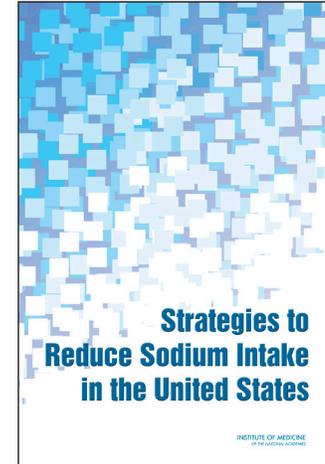


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Strategies to Reduce Sodium Intake in the United States



Americans consume unhealthy amounts of sodium in their food, far exceeding public health recommendations. Consuming too much sodium is a concern for all individuals, as it increases the risk for high blood pressure, a serious health condition that is avoidable and can lead to a variety of diseases. Analysts estimate that population-wide reductions in sodium could prevent more than 100,000 deaths annually.

While numerous stakeholders have initiated voluntary efforts to reduce sodium consumption in the United States during the past 40 years, they have not succeeded. Challenges arise because salt—the primary source of sodium in the diet—and other sodium-containing compounds often are used to enhance the flavor of foods, and high amounts are found in processed foods and foods prepared in restaurants. Sodium also is added to enhance texture or to serve as a preservative or thickener. In fact, very little of the sodium in foods is naturally occurring; most of it is added as it is being processed or prepared by the food industry. The actual sodium levels in food may surprise consumers, especially if the food does not taste salty.

In 2008, Congress asked the Institute of Medicine (IOM) to recommend strategies for reducing sodium intake to levels recommended in the Dietary Guidelines for Americans—currently no more than 2,300 mg per day for persons 2 or more years of age. This amounts to about 1 teaspoon of salt per day, while the average American consumes about 50 percent more than that—more than 3,400 mg of sodium per day. The IOM committee that authored this report concludes that a new, coordinated approach is needed to reduce sodium content in food, requiring new government standards for the acceptable level of sodium. Manufacturers and restaurants/foodservice operators

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need to meet these standards so that all sources in the food supply are involved and so that the consumer’s taste preferences can be changed over time to the lower amounts of salt in food. The goal is to slowly, over time, reduce the sodium content of the food supply in a way that goes unnoticed by most consumers as individuals’ taste sensors adjust to the lower levels of sodium.

Identifying the Problem

Despite efforts to reduce sodium intake in the United States, consumption levels remain high. Figure 1 reveals an upward trend in sodium intake since the early 1970s. Further, in recent years, consumers have not focused nearly as much on reducing sodium intake as they have on other nutrients of concern such as fat. One reason for high sodium consumption is that consumers have become accustomed to high levels of sodium in processed and restaurant foods and have difficulty adjusting to foods with healthier levels of sodium. However, the preference for salty taste can be changed. What is needed is a coordinated effort to reduce sodium in foods across the board

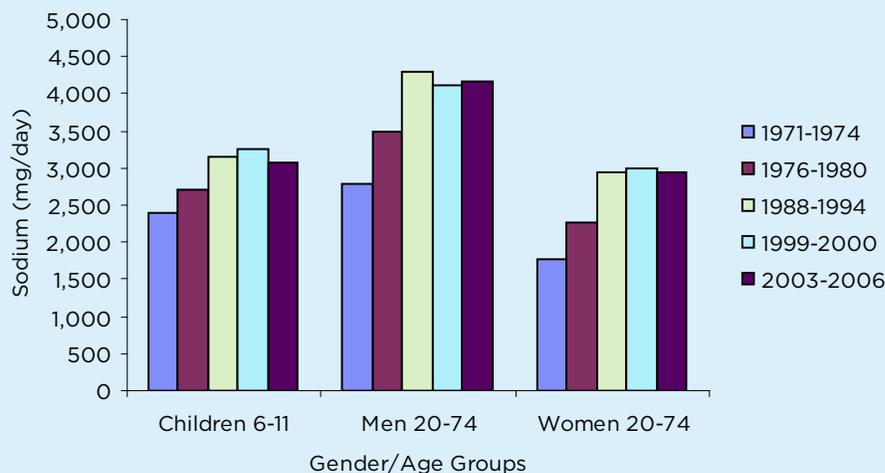
by manufacturers and restaurants—that is, create a level playing field for the food industry. All segments of the food industry would be carrying out the same reductions and none would be at a disadvantage.

