
HOT OFF THE PRESSES

An International Call for Action: Flawed research undermining dietary salt guidelines that protect cardiovascular health

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“The question of contagion in various diseases has often been discussed with a degree of acrimony that is unusual in medical or other scientific enquiries. [...] It is the great pecuniary interests involved ...” John Snow, 1853.

In the mid 19th century, a cholera epidemic in London occurred, leading some to say it was caused by ‘bad air’ and others that it was due to a ‘germ’ transmissible from person to person. This controversy fuelled a political debate about how to control the epidemic. Whilst the Tories supported the ‘germ’ theory that favoured periods of quarantine to protect agricultural interests, the Liberals argued in favour of the ‘miasma’ theory, since quarantines would jeopardise free trade and threaten the rising of the industrial bourgeoisie. Controversies in science have since dominated modern public health, often to protect vested interests rather than to promote the public good.

Cardiovascular disease (CVD) is the number one killer of humans. Reducing sodium (mostly from salt) intake improves cardiovascular health. Since 2010, some researchers have been incorrectly claiming that a moderate reduction in sodium (salt) consumption is harmful. Yet, the best available evidence supports the global public health guidance of health organizations, including the World Hypertension League, to reduce sodium consumption to no more than 2,000mg per day (5g of salt per day) to prevent CVD. In the latest issue of [Current Nutrition Reports](#) (1) 25 leading experts in nutrition and CVD prevention denounced the incorrect claim that is based on flawed methods, poor rigour in research methodology and bias.



Whilst such an unfounded claim has been contested on its scientific merits over many years, the researchers who make the incorrect claims continue without correction. Their incorrect claim continues to be published in peer-reviewed journals by the same scientists based on the same flawed evidence. They mischaracterize and dismiss the scientific consensus if they cite it at all. These publications mislead readers with their incorrect claims generating doubt and controversy.

The 25 experts analyse the misconceptions, misstatements and deliberate denials of the evidence in eight articles published in the *European Heart Journal* between 2020 and 2021 (2). They identified issues of significant consequences for public health, conflict of interest declarations, and peer-review that journals and policymakers must address to maintain public trust in the scientific process, and numerous challenges to scientific integrity (as seen in the past regarding tobacco and currently regarding climate change).

The reasons for this false controversy about sodium intake are many: conflict of interest (often not declared), commercial bias, lack of public access to raw data, flawed and unremedied research practices, ineffective enforcement of rules on research ethics, and unchecked vested interests of scientific journals (1,3).

The international cardiovascular experts hereby call upon government health and advanced education ministries; universities; research ethics boards; journals; and institutions to take specific steps to address these concerns (1,3). Low quality research, the conduct of some scientists and undeclared vested interests are undermining the reduction of sodium intake in the global population that would prevent CVD, still the leading cause of death globally.

References

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SODIUM REDUCTION NEWS

Resolve to Save Lives: LINKS Sodium Reduction Framework 2021

High dietary sodium is the leading nutritional risk globally and is attributed to approximately 500 million people having hypertension, over 44 million disability-adjusted life years lost and over 1.8 million deaths in 2019. In December 2021, **Resolve to Save Lives** released a framework to aid the development, enhancement, and evaluation of dietary sodium reduction programs (<https://linkscommunity.org/toolkit/sodium-framework>).

The Framework was developed by a Resolve to Save Lives (RTSL) expert team, RTSL reviewers from country offices with sodium reduction programs, as well as external experts including those with experience implementing national sodium reduction programs from a diverse array of countries.





The resource is web based and provides an overview on the following key components of sodium reduction programming: Program Governance; Surveillance, Monitoring, and Evaluation; and Key Interventions for packaged foods, foods prepared outside the home, and sodium added to foods in the home.

For each component, the Framework outlines recommended steps and provides additional key implementation tools, country examples, and other related resources. The framework identifies highly recommended interventions from the World Health Organization ('Best Buys'), interventions that have substantive evidence and

experience in reducing dietary sodium, as well as promising interventions that are still under investigation for effectiveness. Links to other key resources such as the World Health Organization SHAKE program and other WHO regional office strategic documents supporting dietary sodium reduction are also shared.

Sodium Reduction Framework

This framework summarizes the recommended components of a comprehensive dietary sodium reduction program and provides links to existing implementation tools, examples of successful programs and other resources.

	Governance
	Surveillance
	Packaged Food
	Foods Prepared Outside the Home
	Sodium Added in the Home

The resource ends with a survey to provide an opportunity for users to further enhance the program in subsequent updates. Users are highly encouraged to provide feedback, making the framework a 'Live' document that is up to date with new research and global progress. It is hoped this framework will aid the development, enhancement, and evaluation of population sodium reduction programs.

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US Food Industry Progress Towards Salt Reduction

Submitted by Andrea Sharkey, MPH, Project Manager, Bureau of Chronic Disease Prevention, New York City Department of Health and Mental Hygiene



I’m pleased to share our new study [“US Food Industry Progress Towards Salt Reduction, 2009-2018”](#), published recently in *American Journal of Public Health*. We used the [National Salt Reduction Initiative \(NSRI\)](#) database to look at changes in sodium in packaged foods during two time periods: (1) during the NSRI (2009-2012 and