

School-EduSalt - School-based education programme to reduce salt intake in children and their families - *January 2018*



The George Institute
for Global Health
China

Facts:

- Approximately 80% of cardiovascular disease (CVD) deaths occur in low- and middle-income countries.
- Raised blood pressure is a major cause of CVD, accounting for 62% of strokes and 49% of coronary heart disease worldwide.
- Salt reduction is one of the most cost-effective measures to reduce high blood pressure and prevent CVD in both developed and developing countries.

Partners:

Queen Mary University of London
The George Institute China
Changzhi Medical College
Peking University, Institute of Child and Adolescent Health
Deakin University, School of Exercise and Nutrition Sciences

Supporters:

Medical Research Council (MRC) of the United Kingdom

Background:

Raised blood pressure (BP) is highly prevalent in China. The problem is particularly marked in northern China where salt intake is very high in both adults and children. Unlike in developed countries, the major source of salt in the Chinese diet is salt added by the consumers themselves during food preparations. Therefore, developing successful strategies that could mobilise the hundreds of millions of consumers to reduce salt consumption in their daily life is critical to the success of prevention and control of hypertension and CVD in China.

Aims:

- To determine whether an education program targeted at school children can lower salt intake in children and their families in China, to reduce blood pressure.

Methods:

- The study enrolled 280 children from 28 primary schools in Changzhi City, Shanxi Province and 560 adult family members of the participating children.
- Children randomized to intervention group received an innovative health education programme of salt reduction once every two weeks for one school semester. They were also trained through the programme to persuade their families and in particular the person who did the cooking for the whole family so that to reduce the amount of salt used at home.
- Urine was collected and blood pressure measured (24 hours) for all participants before and after the intervention to evaluate the effects of the intervention in change in sodium intake as well as blood pressure.

Impact:

- The result of School-EduSalt, published in BMJ, shows that the education program is effective in lowering salt intake in children by 1.9 grams/day (representing a 27% reduction compared with the control group) and their adult families by 2.9 grams/day representing a 25% reduction compared with the control) and helps them switch to healthier dietary habit.
- The study offers a novel approach to preventing BP related diseases via "whole society" approach.
- The findings suggest that the WHO's target of 30% reduction in salt intake by 2025, could be achieved in China and result in a major reduction in cardiovascular morbidity and mortality if our education programme is implemented nationwide.

Contact:

To find out more about School-EduSalt study and its Co-Principal Investigators Prof. Yangfeng Wu or The George Institute for Global Health, please contact:

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