

Reduction of sodium intake in the Americas: a public health imperative

Simón Barquera¹
and Lawrence J. Appel,²
guest editors

Elevated blood pressure is the leading cause of death worldwide. The contemporary approach to this epidemic includes clinical treatment of hypertension in high-risk individuals, and for broad population-level impact, reduction of sodium intake and other lifestyle modifications. As a public health measure, sodium reduction is an especially appealing strategy—an inexpensive and effective “best buy.”

Available evidence on the benefits of lowering sodium is sufficiently strong to warrant action. Public health strategies are very low cost, and the health risks of reducing sodium are practically nonexistent (with appropriate monitoring of iodine intake and iodine concentrations in salt to ensure optimal supplementation). Furthermore, estimated reductions in the burden of blood pressure-related noncommunicable diseases (NCDs)—stroke, heart attacks and heart failure—are substantial.

Sodium reduction at the population level is an intersectoral undertaking that requires extensive public- and private-sector coordination to achieve success. Various sectors and stakeholders must be involved, and their work requires close coordination. The ministries of economy, health, and education, among others, must be involved, given that the policies are related to nutrition, NCDs, and commerce. Furthermore, food industries must be engaged. Lastly, resources must be committed to collect data, to evaluate results and document impact.

Still, there are some uncertainties, particularly related to implementation of these policies in the Region. Information on dietary intake of sodium and its principal food sources are lacking in some countries in the Region. Also, the state of economic development, extent of nutrition transition, and traditional food culture vary widely from country to country and will certainly influence the approach to implementation and the ability to achieve meaningful reductions in sodium intake.

Crucial in the coming years is for countries to collect data on sodium intake and sources of dietary sodium using standardized methods. Both baseline and follow-up data are needed to monitor and evaluate the impacts of policies and to adjust strategies, if needed. To assist countries in this regard, the Pan American Health Organization (PAHO) has developed the Protocol for Population-Level Sodium Determination in 24-Hour Urine Samples.

The current special issue of the *Pan American Journal of Public Health* constitutes a coordinated and unprecedented effort by PAHO to document the work of countries in the Region of the Americas that are implementing strategies to accomplish population-wide reductions in level intake. The strategies aim to prevent and control blood pressure-related NCDs.

The nine papers included in this special issue are of direct relevance to public health efforts designed to reduce sodium intake in the Americas. Three of them are “Original research” articles. Sánchez et al. provide an in-depth exploration of behavior related to health, salt consumption, and nutrition labeling preference in Argentina, Costa Rica, and Ecuador. Claro et al. document attitudes, knowledge, and behavior related to salt consumption in five sentinel countries (Argentina, Canada, Chile, Costa Rica, and Ecuador), while Ferrante et al. present the cost utility of reducing salt intake and its impact on the incidence of cardiovascular diseases in Argentina.

¹ Director, Research on Health and Nutrition Policies and Programs, Research Center on Nutrition and Health, National Institute of Public Health, Mexico.

² Director, Welch Center for Prevention, Epidemiology, and Clinical Research; Johns Hopkins Medical Institutions, Baltimore, MD, United States of America.

Four articles are “Special reports”. Campbell et al. document the need for program coordination to optimize salt and iodine intake for improvements in global health. Nilson et al. discuss progress in a program on salt reduction in Brazil. He et al. document the adverse effects of excess salt intake and highlights the potential benefits of sodium reduction for hypertension, while Levings et al. report on the progress toward sodium reduction in the United States. The “Review” article of Ji et al. offers a systematic analysis of studies comparing 24-hour and spot urine collections, and in “Current topics” Blanco-Metzler et al. report on the advances of Costa Rica’s national salt reduction program.

Together, these nine papers can assist policy-makers, public health officials, and clinicians in developing, implementing and monitoring strategies geared to reduce sodium intake. These efforts should ultimately reduce the burden of NCDs in the Americas and help millions of people to live healthier and more productive lives.
