The Salt Discourse in 2013

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The US Department of Health and Human Services has recommended that adults consume no more than 2,300 mg of sodium per day and that individuals in the following subgroups consume no more than 1,500 mg/day: persons aged ≥51 years; persons with hypertension, diabetes, or chronic kidney disease; and blacks. These subgroups account for approximately half of the US population.

There is some increasing evidence, however, that suggests that low-sodium diets are associated with adverse health outcomes. Consequently, the Center for Disease Control and Prevention (CDC) recently commissioned the Institute of Medicine (IOM) to undertake a study “to examine the designs, methodologies, and conclusions in this latest body of research on dietary sodium intake and health outcomes.” The IOM report concluded the following:

1. “The evidence supports a positive relationship between higher levels of sodium intake and risk for CVD.”
2. “The evidence on health outcomes is not consistent with efforts that encourage lowering of dietary sodium in the general population to 1,500 mg/day”
3. “There is no evidence on health outcomes to support treating population subgroups differently than the general US population.”

The current US Department of Health and Human Services recommendations are based on clinical trial evidence that dietary salt reduction lowers blood pressure and increasing evidence that salt reduction also decreases the risk for cardiovascular disease and stroke. A number of countries have developed population-based recommendations for reducing salt consumption. The global goal set by the World Health Organization is to reduce sodium intake to <2,000 mg/day by 2025, with some countries aiming for lower levels in the long term. In the United States, strategies for the implementation of recommendations to reduce dietary sodium have been developed by numerous health care agencies and professional societies, including the IOM, the CDC, the American Heart Association, and the New York City Department of Health. Nevertheless, average sodium consumption in the United States remains 3,400 mg/day.

However, questioning one of the current recommendations, the recent IOM report explicitly concluded that “studies on health outcomes are inconsistent in quality and insufficient in quantity to determine that sodium intakes below 2,300 mg/day either increase or decrease the risk of heart disease, stroke, or all-cause mortality in the general US population.” In view of the IOM conclusions, we have invited several advocates and critics of the recommendations for salt reduction to comment on the implications of the IOM report for public policy. Invited commentaries have been submitted by the following persons: Dr Thomas Friedan (director of the CDC) and colleagues; Dr Thomas Farley (commissioner of the New York City Health Department) and colleagues; Drs Lawrence Appel and Paul Whelton, who have been active in developing and promulgating the American Heart Association’s recommendations; Dr Salim Yusuf and colleagues, who are skeptics of the recommendations for salt reduction; and Dr David McCarron, who is also a skeptic. In a related editorial, Drs Michael Alderman and Hillel Cohen provide additional perspectives on the IOM report and the various responses to its conclusions. Also in this issue of the Journal, Dr Robert Heaney reviews strategies and difficulties of establishing requirements and recommendations for nutrient intakes, including sodium.

The ultimate objective of this discourse is to develop a simple and consistent message for the general public and for health-care providers regarding recommendations for population-based salt reduction.

DISCLOSURE

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REFERENCES