DIETARY SODIUM (SALT): FACT SHEET AND GLOBAL CALL TO ACTION

Early in 2022, 70 national and international health and scientific organizations supported the World Hypertension League, Resolve to Save Lives and the International Society of Hypertension fact sheet and global call to action on reducing dietary sodium (salt)¹. The Fact Sheet and Global Call to Action can be considered to represent the position of the mainstream global health and scientific sector.

This is a short summary of the global call to action which outlines:

- a) the large burden of disease caused by high dietary sodium,
- b) evidence supporting reductions in dietary sodium,
- c) recommendations to reduce dietary sodium.
- d) current levels of sodium intake,
- e) cost effectiveness of reducing dietary sodium,
- f) some of the sources of controversial opinions,
- g) approaches to reduce dietary sodium and
- h) sources of frequently updated evidence reviews on the adverse health effects of high dietary sodium and on how to reduce dietary sodium.

The call advocates health care professionals, scientists, and the organizations that represent them to more actively engage and advocate for sodium reduction to be a high global priority and for all nations to reduce dietary sodium to recommended levels.

Numerous governmental and nongovernmental scientific reviews indicate high dietary sodium is one of the most significant health risks facing populations largely by increasing blood pressure, and thereby causing cardiovascular disease. Meta analyses of high quality randomized controlled trials show blood pressure is linearly decreased with reductions in dietary sodium levels to 800 mg/day. High dietary sodium affects blood pressure in, those with and without hypertension, old and young, differing ethnicities, males, and females. Meta analyses of randomized controlled trials support decreases in dietary sodium to 2300 mg/day linearly decreasing cardiovascular disease. A meta-analysis of cohort studies, that defined intake by multiple 24 hr urine sodium collections, reported a linear association between dietary sodium levels above 1846 mg/day and cardiovascular disease. This high-quality research does not currently find evidence for a lower threshold of dietary sodium causing cardiovascular disease or increasing blood pressure. In contrast, increased cardiovascular disease with lower levels of sodium intake have been reported in low quality research with the results widely being attributed to weak research methods and study designs.

The World Health Organization recommends adults consume less than 2000 mg sodium (5 gm salt) per day with some variation in national recommendations (all recommend less than 2400 mg/day or lower levels). Children are recommended to consume less sodium than adults. The average sodium consumption in adults is estimated to be about 4000 mg/day. Economic studies indicate very high-cost effectiveness or cost savings and high returns on investment for programs to reduce

dietary sodium. Reducing dietary sodium is indicated to be one of a few 'best buys' for improving population health by the World Health Organization.

Multiple strategic documents have been developed to guide programs to reduce dietary sodium. Strategies are largely based on reducing sodium additives to food during commercial processing or at home. These strategies call for broad comprehensive changes in nutritional policies to create healthy eating environments and population dietary behaviour change interventions. Replacing normal salt (sodium chloride) with a lower sodium (potassium enriched) salt has been shown to be both safe and to reduce cardiovascular disease and death. As of 2020, ninety-six countries had sodium reduction programs with a several showing substantial reductions in sodium, reductions in population blood pressure and cardiovascular disease. Nevertheless, most of the current sodium reduction programs are at best modest and at an early stage. Much greater and higher priority actions are advocated by the World Hypertension League, Resolve to Save Lives and the International Society of Hypertension and the 68 supporting organizations of the global call to action.

All health care professionals, scientists, and the public need to advocate and work together and with governmental organizations to reduce dietary sodium, reducing high blood pressure, the global leading risk for death, cardiovascular disease and stroke, the leading causes of death globally. Organizations can review the Global Call to Action and indicate their support by contacting the World Hypertension League at whleague17@gmail.com. An updated list of supporting organizations will be maintained until 2025. The Call to Action can be rapidly accessed at https://rdcu.be/cNIMn.

1. 2022 World Hypertension League, Resolve To Save Lives and International Society of Hypertension Dietary Sodium (Salt) Global Call To Action. *J Hum Hypertens*. 2022; https://doi.org/10.1038/s41371-022-00690-0.