Christiana Care Health System and University of Delaware Researchers Show Health Benefits of “Holding the Salt”

Major Review Finds Excess Salt Hurts More than Just Blood Pressure

(NEWARK, Del. – March 9) Although it is widely known that excess salt can cause unhealthy blood pressure levels, researchers from Christiana Care Health System and the University of Delaware concluded that excess salt intake also wreaks havoc on many other organs.

Consuming too much salt also can adversely impact the heart, kidneys, blood vessels and brain, according to research review published in the current issue of the Journal of the American College of Cardiology by William Weintraub, M.D., MACC, FAHA, FESC, John H. Ammon Chair of Cardiology at Christiana Care and founding director of Christiana Care’s Center for Outcomes Research, and William Farquhar, PhD, chair and professor of the Cardiovascular Research Laboratory at the University of Delaware.

“Our goal is to arm patients and their families with the information they need to make healthy decisions about their diets so they can live healthy lives,” Weintraub said. “Other research has established the unhealthy impact of increased salt intake on blood pressure, but this review goes beyond those findings to shine a light on the unhealthy impact excess salt intake causes on several other organs.”

Specifically, the review of 100-plus studies by Weintraub and Farquhar found that excess salt intake can cause serious health problems, even in the absence of blood pressure complications.

Increased salt intake can cause the following:

- in the heart, an enlargement of the walls of the main pumping chamber, forcing the chamber to work harder, and thereby increasing the risk for cardiovascular problems.
- in the kidney, an increase in protein excretion as well as a hindrance of the rate of waste filtration from the blood.
- in the blood vessels, a disruption of the ability of its inner lining to function properly.
- in the brain, the unnecessary activation of the fight-or-flight response, which can result in cascade of health problems.

According to a 2012 National Health and Nutrition Examination Survey, 97 percent of U.S. adults consumed more sodium than recommended by the federal government’s Dietary Guidelines for Americans.
Weintraub and Farquhar conclude that a coordinated, population-wide effort should be launched to reduce the intake of sodium that is inclusive of health advocacy groups, food processors, restaurants and public policy makers.

Christiana Care’s Center for Outcomes Research features researchers with established expertise in clinical, population health and cost-effectiveness research. The center focuses on the impact of alternative approaches to prevention, diagnosis and treatment of disease.

The Center for Outcomes Research is one of four centers within Christiana Care’s Value Institute, whose goal is to develop, deliver and evaluate innovative practice and policy solutions that improve the experience, efficiency and effectiveness of health care for patients and providers alike.

The study was supported through the Delaware Clinical and Translational Research Program, also known as CTR-ACCEL, which is a five-year, $20 million grant from the National Institutes of Health to support clinical and translational research given to the University of Delaware, Christiana Care, Nemours and Medical University of South Carolina. Weintraub is the leading investigator for CTR-ACCEL at Christiana Care.

Other authors in the review include Claudine Jurkovitz, M.D., MPH, senior physician scientist with Christiana Care’s Value Institute, whose mission is to develop, deliver and evaluate innovative health care solutions that meet the “triple aim” of improving patient experience and population health while reducing health care costs. David G. Edwards, PhD, associate professor of the Vascular Physiology Laboratory at the University of Delaware, also is an author in the review.

About Christiana Care Health System

Christiana Care Health System is one of the country’s largest health care systems, ranking as the 22nd leading hospital in the nation and 12th on the East Coast in terms of admissions. The health system includes The Christiana Care Medical Group, a network of primary care physicians, medical and surgical specialists as well as home health care, preventive medicine, rehabilitation services and patient/family advisors for core health care services. A not-for-profit teaching hospital affiliated with Sidney Kimmel Medical College at Thomas Jefferson University, Christiana Care is recognized as a regional center for excellence in cardiology, cancer and women’s health services. Christiana Care has an extensive range of outpatient services, and through Christiana Care Quality Partners, Christiana Care works closely with its medical staff to achieve better health, better access to care and lower cost. Christiana Care is home to Delaware’s only Level I trauma center, the highest capability center and the only one of its kind between Philadelphia and Baltimore. Christiana Care also features a Level III neonatal intensive care unit, the only delivering hospital in Delaware that offers the highest level of non-surgical care to the most critically ill newborns. Christiana Care includes two hospitals with 1,100 patient beds.

For more information about Christiana Care, visit www.christianacare.org/whoweare.