Jamaica Salt Consumption, Knowledge, Attitudes and Practices (Salt-KAP) Study

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JAMAICA SALT CONSUMPTION, KNOWLEDGE, ATTITUDES AND PRACTICES (SALT-KAP) STUDY

Collaborative Research Project between

The Caribbean Institute for Health Research, UWI

The Ministry of Health and Wellness, Jamaica

Funded by The National Health Fund
Overall Aim:
To obtain baseline data on salt consumption in Jamaica, salt content in restaurant foods, and evaluate knowledge, attitudes and practices of Jamaicans regarding salt consumption.
Why is this important?
SALT - Introduction

• Salt (sodium chloride) is a major component of the food supply in most countries

• It is commonly used to flavour food, and as a binder, stabilizer, or food preservative

• Humans need about 500 mg of sodium to carry out normal body functions such as water balance and nerve conduction
Sources of sodium in the diet

The main source of sodium in the diet is table salt (sodium chloride);

Other sources: monosodium glutamate (MSG), and sodium bicarbonate (baking soda)

Most people consume about 9–12 grams of salt per day 1.5 – 2 times the recommended maximum level of intake
High salt intake has multiple adverse health outcomes

• High Blood Pressure
• Ischaemic Heart Disease
• Hypertensive Heart Disease
• Heart Failure

• Stroke
• Dementia

• Chronic Kidney Disease
• Renal Stones

• Stomach cancer

• Osteoporosis

• Obesity

3 million deaths globally each year

Redrawn from He et al. JACC 2020; 75(6):632-47
In 2016 WHO published the SHAKE package, which serves as a guideline designed to assist Member States with the development, implementation and monitoring of salt reduction strategies.

Recommended salt consumption <5 g per day (2000 mg of Na)

Countries should target 30% relative reduction in mean population intake of salt/sodium by 2025
WHO SHAKE SALT INTERVENTION PACKAGE

1. SURVEILLANCE
MEASURE AND MONITOR SALT USE
Intervention S1: Measure and monitor population salt consumption patterns
Intervention S2: Measure and monitor the sodium content of food
Intervention S3: Monitor and evaluate the impact of the salt reduction programme

2. HARNESS INDUSTRY
PROMOTE REFORMULATION OF FOODS AND MEALS TO CONTAIN LESS SALT
Intervention H1: Set target levels for the amount of salt in foods and meals and implement strategies to promote reformulation

3. ADOPT STANDARDS FOR LABELLING AND MARKETING
IMPLEMENT STANDARDS FOR EFFECTIVE AND ACCURATE LABELLING AND MARKETING OF FOOD
Intervention A1: Adopt interpretive front-of-pack nutrition labelling systems
Intervention A2: Implement strategies to combat the misleading marketing of foods that are high in salt

4. KNOWLEDGE
EDUCATE AND COMMUNICATE TO EMPOWER INDIVIDUALS TO EAT LESS SALT
Intervention K1: Implement integrated education and communication strategies to raise awareness about the health risks and dietary sources of salt and ultimately change behaviour

5. ENVIRONMENT
SUPPORT SETTINGS TO PROMOTE HEALTHY EATING
Intervention E1: Implement multicomponent salt reduction strategies in community settings including schools, workplaces and hospitals
Global Sodium Consumption

• In 2010, global mean sodium intake was 3.95 g/day;
• Intake in men was ~10% higher than in women
• Intakes were highest in East Asia, Central Asia and Eastern Europe
• Intakes were lowest in sub-Saharan Africa and Latin America
Salt consumption in Jamaica

• Limited published data on salt consumption in Jamaica

• The Spanish Cohort Study reported estimated sodium excretion of 3.3 g/24 hour in the 1990s

• In SORT Trial baseline sodium excretion was 3.4 g/day among sample of 56 patients

• No recent or national estimates are available prior to the current study

SORT = Sodium Reduction Trial
Jamaica SALT-KAP - Objectives

1. To estimate dietary sodium consumption among Jamaicans using spot urinary sodium analyses.

2. To evaluate the sodium content in commonly consumed foods sold in local restaurants.

3. To conduct a baseline survey on current knowledge, attitudes, and practices regarding salt intake in Jamaica, and estimate current levels of salt consumption.

4. To evaluate the accuracy of spot urine sodium as a measure of dietary sodium intake in the Jamaican setting by comparing estimates to 24-hour urinary sodium excretion.
Project divided into four components
Component 1: Spot Urine Sodium Analyses

- Analyzed data 1009 spot urine sodium samples obtained from JHLS III.
- Estimated mean 24-hour dietary sodium consumption and the proportion of participants with high dietary sodium consumption using PAHO formula.
- Estimate how dietary sodium consumption vary by sex, sociodemographic factors, and participant characteristics.
Component 1: Spot Urine Sodium Analyses

- Preliminary analyses now completed
- Findings submitted to CARPHA Conference – full details to be presented in June
- Preview: Mean sodium excretion levels much higher than recommended daily intake; low mean potassium intake
- Most Jamaicans classified as having high sodium intake and low potassium intake
Component 2: Salt content of food sold in restaurants

- Creating a database of restaurants, including restaurant chains (≥3 restaurants locally) and individual restaurants.
- Will contact the restaurants’ management to obtain information on meal items sold in each establishment and available nutrient profiles, recipes, and ingredient listings.
- Will describe food preparation practices, estimate mean sodium content per meal and the proportion of foods with high salt content.
Component 3: Survey of Knowledge, Attitudes and Practices Regarding Salt Intake and Estimation of Salt Consumption Levels

- Nationally representative sample of approximately 1200 participants
- Administer a questionnaire to evaluate knowledge about salt intake and health, attitudes with regards to salt intake and low salt diet, and current practices of salt intake.
- We will also measure weight, height and blood pressure and collect spot urine sample to measure urine sodium excretion.
Component 4: Validation Study Using 24-hour Urinary Sodium

- Sub-sample of 120 persons from national survey
- Will do a 24-hour urine collection to measure 24-hour urinary sodium in addition to spot urine sodium
- Compare estimates 24-hour urine sodium from spot urine sample to that obtained from actual 24-hour urine collection and estimate levels of agreement
Components 3 and 4 update

- Completed training for field staff
- Completed mapping of most Kingston EDs
- Recruiting first participants this week
- To complete data collection in 6 – 9 months
Jamaica SALT-KAP - Implications

• Baseline study to fulfil the interventions S1 and S2 of the WHO SHAKE package

• Serve as a key step in the development of a national salt reduction programme

• Will inform interventions to promote individual and population level sodium reduction strategies in seeking to achieve the national target of a 30% reduction in salt consumption by 2025.

• Initial results shared with MOHW – preparing policy brief
The Team

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