Policy Options to Reduce Population Salt Intake

The following is a synopsis of “Policy Options to Reduce Population Salt Intake,” published in the July 31, 2011, issue of the British Medical Journal.

What is already known on this topic?

High blood pressure, a leading risk factor for cardiovascular disease, contributes significantly to rates of death and disability worldwide. Sodium, which we consume primarily in the form of salt, is in most processed and restaurant food. Multiple studies have shown a direct correlation between blood pressure and dietary salt intake. Evidence from randomized controlled trials indicates a dose-response effect, with blood pressure decreasing when salt intake is reduced. This population-based intervention is effective in men and women of all ages and racial/ethnic groups.

What is added by this document?

Because cardiovascular disease affects countries worldwide, its prevention has become a top priority, second only to global tobacco control. Current estimates indicate that a 15 percent reduction in salt intake could prevent 8.5 million deaths worldwide from cardiovascular disease over 10 years. In the United States, reducing daily salt intake by 3 grams (1,200 milligrams of sodium)* would result in a 10 percent reduction in new cases of cardiovascular disease each year. Recognizing the importance of this population-based intervention, in 2011 the World Health Organization set a global goal to reduce daily salt intake to less than 5 grams (2,000 milligrams of sodium) per person by 2025.**

What are the implications for public health practice?

Several economic modeling studies have assessed the cost and health effects of population-wide salt reduction. These studies show that lower salt intake has consistently resulted in cost savings. By reducing salt intake by 3 grams per day, the U.S. population would gain an estimated 194,000 to 392,000 quality-adjusted life years. This intervention also would result in health care cost savings between $10 and $24 billion. With shrinking economies and limited budgets worldwide, reducing salt intake at a population level can save lives and decrease costs by controlling the burden of chronic disease.

* Sodium is a component of salt (NaCl). Ninety percent of the sodium Americans consume is in the form of salt.

**Guidelines in the United States differ slightly. The 2010 Dietary Guidelines for Americans recommend that those aged 2 and up reduce sodium intake to less than 2,300 milligrams (mg) per day. People 51 and older and those of any age who are African American or who have high blood pressure, diabetes, or chronic kidney disease should reduce sodium intake to 1,500 mg per day.
What are the applications for these findings?

Focusing on individual behavior change is not enough to make an impact on cardiovascular disease because most salt is added to food during manufacturing, rather than at the table. Therefore, a four-pronged approach should form the foundation for comprehensive salt reduction policy:

- Communication: Create and evaluate public awareness campaigns to educate consumers about salt and its health effects.
- Reformulation: Set progressive targets for lowering sodium levels in existing processed food and partner with industry to set standards for new food products.
- Monitoring: Survey the population's salt intake, the progress of reformulation, and the impact of salt-related communications.
- Regulation: Connect with the food industry, including regulatory agencies, to create a “level playing field” of lower-sodium products.

Food reformulation is required throughout the industry to help curb the epidemic of cardiovascular disease in the United States. This process must include voluntary or mandatory salt standards or market pressure from consumers for lower-sodium products. Non-industry stakeholders, such as academia and public health agencies, also must be involved in this change.

Resources

Centers for Disease Control and Prevention
Salt Home Page
www.cdc.gov/salt/index.htm

World Health Organization
Population Sodium Reduction Strategies
www.who.int/dietphysicalactivity/reducingsalt/en/index.html

Dietary Guidelines for Americans, 2010

Consensus Action on Salt & Health
www.actiononsalt.org.uk

Citation

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.