Efforts to reduce dietary salt in the Americas

Norm R. C. Campbell,¹ Ricardo Correa-Rotter,² Barbara Legowski,³ and Branka Legetic⁴ The overconsumption of salt (sodium chloride) increases blood pressure and with it the risk for stroke, heart, and kidney disease. It also causes recurrent kidney stones; is a probable procarcinogen for gastric cancer; and has a pathophysiologic basis for causing osteoporosis, obesity, cardiovascular disease independent of blood pressure, and increased severity and frequency of asthma attacks (1). Even if only blood pressure and related cardiovascular disease are reduced, programs that lower dietary salt intake are estimated to be among the most effective at decreasing the rates of death and disability and among the most cost-effective in improving population health (2). Although no level of salt added to food has been shown to be safe, a population salt intake of < 5 g/day per person is recommended by international experts convened by the World Health Organization (WHO). A Pan American Health Organization (PAHO) Expert Group Policy Statement set 2020 as the target date for achieving this recommendation in the Americas (3).

Worldwide, the average consumption of salt generally exceeds 6 g/day; for many populations, the average in most countries is 9-12 g/day. In the Americas, recently assessed average daily salt intake is high: 11 g/day in Brazil, 12 g/day in Argentina, 9 g/day in Chile, 8.7 g/day in the United States, and 8.5 g/day in Canada (3). In highly developed areas, about 75% of salt comes from processed food; in less developed areas, up to 70% of salt may come from discretionary salt added in cooking or at the table. Common to all countries engaged in dietary salt reduction is that many people do not personalize the evidence about high salt intake even if they understand that there is a population level problem. Clearly, much work needs to be done to help people implement positive dietary changes so that salt consumption drops to < 5 g/day by 2020.

To aid salt reduction efforts, in 2009-2011 PAHO supported an expert group to develop tools and resources to assist countries in the Americas to lower dietary salt at the population level (3). This special issue of the Pan American Journal of Public Health outlines some of the efforts made and best practices so far, while reflecting the challenges that remain regarding the application of existing knowledge and the research needed. Aspects of national activities in Argentina, Barbados, Brazil, Canada, Chile, Mexico, and the United States of America are outlined, and some regional projects and resources developed by the expert group are featured. There are also key expert group recommendations, among them that countries undertake 24-hour urine studies to measure baseline sodium intake, a position supported by a systematic review of the utility of spot urine sodium versus 24-hour urine sodium studies. More research is needed to define conditions when spot urine samples can provide useful information on sodium consumption. Also reviewed is the need to integrate programs that aim to reduce dietary salt with those that intend to prevent iodine deficiency disorder by fortifying salt with iodine. Steps are recommended to promote optimal intakes of both salt and iodine. The issue also outlines some of the advances made between national salt reduction programs and certain food industries.

PAHO now supports a technical advisory group that will continue to work closely with countries to further the efforts to reduce dietary salt. The technical advisory group will operate through six subgroups: addressing industry engagement and product reformulation; advocacy and communication; surveillance of salt intake, sources of salt in the diet, and knowledge and

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opinions on salt and health; salt fortification with iodine; national level health economic studies on salt reduction; and scientific review. By catalyzing collaboration among governmental and nongovernmental organizations, civil society, and industry, PAHO is aiming to realize the 2020 goal of salt intake, a best buy for public health and for the benefit of the people in the Americas (4).

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REFERENCES

- 1 He FJ, MacGregor GA. A comprehensive review on salt and health and current experience of worldwide salt reduction programmes. J Hum Hypertens. 2009;23(6):363-84.
- 2. World Health Organization. Creating an enabling environment for population-based salt reduction strategies. Report of a joint technical meeting held by WHO and the Food Standards Agency, United Kingdom, July 2010. Geneva: WHO; 2011.
- 3. Legetic B, Campbell N. Reducing salt intake in the Americas: Pan American Health Organization actions. J Health Commun. 2011;16(Suppl 2):37-48.
- 4. Bloom DE, Chisholm D, Jané-Llopis E, Prettner K, Stein A, Feigl A. From burden to "best buys": reducing the economic impact of non-communicable diseases in low- and middleincome countries. Geneva: World Economic Forum; 2011. (Program on the Global Demography of Aging Working Paper 75). Available from: http://www.hsph.harvard.edu/pgda/ WorkingPapers/2011/PGDA_WP_75.pdf Accessed 1 February 2012.