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POLICY STATEMENT FROM THE WORLD HYPERTENSION LEAGUE

Packages of sodium (Salt) sold for consumption and salt dispensers should be required to have a front of package health warning label: A position statement of the World Hypertension League, national and international health and scientific organizations

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Dietary risks in aggregate are the leading risk for death globally. Among dietary risks, high dietary sodium (salt) is the leading risk.[1] Globally, excess dietary sodium is estimated to have caused over 3 million deaths and over 70 million disability-adjusted life-years (DALYS) in 2017.[1,2] High dietary sodium is predominantly a risk as a result of increasing blood pressure (the leading single risk for death globally) but is also a probable pro-carcinogen for gastric cancer, directly causes cardiovascular and renal damage independent of blood pressure, and is associated with several other diseases.[1,3-11] The recent National Academy of Medicine review of the evidence for dietary sodium consumption in United States and Canada concluded that excess dietary sodium increases blood pressure, that elevated blood pressure causes cardiovascular disease (CVD) and that there is moderately strong evidence that high dietary sodium directly increases total mortality and cardiovascular events.[12] In addition, the World Health Organization (WHO) reported that increased dietary sodium increases blood pressure and is associated with CVD.[13] Multiple other diseases have associations and biologically sound pathophysiological mechanisms for sodium causing harm, but clinical evidence is not substantive enough to prove causality.[3] In addition, acute ingestion of sodium chloride (salt) in the range of 17 g or more in an adult, and 12.5 g or more in an infant can cause seizures, coma, and death. Although ingestions of large quantities of sodium are very distasteful and believed to be infrequent, both accidental and intentional deaths do occur.[12,14]

Reducing excess dietary sodium is a global target of the WHO endorsed by the World Health Assembly, and many countries have started to reduce dietary sodium using a variety of public health interventions.[15] The WHO created the SHAKE package to guide countries on policies to reduce dietary sodium.[16] In most countries where most foods consumed are highly processed, the major source of sodium is from processed foods (ie, hidden sodium) with about 10%

coming from sodium added in cooking and at the table (ie, discretionary sodium).[16] Although most countries require the amount of sodium to be indicated on labels in processed foods (ie, nutrition fact panels [NFP]), these labels are difficult for consumers to interpret and do not warn of any risks from consumption.[17] In general, NFP do not indicate if a product is high, intermediate, or low in sodium. A few other countries such as the United Kingdom have voluntary front of package warning labels for foods high in sodium. Several countries (eg, Finland, Israel, Iran, Chile, Uruguay, Ecuador, Peru), where sodium in processed foods is the major source, require warning labels on processed foods high in sodium and other countries are considering such labels.[18] Front-of-pack labeling of this kind to reduce sodium intake is recommended by WHO as a "best buy" for NCD prevention.[19] These labels are applicable to foods but not to packages of salt where the only content is sodium chloride.

In much of the world, the major source of sodium is that added as table salt in cooking and at the table.[16,20] Some countries have banned restaurants from putting salt shakers on tables to reduce spontaneous addition of sodium to foods and increase awareness of the dangers of high-sodium diets (eg, Argentina, Uruguay, Mexico City). To our knowledge, no country has required actual packages and containers of sodium chloride (salt) to have warning labels.

Warning labels on packages of sodium chloride (see text box for an example) may have several potential benefits. Firstly, it would increase awareness of the dangers of high-sodium diets by people purchasing sodium and a reminder of the dangers by people seeing the containers at stores, food service establishments, or in the home. Secondly, stores that sell sodium chloride may display sodium less prominently. Thirdly, and most importantly, it could lead to a reduction in sodium consumption. A randomized controlled trial found that having patients with hypertension place a warning label on salt shakers at home reduced sodium consumption very substantively.[21] To have maximum impact, a warning label should also be considered for other major discretionary sources of dietary sodium (eg, soya sauce, fish sauce, bouillon cubes) where sodium is the major component of the product. Low sodium salts (with partial replacement of sodium by potassium and potentially magnesium) should also have a label that promotes use to help reduce dietary sodium but also a warning to reduce consumption and for people with kidney disease or taking antihypertensive or cardiac drugs to seek medical advice before using (to prevent hyperkalemia).

Efforts to reduce excess sodium from discretionary and processed food sources are compatible with the programs to prevent iodine deficiency disorders that use iodized sodium chloride. WHO has recommended coordination of population surveys of dietary sodium and iodine and to adjust the iodine content of sodium chloride based on changes in sodium intake.[22,23]

This position statement requests governments require health warnings on packages of sodium chloride (salt) sold for consumption and sodium dispensers. The warning label should be clearly visible and easily readable, indicating that consumption of excess sodium is a health risk and advising consumers to use less sodium. A sample warning label is provided in the text box below.

> Too much sodium in the diet causes high blood pressure and increases risk of stomach cancer, stroke, heart disease and kidney disease. Limit your use

The following organizations support the position. World Hypertension League, Resolve to Save Lives, World Health Organization Collaborating Centre on Salt Reduction, The George Institute for Global Health, World Action on Salt and Health (WASH), Consensus Action on Salt and Health (CASH), World Health Organization Collaborating Centre for Nutrition, University of Warwick, Hypertension Canada, and the British and Irish Hypertension Society.

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CONFLICT OF INTEREST

NRCC was a paid consultant to the Novartis Foundation (2016-2017) to support their program to improve hypertension control in low- to middle-income countries which includes travel support for site visits and a contract to develop a survey. NRCC has provided paid consultative advice on accurate blood pressure assessment to Midway Corporation (2017) and is an unpaid member of World Action on Salt and Health (WASH). JW is Director of the World Health Organization Collaborating Centre on Population Salt Reduction. She is supported by an Australian National Heart Foundation Future Leaders Fellowship and receives funding from WHO, the Australian National Health and Medical Research Council, Victorian Health Promotion Foundation and Vital Strategies for work on salt reduction. GAM is Chairman of Blood Pressure UK (BPUK), Chairman of Consensus Action on Salt & Health (CASH), WASH and Action on Sugar. BPUK, CASH, WASH and Action on Sugar are non-profit charitable organizations. GAM does not receive any financial support from any of these organizations. FC is President and Trustee, British and Irish Hypertension Society; World Health Organization Scientific Advisor; Member of CASH and WASH. FJH is an unpaid member of CASH and WASH. MT, CF, KT JW, AJ, PW, and XHZ have no conflicts of interest to disclose.

POSITION STATEMENT

Commercially sold or provided (eg, in restaurants) packages or containers of sodium chloride (salt) intended for consumption and salt dispensers should be required to have a front of package health warning label. The warning label should be clearly visible, easily readable, indicate that consumption of excess sodium (salt) is a health risk, and recommend that people use less sodium (salt).

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