Building the science behind a smarter salt

Excess salt intake: 2 million deaths per year, and counting

Excess sodium is a major global cause of high blood pressure and cardiovascular disease deaths (CVD), despite proven, scalable solutions. One such solution is use of low-sodium salt substitutes (LSSS), which replace some of the sodium chloride with potassium chloride. Large trials and models suggest LSSS could prevent hundreds of thousands of CVD deaths each year. Yet gaps in evidence — especially around safety, acceptance, cost, and implementation — have slowed global adoption.

Overcoming the research gap

To identify and prioritize research needs that would fill these evidence gaps and facilitate global uptake of LSSS, Johns Hopkins University, The George Institute, and Resolve to Save Lives jointly conducted a research prioritization effort among groups of international experts. These interdisciplinary experts participated in a series of webinars where current evidence was discussed, and existing evidence gaps were ranked to collaboratively develop a consolidated agenda for future research on LSSS.

A lower-sodium option for every table

Through this consultative process, a clear need for further research was identified to support global uptake of LSSS and provide governments, funders, and industry with the information they need to produce, procure and promote healthier foods. Experts prioritized four areas in research for future focus:

- **Safety and efficacy** research among individuals with chronic kidney disease and diabetes as well as those taking blood pressure–lowering medications, such as renin-angiotensin-aldosterone system (RAAS) inhibitors.
- **Industry and food technology** research to improve consumer acceptability, optimize LSSS product formulation, and assess cost and supply feasibility for large-scale use of LSSS in discretionary and processed foods.
- **Implementation research** to identify effective strategies for stakeholder engagement, labeling, and messaging that build trust, drive adoption, and ensure safe use of LSSS across healthcare, industry, and consumer settings.
- **Public policy research** to evaluate the impact of subsidies, reduced tariffs, and procurement policies in public institutions, as well as the most effective strategies to educate policymakers and the public on the benefits of LSSS.

Closing critical evidence gaps through coordinated research and investment will be essential to realize the full potential of LSSS. With collaboration among scientists, governments, industry, and funders, LSSS can become a practical, scalable intervention to prevent millions of deaths from CVD worldwide.

Read the full report here. Contact Tammy Brady at tbrady8@jh.edu for more information.