IOM Committee on Strategies to Reduce Sodium Intake  
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American Heart Association/American Stroke Association

Thank you for the opportunity to present the views of the American Heart Association (AHA) and the American Stroke Association (ASA). I am Frank Sacks, Professor of Cardiovascular Disease Prevention at the Harvard School of Public Health Department of Nutrition, and Professor of Medicine, Harvard Medical School; Senior Attending Physician, Cardiology Department, Brigham & Women’s Hospital. I am also Vice-Chair of AHA’s Nutrition Committee.

AHA is the nation’s largest voluntary health organization, with over 22.5 million volunteers and supporters. Since 1924, AHA has dedicated itself to reducing disability and death from cardiovascular disease and stroke – the #1 and #3 leading causes of death in the United States.

The Effect of Sodium on Health
Let me first convey AHA’s strong support of the work of this Committee; sodium consumption must be reduced. As this Committee is well aware, sodium can have a detrimental effect on health, particularly blood pressure. A substantial number of studies show a direct relationship between salt intake and blood pressure. The studies found that as dietary salt intake rises, so does blood pressure. Evidence includes results from animal studies, epidemiological studies, clinical trials, and meta-analyses of trials. Over 50 randomized trials examining the effects of salt on blood pressure have been conducted, including a number of rigorously controlled, dose-response trials. The resulting evidence is persuasive – there is a statistically significant, clinically relevant, progressive dose-response relationship between sodium intake and blood pressure.¹

Unfortunately elevated blood pressure, which is a major risk factor for heart disease and stroke, is extraordinarily common. It has been estimated that 73.6 million – one in three U.S. adults – has high blood pressure or hypertension, an additional 25 to 37% (depending on study inclusion criteria) of the adult population age 20 and older has pre-hypertension, and the prevalence of hypertension in the U.S. continues to rise.² Among adults, the lifetime risk of developing hypertension is approximately 90%.

The good news is that we know that a reduced salt intake can have significant health benefits. A reduced sodium intake can lower blood pressure, prevent and control hypertension, and help prevent cardiovascular disease.

**Sodium Reduction Goal**
Unfortunately, Americans typically consume quantities far greater than the 2,300mg currently recommended by the IOM, AHA, and the U.S. Dietary Guidelines for Americans. It is our understanding, that this Committee has been charged with developing strategies to reduce sodium intake to that level. While 2,300mg would be a marked decrease from current consumption levels, which average 3,436mg; it is still too high. The goal should be to reduce sodium intake to no more than 1,500mg per day. 1,500mg is the amount currently recommended for salt sensitive populations – individuals with hypertension, African-Americans, middle-age, and older adults. But as the CDC announced just last week in its Morbidity and Mortality Weekly Report, these specific groups now account for a majority (69%) of the total population.\(^3\) Therefore, we believe that the 1,500mg limit should apply to the entire U.S. population.

We realize that our recommendation to lower sodium intake to this level may be met with some opposition; some have voiced concern that a reduction in sodium consumption may lead to unintended, adverse health effects. While we agree that sodium is an essential nutrient, we must point out that very little sodium is actually needed. Under conditions of maximal adaptation and without sweating, the minimum amount of sodium required to replace losses is estimated to be no more than 180 mg/day, which is roughly 5% of current intake. Therefore, AHA’s recommendation to reduce the sodium intake goal to 1,500mg will not bring consumers anywhere close to a level that is too low. Rather, a goal of 1,500mg per day will dramatically decrease the average American’s sodium intake, while remaining high enough to ensure nutrient adequacy and replace sweat losses.

**Recommendations**
We recognize, however, that a 1,500mg limit can only be achieved if there is a change in the food environment. Because the majority of sodium intake comes from eating processed foods, it will be difficult for consumers to lower their sodium intake to 1,500mg on their own; it will require the cooperation of food manufacturers and restaurants to reduce the sodium content of the foods they make available to the public. AHA would like to see food manufacturers and restaurants reduce the salt added to foods by 50% over the next 10 years, for the benefit of public health.

To encourage manufacturers to reduce sodium content, the Committee should consider establishing sodium targets for specific food categories. The New York City Department of Public Health, for example, is currently working with food manufacturers to establish voluntary targets to reduce salt.

The Committee should also consider lowering the sodium threshold for “healthy” food claims and improving front-of-package labeling. With an increasing focus on low sodium diets, consumers may be more attracted to food products that bear a low sodium or “healthy” claim or

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otherwise indicate low sodium content. If the sodium threshold for health claims is lowered, manufacturers may choose to reduce the sodium content of their products in order to meet the new standard. And consistent sodium cut-off levels within food product categories would improve the usefulness of front-of-package food labeling.

And as previously mentioned, lowering the daily value for sodium to 1,500mg, would be a valuable component of an overall strategy to reduce sodium intake. A lower daily value would recognize the health effects associated with excess sodium intake and could encourage manufacturers to reduce the sodium content of their foods. No manufacturer wants its food product’s label to reflect an extremely high percentage of the daily value for sodium, a scenario that would be increasingly more likely if the daily value is lowered; thereby, encouraging reformulation. To provide manufacturers with time to reformulate products and identify acceptable salt substitutes, the Committee may want to consider making a recommendation for reducing sodium in two phases – 2,000mg per day in 2013 and 1,500mg per day in 2020. This two-step phase down will also allow consumers to adapt their taste sensitivities to the lower sodium content in foods.4

Finally, and perhaps most importantly, the Committee should also make specific recommendations on the development, implementation and oversight of a public health campaign to educate consumers about the dangers of high salt intake and the need to make wise and healthy choices in the sodium content of their foods. If consumers become more attuned to the sodium content of their foods and the detrimental health effects a high salt intake diet can have, an increased demand for low sodium products could encourage manufacturers to reduce the sodium content of their products.

**Conclusion**

In closing, I’d like to reiterate AHA’s support for this Committee’s efforts to identify strategies to reduce sodium intake. The amount of salt Americans consume is a major public health issue. High salt diets have been linked to an increase in blood pressure and an increased risk for a number of cardiovascular diseases including heart disease and stroke.

The recommendations I’ve outlined here today are all intended to reduce those risks by decreasing the amount of sodium available in the food supply and educating consumers of the need to reduce their salt intake by choosing foods with little or no salt. However, the success of these recommendations will require the cooperation of food manufacturers and restaurants, as well as the public health community. However, I’m hopeful that the increasing attention this issue is receiving – as evidenced by the formation of this very Committee – means that we are moving in the right direction.

Ultimately, the success of this Committee, organizations like AHA and other public health entities, and the food processing and restaurant industry, will be measured by the reductions in

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4 Studies have shown that consumers’ taste preferences for salt are based on dietary habit and that preferences can change as sodium content is gradually reduced. Blais CA, Pangborn RM, Borhani NO, Farrell MF, Prineas RJ, Laing B. Effect of dietary sodium restriction on taste responses to sodium chloride: a longitudinal study. Am J Clin Nutr 1986;44:232-243.
sodium consumption that we are able to achieve. As the Committee’s recommended strategies to reduce sodium intake are implemented, it will be important to monitor our progress. Surveillance programs like the NHANES nutrition survey will continue to play a critical role in determining trends in sodium intake; however, the Committee should consider making one last recommendation and call for supplemental research such as the measurement of 24-hour sodium urinary excretion to provide additional data on how sodium intake changes over time. This type of longitudinal data, which does not rely on participant recall, will help provide a clear picture of our progress.

I thank you again for the opportunity to present the views of AHA at this meeting. I would be happy to answer any questions you might have.