

REDUCING DIETARY SALT TO IMPROVE HEALTH IN THE AMERICAS

THE RATIONALE

The World Health Organization (WHO) indicates that increased blood pressure is the leading risk for death world wide and the second leading risk for disability.¹ In the Americas overall one-fifth to one-third of adults has hypertension; in Latin America and the Caribbean, the rates are among the highest in the world. Regardless of location, among people living to age 80, over 90% are expected to develop hypertension.^{3, 4} The direct and indirect costs of increased blood pressure are estimated to consume 5-15% of the Gross Domestic Product in high income countries and 2.5-8% in Latin America and the Caribbean.²

Elevated blood pressure accounts for about two-thirds of strokes, and about one-half of heart disease,¹ with the risk of developing hypertensive complications increasing with age. Even blood pressure rising within the normal range, lower than what most health care professionals consider to be 'hypertension', poses risk, causing about half of the disease attributed to elevated blood pressure.^{1 5}

A healthy lifestyle can prevent increases in blood pressure. Important is regular physical activity, avoiding excessive alcohol, attaining and maintaining a healthy body weight and following a healthy diet – lots of fresh fruits and vegetables, low fat dairy products and otherwise, foods that are low in saturated fats and salt⁶⁻¹⁰.

Salt added to food is estimated to cause approximately 30% of hypertension and 10% of cardiovascular disease.^{7, 11} Pre prepared foods consumed outside the home are usually the largest source of dietary salt but in some regions, high quantities of salt are added to food cooked at home.^{12 13}

The WHO and FAO recommends dietary salt intake of less than 5 gram per day.¹⁴ Where data are available, people in the Americas are consuming up to three times this level and all age groups including children are affected.^{15, 16} In response, the Pan American Health Organization (PAHO) is launching region-wide action to reduce salt consumption at the population level, shown to be the most cost effective intervention available to improve health in low to middle income countries, and expected to be similarly cost effective in high income countries.

In September 2009, PAHO convened a group of international experts on dietary salt reduction to lead the regional initiative. They are tasked with developing a policy statement with recommendations and a “tool kit” with resources to aid governments, non-governmental organizations, organizations of health professionals, the food industry as well as PAHO, to reduce salt consumption and improve overall population health. The policy statement and resources can be assessed [here](#). A fact sheet for the public and for health care professionals can be found [here](#) to serve as an educational aid.

Reference List

- (1) Lawes CM, Vander HS, Rodgers A. Global burden of blood-pressure-related disease, 2001. *Lancet* 2008;371:1513-1518.
- (2) Gaziano TA, Bitton A, Anand S, Weinstein MC. The global cost of nonoptimal blood pressure. *J Hypertens* 2009;27:1472-1477.
- (3) Kearney PM, Whelton M, Reynolds K, Muntner P, Whelton PK, He J. Global burden of hypertension: analysis of worldwide data. *The Lancet* 2005;365:217-223.
- (4) Vasan RS, Beiser A, Seshadri S et al. Residual Lifetime Risk for Developing Hypertension in Middle-aged Women and Men. *JAMA* 2002;287:1003-1010.
- (5) Lewington S, Clarke R, Qizilbash N, Peto R, Collins R. Age-specific relevance of usual blood pressure to vascular mortality: a meta-analysis of individual data for one million adults in 61 prospective studies. *Lancet* 2002;360:1903-1913.
- (6) Geleijnse JM, Grobbee DE, Kok FJ. Impact of dietary and lifestyle factors on the prevalence of hypertension in Western populations. *J Hum Hypertens* 2005;19:S1-S4.
- (7) Joffres M, Campbell NRC, Manns B, Tu K. Estimate of the benefits of a population-based reduction in dietary sodium additives on hypertension and its related health care costs in Canada. *Can J Cardiol* 2007;23:437-443.
- (8) Khan NA, Hemmelgarn B, Herman RJ et al. The 2009 Canadian Hypertension Education Program recommendations for the management of hypertension: Part 2--therapy. *Can J Cardiol* 2009;25:287-298.
- (9) Sanchez RA, Ayala M, Baglivo H et al. Latin American guidelines on hypertension. *J Hypertens* 2009;27:905-922.
- (10) Chobanian AV, Bakris GL, Black HR et al. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. The JNC 7 Report. *JAMA* 2003;289:2560-2572.
- (11) Penz ED, Joffres MR, Campbell NR. Reducing dietary sodium and decreases in cardiovascular disease in Canada. *Can J Cardiol* 2008;24:497-1.
- (12) Mattes RD, Donnelly D. Relative contributions of dietary sodium sources. *Am J Clin Nutr* 1991;10:383-393.
- (13) The China Salt Substitute Study Collaborative Group. Salt substitution: a low-cost strategy for blood pressure control among rural Chinese. A randomized, controlled trial. *J Hypertens* 2007;25:2011-2018.

- (14) World Health Organization. *Reducing Salt Intake in Populations: Report of a WHO Forum and Technical Meeting 5-7 October, 2006 Paris, France*. Geneva, Switzerland: World Health Organization, 2007.
- (15) Garriguet D. Sodium consumption at all ages. *Health Reports* 2007;18:47-52.
- (16) Wright JD, Wang CY, Kennedy-Stephenson J, Ervin RB. Dietary intake of ten key nutrients for public health, United States: 1999-2000. *Adv Data* 2003;1-4.