Lowering sodium consumption could save US $18 billion annually in health costs

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Reducing Americans' average intake of sodium to the amount recommended by health officials could save the nation as much as $18 billion annually in avoided health care costs and improve the quality of life for millions of people, according to a new RAND Corporation study.

The study estimates that meeting national sodium guidelines could eliminate 11 million cases of high blood pressure nationally and extend the lives of thousands of people each year. The monetary value of the improved quality of life would be an estimated $32 billion annually, according to the findings published in the September/October edition of the *Journal of Health Promotion*.

"This study provides an important first step toward quantifying the benefits of reducing the intake of sodium by the American public," said Kartika Palar, the study's lead author and a graduate fellow at the RAND Pardee Graduate School. "These findings make a strong case that there's value in pursuing a population-based approach to reducing sodium intake among Americans."

The study is one of the first to estimate the economic benefits of lowering sodium consumption among the American public.

Excessive consumption of sodium is a persistent health problem in the United States, causing increased rates of high blood pressure and related illnesses such as cardiovascular diseases. The Institute of Medicine recommends that adults consume no more than 2,300 milligrams of

sodium each day, with lower amounts recommended for older adults, black patients and those with high blood pressure -- groups that are at higher risk.

Researchers from RAND Health analyzed information about Americans' blood pressure levels, use of antihypertensive medications and sodium intake from the National Health and Nutrition Examination Survey, a federal study that routinely assesses the health and nutritional status of adults and children in the United States. The study is unique in that it combines interviews and physical examinations.

Palar and study co-author Roland Sturm, a RAND senior economist, using a cross-sectional simulation model, calculated that lowering sodium intake would trim a sizable portion of the $55 billion spent nationally each year to treat high blood pressure. About half of the $18 billion in annual health care cost savings would accrue to public sector health spending. Researchers say their estimates are conservative because they were not able to calculate the savings for illnesses such as cardiovascular diseases where sodium consumption plays a less-defined role.

In addition, researchers estimated that meeting sodium consumption guidelines would save in one year 312,000 quality adjusted life years -- a research measurement that adjusts increased longevity for the relative healthiness experienced during additional years of life.

"Our results are driven by the fact that nearly 30 percent of the nation's population has hypertension," Palar said. "One of the reasons that hypertension is so pervasive is that sodium consumption is so high."

Researchers say that better strategies for lowering sodium intake broadly across the nation's population still need to be developed. Studies estimate that more than 75 percent of Americans dietary sodium intake comes

from processed foods rather than from salt added during cooking at home or at the dining table. Restaurant food also is generally high in sodium.

Population-based strategies that have been discussed include redesigning food labeling information to better highlight sodium levels, having manufacturers voluntarily lower sodium levels and adopting regulations that would require food processors to lower sodium.

Source: RAND Corporation