



**The effects of salt substitute compared to regular table salt on stroke:
The China Salt Substitute and Stroke Study (SSaSS) – August 2021**



The George Institute
for Global Health

Facts:

- Stroke is the second-leading cause of mortality, killing 5.5 million people each year.
- Globally, one in four people over 25 are at risk of stroke during their lifetimes, with individuals in China having the highest lifetime stroke risk.
- Stroke is the leading cause of death in China, accounting for 1.57 million deaths.
- In rural China, where SSaSS was conducted, average salt intake was 10-11g per day, a key risk for hypertension and stroke.

Project cycle:

2015 – 2020

Partners:

*The George Institute for Global Health
University of Sydney, Australia
Peking University Health Science Center,
China
UNSW Sydney, Australia
Imperial College, UK
Northwestern University Medical School,
United States*

Supporters:

*National Health and Medical Research
Council, Australia*

Background:

- High levels of sodium consumption and low levels of potassium consumption are both associated with high blood pressure levels. Salt substitutes replace part of the sodium chloride in regular salt with potassium chloride and are effective and low-cost ways of lowering blood pressure.
- Concerns about excess potassium intake in people with severe kidney disease have limited uptake of salt substitutes.
- High blood pressure is a key risk for stroke and salt substitutes are a particularly attractive option for China where sodium consumption is high, potassium consumption is low and stroke is very common.

Aims:

- To determine the effects of replacing regular table salt (100% sodium chloride) with a reduced-sodium, added-potassium salt substitute (75% sodium chloride, 25% potassium chloride) on the risk of stroke, heart attack and death.

Methods:

- In the largest study of its kind, 21,000 people from 600 villages in rural China were assigned at random to receive free salt substitute or to continue using regular table salt for five years. The study has now been completed.

Impact:

- Switching to salt substitute reduced the risk of stroke by 14%, total cardiovascular events (strokes and heart attacks combined) by 13 percent, and the risk of premature death by 12%.
- A 2020 modelling study that assumed a 10% decrease in risks through nationwide use of salt substitutes estimated that 460,000 premature deaths could be averted every year in China. The results of SSaSS confirm the health gains projected by the modelling study.
- Almost everyone in the world stands to gain from switching to using salt substitute, particularly the billions living in low- and middle-income countries where most dietary salt is added at home during food preparation and can be easily substituted.

Contact:

To find out more about The China Salt Substitute (SSaSS) study and its principal investigators (Prof. Yangfeng Wu and Prof. Bruce Neal) or The George Institute please contact: Tina Wall +61 410 411 983 or twall@georgeinstitute.org.au

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