Institute of Medicine. 2010. Strategies to Reduce Sodium Intake in the United States. Washington, DC: The National Academies Press



Shelley McGuire School of Biological Sciences, Washington State University, Pullman, WA 99164

Background

For over 4 decades, both scientific and medical communities have recommended that Americans reduce their salt intake. This guidance is rooted in countless scientific reports documenting that excessive sodium intake can predispose some individuals to hypertension, a major risk factor for development of heart disease and stroke. Despite numerous federal and private initiatives to lower salt intake in the U.S. population via educational campaigns, behavior modification strategies, and voluntary sodium reduction initiatives by food manufacturing and food service industries, nationally representative data point to considerable increases in sodium intake over the last 30 y. Indeed, sodium consumption averages in excess of 3400 mg/d (~1.5 teaspoons of table salt), an amount that substantially exceeds the maximum intake level (2300 mg/d) recommended by both the Institute of Medicine and the 2005 Dietary Guidelines for Americans.

Committee charge

In response to the current sodium consumption data and at the request of Congress, a 14-member committee chaired by Dr. Jane Henney from the University of Cincinnati was convened in 2008. This endeavor was initiated by the Consolidated Appropriations Act of 2008, which authorized the U.S. Departments of Labor, Health and Human Services, and Education to direct the CDC to undertake a study through the Institute of Medicine "to examine and make recommendations regarding various means that could be employed to reduce dietary sodium intake to levels recommended by the Dietary Guidelines." It is noteworthy that the committee was not asked to review the literature related to whether reductions in salt consumption should be targeted only to especially at-risk populations such as salt-sensitive or elderly individuals. In fact, the committee's work was "predicated on the importance of reducing sodium intake and the agreement that achieving lower intakes is critical public health focus for all Americans." However, this assumption remains an area of active debate within some segments of the nutrition research community. Nonetheless, the report reviewed here, Strategies to Reduce Sodium Intake in the United States, is the result of this committee's findings, deliberations, recommendations, and conclusions.

The report

First released in April 2010, this report reflects a 4-step approach used by the committee. Following an introductory chapter that

briefly reviews the genesis of the study, specific tasks of the committee, and approach to be taken, Chapter 2 examines past and present government and public health initiatives related to reducing sodium intake by Americans (Step 1). Chapters 3–7 then review the overarching context (Step 3) in which any national initiative concerning salt reduction would need to consider to be successful (e.g., sodium intake and sources, the regulatory environment). These sections are followed by Chapter 8 (Step 4), which considers options and unintended consequences, Chapter 9, which outlines the recommended strategies, and Chapter 10, an obligatory discussion of next steps and research gaps.

The committee put forth 5 basic recommendations aimed at lowering national salt consumption, which they categorized as primary, interim, and supporting strategies. These are summarized here.

Primary strategy. The U.S. FDA should expeditiously initiate a process to set mandatory national standards for the sodium content of foods. This would entail a stepwise modification of the generally recognized as safe (GRAS) status of salt added to processed foods that would then presumably be accompanied by a stepwise reduction in the salt content of prepared foods and a similar, gradual reduction in sodium intake across all life stage segments of the U.S. population.

Interim strategy. The food industry should voluntarily reduce the sodium content of foods in advance of the implementation of mandatory standards. Active and voluntary involvement of both food manufacturers and restaurant/foodservice operators would be required for this strategy to be implemented.

Supporting strategies. Government agencies, public health and consumer organizations, and the food industry should carry out activities to support the reduction of sodium levels in the food supply. This would require the FDA and the USDA to revise and update provisions for nutrition labeling and the U.S. Congress to remove the exemption of nutrition labeling for food products intended solely for use in restaurants and food service operations.

Activities to support consumers in reducing sodium intake should be implemented. Realization of this aim would require the Secretary of Health and Human Services to lead an effort to design and execute a nationwide campaign designed to lower salt intake.

Federal agencies should ensure and enhance monitoring and surveillance of sodium intake, salt taste preference, and sodium content of foods. This complex and broad strategy would necessitate increased federal funding and expansion/enhancement of our national nutrition monitoring programs.

Summary

The recommended strategies put forth in this document are meant to set a new course for reducing our national sodium intake with an innovative and unprecedented approach that essentially mandates the gradual reduction in sodium levels in commercially and foodservice-prepared foods. It is the hope of the committee that this incremental stepwise reduction will allow consumers (across the lifespan) sufficient time to become accustomed to the taste of less savory foods, thus increasing the likelihood of sustainable consumer acceptance and substantial salt intake reduction. Only time will tell if these strategies are achievable on a national scale

and whether they will translate into more optimal health of the American population.

For more information

Copies of the full report are available from the National Academies Press at http://www.iom.edu/Reports/2010/Strategies-to-Reduce-Sodium-Intake-in-the-United-States.aspx. A free, full online version can be reviewed at http://books.nap.edu/openbook.php?record_ id=12818. A summary is available at http://iom.edu/~/media/ Files/Report%20Files/2010/Strategies-to-Reduce-Sodium-Intakein-the-United-States/Strategies%20 to%20 Reduce%20 Sodium%20Intake%202010%20%20Report%20Brief.pdf, and a podcast of the public briefing held to release this report is available at http:// feeds2.feedburner.com/nationalacademies/podcasts.