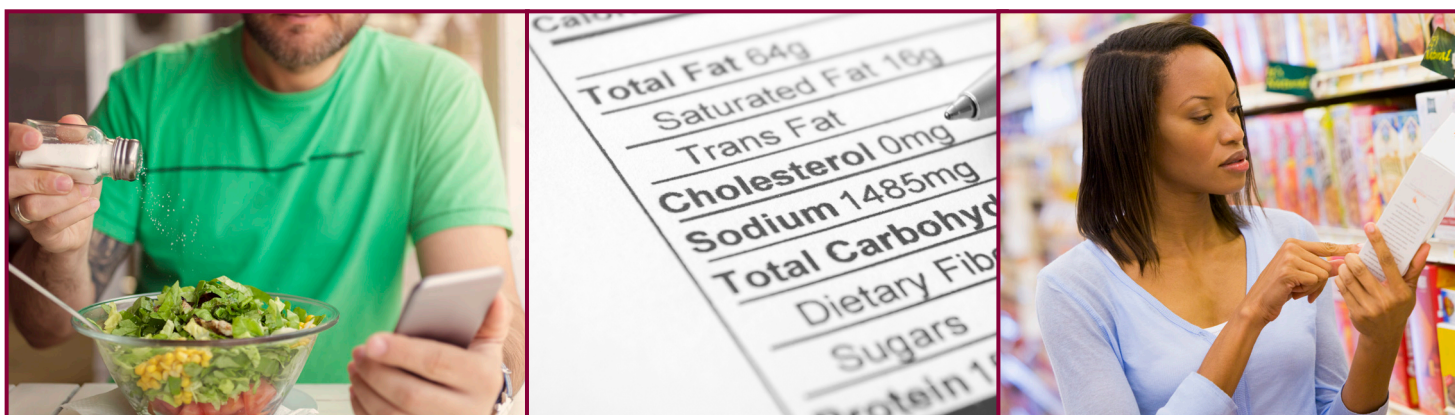


Population-Level Interventions in Government Jurisdictions for Dietary Sodium Reduction

The following is a synopsis of “Population-level interventions in government jurisdictions for dietary sodium reduction,” which was published in September 2016 in the *Cochrane Database of Systematic Reviews*.



What is already known on this topic?

The *2015–2020 Dietary Guidelines for Americans* recommends people aged 14 years or older in the United States consume less than 2,300 milligrams of dietary sodium per day. However, the analyzed data from the 2009–2012 National Health and Nutrition Examination Survey found that approximately 90% of Americans across all subpopulations exceeded recommendations for sodium intake. This is a concerning finding because current evidence indicates that high dietary sodium consumption is associated with high blood pressure. High blood pressure is a major risk factor for cardiovascular diseases (CVDs) such as stroke and heart disease. As CVDs remain the leading cause of death among U.S. adults, dietary sodium reduction may be addressed by targeting whole populations through population-level interventions.

What is added by this article?

The authors assessed the impact of population-level interventions for dietary sodium reduction in government jurisdictions (e.g., national, state/regional/provincial, municipal) in 15 countries. The authors identified six types of population-level interventions for dietary sodium reduction, including:

- Food product reformulation to reduce sodium content in food products
- Pricing interventions to encourage purchase of healthier food and discourage purchase of less-healthy food
- Food procurement policy in specific settings, such as sodium reduction policies in schools, workplaces, and health care settings
- Restrictions on marketing to children
- On-package nutrition information, including information on calories and nutrients and symbols for healthy food selection
- Public education campaigns, including campaigns about sodium reduction delivered through different media platforms

The authors included 10 countries for quantitative analysis. Among the seven countries that focused on multicomponent interventions that incorporated structural changes (i.e., food product reformulation, food procurement policy in specific settings), four countries—Finland, France, Ireland, and United Kingdom—reported overall reduced dietary sodium consumption from

Table 1. Summary of Findings Among Jurisdictions Included in the Quantitative Analysis

Jurisdiction	Public Education Campaign	Food Product Reformulation	Food Procurement Policy in Specific Settings	On-Package Nutrition Information	Restrictions on Marketing to Children	Pricing Interventions	Overall Outcome (Mean Sodium Consumption per Day)
United Kingdom	✓	✓	✓	✓	✓		Decrease
Finland	✓	✓	✓	✓			
France	✓	✓	✓				
China	✓						
Ireland	✓	✓		✓			
United States*	✓			✓			No change
Austria*	✓	✓	✓				
Netherlands	✓	✓	✓	✓			
Canada	✓						Increase
Switzerland	✓	✓	✓				

*An *increase* in sodium consumption among women was reported in the United States

*A *decrease* in sodium consumption among men was reported in Austria

pre-intervention to post-intervention. However, two countries, Canada and Switzerland, reported an overall increase in dietary sodium intake after the intervention. All the countries except Ireland assessed the impact of the interventions between the sexes. More than half of the countries that solely focused on men demonstrated a reduction in dietary sodium consumption, whereas the findings among countries that only focused on women reported mixed results. The specific details related to the interventions and outcomes in the jurisdictions are available in Table 1.

What are the implications of these findings?

The authors indicated that a population-level intervention approach has the potential to reduce dietary sodium consumption. Initiatives that are multifaceted and involve structural changes (i.e., food product reformulation, food procurement policy in specific settings) were more effective than single-component initiatives (i.e., public education campaign). Additionally, jurisdictions should consider a process to monitor an initiative's impact when launching a national sodium reduction initiative. Further empirical studies

are needed to determine the impact of national sodium reduction initiatives on health outcomes associated with excess sodium consumption. The authors mentioned that the literature included in the review had low methodological quality. However, large nationally representative samples of the population and careful measurement of dietary sodium intake were strengths of several studies.

Resources

Centers for Disease Control and Prevention: Salt
<http://www.cdc.gov/salt>

Dietary Guidelines for Americans 2015–2020: Eighth Edition
<https://health.gov/dietaryguidelines/2015/guidelines/>

Institute of Medicine
 Sodium Intake in Populations: Assessment of Evidence
<http://www.nationalacademies.org/hmd/Reports/2013/Sodium-Intake-in-Populations-Assessment-of-Evidence.aspx>

Citation

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