No one is immune to the adverse health effects of excessive sodium intake. While some may have the impression that sodium reduction is only necessary for individuals with hypertension or for groups with a higher risk of developing hypertension (for example, African Americans and older adults), in reality, it is necessary for all populations in order to avoid high blood pressure and cardiovascular disease.

Recommended Strategies to Reduce Sodium Intake

As its primary strategy for sodium reduction, the committee recommends that the FDA set mandatory national standards for the sodium content in foods—not banning outright the addition of salt to foods but beginning the process of reducing excess sodium in processed foods and menu items to a safer level. It is important that the reduction in

Figure 1: Trends in Mean Sodium Intake from Food for Three Gender/Age Groups, 1971-1974 to 2003-2006



Source: Briefel and Johnson (2004) and NHANES (2003-2006)

What is needed is a coordinated effort to reduce sodium in foods across the board by manufacturers and restaurants—that is, create a level playing field for the food industry. All segments of the food industry would be carrying out the same reductions and none would be at a disadvantage.

sodium content of foods be carried out gradually, with small reductions instituted regularly as part of a carefully monitored process. Evidence shows that a decrease in sodium can be accomplished successfully without affecting consumer enjoyment of food products if it is done in a stepwise process that systematically and gradually lowers sodium levels across the food supply.

The Food, Drug, and Cosmetic Act specifies that substances added to foods by manufacturers must be proven safe under the conditions of their intended use, unless the substance is generally recognized as safe, known in the industry as GRAS. Currently, the manufacturers' addition of salt and a number of other sodium-containing compounds to foods is considered a GRAS use of the substance, but no standard level that constitutes a "safe use" has been set. Therefore, the committee recommends that the FDA modify the GRAS status of such compounds added to processed foods—that is change the level to which the use of such compounds is considered safe. This change, when carried out in a stepwise manner, will reduce the sodium content of the food supply slowly, in a way that should avoid making food unpalatable to consumers.

A range of stakeholders, including public health and consumer organizations and the food industry, will need to work together in order to successfully reduce sodium intake among Americans. In order to implement these new food standards, leadership and coordination at the national level is essential. Specifically, the Secre-

tary of Health and Human Services (HHS) should act in cooperation with other government and non-government groups to design and implement a nationwide campaign to reduce sodium intake and should set a timeline for achieving the sodium intake levels established by the *Dietary Guidelines for Americans*. Consumers do not have direct control over how much sodium is added to foods, but they have an important role to play in reducing their sodium intake by making healthy food choices and selecting lower-sodium foods. In addition, government agencies, public health and consumer organizations, health professionals, the health insurance industry, the food industry, and public-private partnerships should support the implementation of the sodium standards for foods and also support consumers in reducing their sodium intake. Finally, better monitoring of sodium intake and of the progress toward changing salt taste preference are essential so that the reduction efforts can be tracked and evaluated, and improvements can be made as needed.

Implementation and Research Needs

The implementation of these important changes will require preliminary data-gathering, dialogue among stakeholders, and careful analysis of food supply data. Further, if carried out in a stepwise manner, the process can be informed by the continual monitoring of the impact of the steps. In other areas, the committee identified three topics that require research:



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The Food and Drug Administration

The Office of Disease Prevention and Health Promotion

- Understanding how salty taste preferences develop throughout the lifespan
- Developing innovative methods to reduce sodium in foods while maintaining palatability, physical properties, and safety
- Enhancing current understanding of factors that impact consumer awareness and behavior relative to sodium reduction

Conclusion

In the face of chronic disease risks associated with sodium intake, the current level of sodium in the food supply—added by food manufacturers, food-service operators, and restaurants—is too high to be “safe.” The recommended strategies in this report set a new course for reducing sodium intake with an innovative and unprecedented approach to gradually reducing sodium levels in foods. The patchwork of voluntary approaches that have been implemented over the years have not worked and have not created the level playing field deemed critical to any successful effort to reduce the sodium content of the overall food supply. While these efforts are laudable, they are not sustainable. The current focus on instructing consumers to select lower-sodium foods and making available reduced-sodium “niche” products cannot result in intakes consistent with public health recommendations. Without major change, hypertension and cardiovascular disease rates will continue to rise, and consumers, who have little choice, will pay the price for inaction. 

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