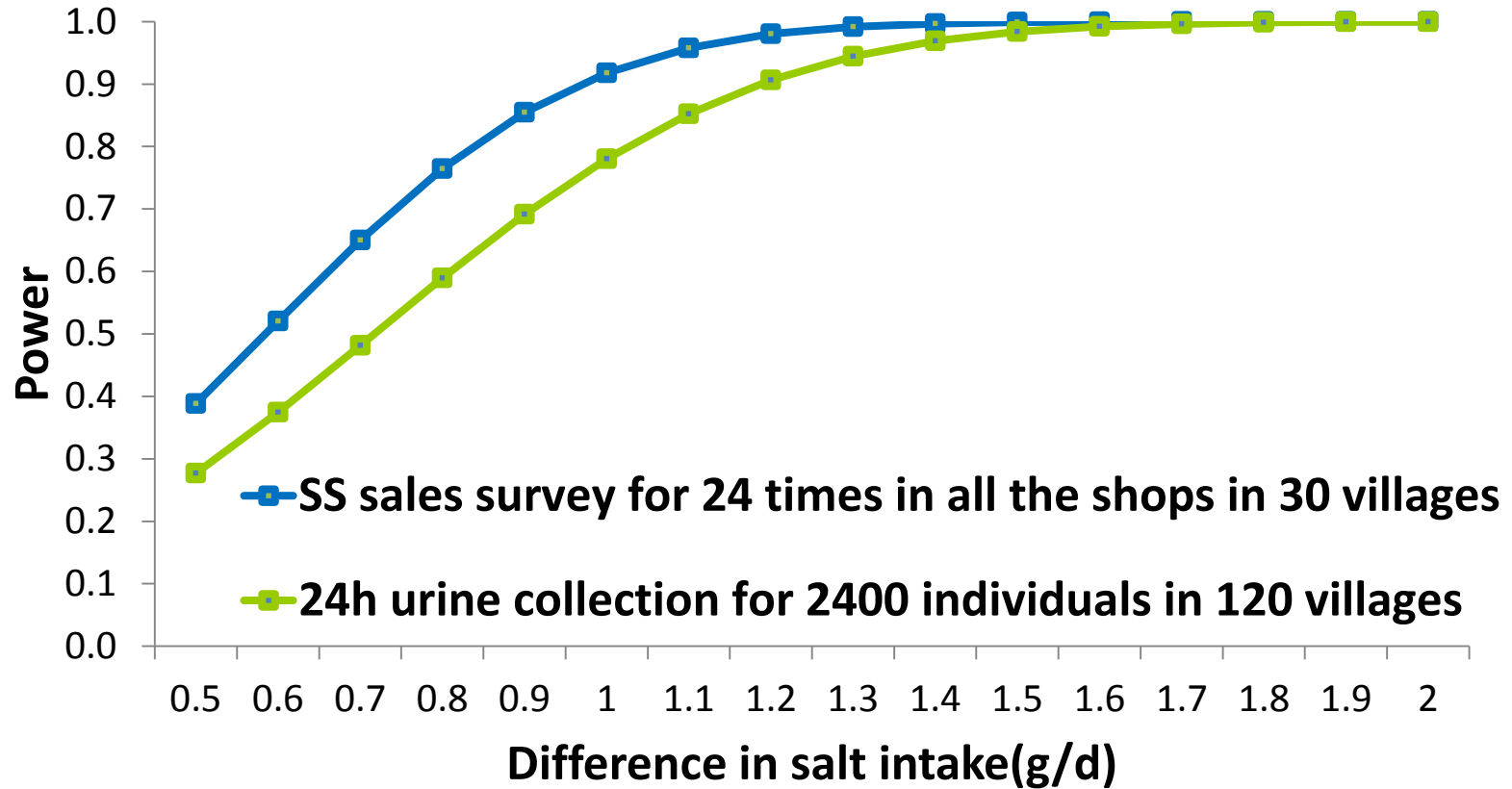


**Salt substitute sales vs 24h urinary Na**

# Results

Effect size (Intervention vs control)	Assessed by 24-hour Urine	Estimated from SS sales
difference in sodium intake	-7.0 mmol/d	114% -8.0 mmol/d
difference in potassium intake	14.1 mmol/d	101% 14.2 mmol/d

# Results



Cost

- Salt sales survey: ¥RMB 57,000 (≈ \$10,000)
- 24h Urine collection : RMB 420,000 (≈ \$70,000)

# Summary- Salt sales survey

## 1) SS sales: $PS+HE > HE > control$

- 24h urinary K:  $PS+HE > HE > control$
- 24h urinary Na:  $PS+HE < HE < control$

## 2) Intervention effect estimated from SS sales

- Potassium: 114% of that from 24h urine.
- Sodium: 110% of that from 24h urine

## 3) Larger statistical power

## 4) Lower cost

# Limitations

- **? Salt intake level**
  - **Suitable situation:**
    - **Salt added by consumers is major source**
    - **Population should be stable**
    - **Community-based**
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# Conclusion

- A salt sales survey could serve as a **simple, sensitive** and **cost-effective** method to evaluate community-based salt reduction programs where salt is mainly added by the consumers.
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# Acknowledgement

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- United Health Group

## □ Participants

## □ Partners

- US CDC
  - The Duke University
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  - China Medical University
  - Jiaotong University Medical College
  - Hebei Provincial CDC
  - Ningxia Medical University
  - Changzhi Medical University
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Thank you!

Any Questions?

# Timeline

