

Shift Focus From Salt to Sugar in Cardiovascular Disease: Researchers

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By David Douglas

NEW YORK (Reuters Health) - Salt in processed foods may boost the risk of hypertension and cardiovascular disease, but the role of sugar has been underrated, researchers say.

As Dr. James J DiNicolantonio told Reuters Health by email, "A reduction in the intake of added sugars, particularly fructose, and specifically in the quantities and context of industrially manufactured consumables, would help not only curb hypertension rates, but would also help address broader problems related to cardiometabolic disease."

Dr. DiNicolantonio of Saint Luke's Mid America Heart Institute in Kansas City, Missouri, and Dr. Sean C Lucan of Montefiore Medical Center in the Bronx, New York, came to this conclusion after a review of the literature. Their findings were published online December 10 in *Open Heart*.

Compelling evidence from basic science, population studies, and clinical trials, they write, "implicates sugars, and particularly the monosaccharide fructose, as playing a major role in the development of hypertension."

They point out that epidemiological studies and experimental trials in animals and humans suggest these added sugars "may increase blood pressure and blood pressure variability, increase heart rate and myocardial oxygen demand, and contribute to inflammation, insulin resistance and broader metabolic dysfunction."

People who consume 25% or more calories from added sugar, they say, "have an almost threefold increased risk of death due to cardiovascular disease."

They further observe that drinking sugar-sweetened beverages has been directly associated with increased blood pressure. Worldwide, they state, consumption of such beverages has been implicated in 180,000 deaths per year.

In particular, ingesting one 24 ounce soft drink has been shown to cause an average maximum increase in blood pressure of 15/9 mm Hg and heart rate of 9 bpm. A sucrose-sweetened beverage has the same effect on heart rate, but has a slightly less pronounced hypertensive effect (12/9 mm Hg).

The authors say this is a relatively new problem in that some 300 years ago, humans consumed only a few pounds of sugar a year. Now estimated annual intake in the U.S. ranges from 77 to 152 lbs.

In fact, current U.S. per capita intake of added sugars is as much as eight times higher than current recommendations by the American Heart Association and the World Health Organization.

"Cardiovascular disease is the leading cause of premature mortality in the developed world, and hypertension is its most important risk factor," said Dr. DiNicolantonio. "Controlling hypertension is a major focus of public health initiatives, and dietary approaches have historically focused on sodium."

"Clinicians and patients," he concluded, "should shift focus away from salt and focus greater attention to the likely more-consequential food additive: sugar."

Commenting on the paper by email, Dr. Rachel Johnson of the University of Vermont, Burlington, told Reuters Health she doesn't think "it should be an either or approach."

Dr. Johnson, chair of the American Heart Association Nutrition Committee, said the AHA "recommends limiting added sugars to no more than 6 teaspoons a day for women and 9 teaspoons for men. AHA also recommends limiting sodium."

"Limiting processed foods in your diet will likely have the effect of reducing both added sugars and sodium intake," she concluded.

SOURCE: <http://bit.ly/1Auc8tH>

Open Heart 2014.

Editors' Recommendations

- [Lower Sodium Intake Reduces Blood Pressure in Adults and Children, but is not Associated With a Reduced Risk of all CVD or All Cause Mortality](#)
- [A Qualitative Study of CVD Management and Dietary Changes: Problems of 'Too Much' and 'Contradictory' Information](#)