Sweet Beverages Linked to Cardiovascular Risk

BY ROBERT FINN

SAN FRANCISCO — The increase in the consumption of sugar-sweetened beverages between 1990 and 2000 contributed to 130,000 new cases of diabetes and 14,000 new cases of coronary heart disease between 2000 and 2010, according to estimates from a computer model of the U.S. population.

In addition, the rising consumption of sugar-sweetened beverages, which include soda, sports drinks, and fruit drinks, led to an estimated 1.4 million additional life-years burdened by diabetes and 50,000 additional life-years burdened by coronary heart disease in the first decade of the 21st century.

To derive those estimates, Dr. Litsa K. Lambrakos of the University of California, San Francisco, and her colleagues used data from the 1990-2000 National Health and Nutrition Examination Survey (NHANES) on consumption of sugar-sweetened beverages. She combined that with the Coronary Heart Disease Policy Model, a computer simulation of heart disease in U.S. adults aged 35-84 years.

According to that model, the relative risk of incident diabetes related to the daily consumption of sugar-sweetened beverages was 1.32 after adjusting for body mass index. Dr. Lambrakos presented the findings during a poster session at a conference sponsored by the American Heart Association.

The estimated increase in coronary heart disease related to the increased consumption of sugar-sweetened beverages would have generated an additional $300-$500 million in health care costs between 2000 and 2010.

"Those numbers about excess health care costs are very conservative, because they only account for health care costs attributed to coronary heart disease," Dr. Lambrakos said in an interview. "We know we have an increase in diabetes as well that we can attribute to soft drink consumption. And those costs—the cost of caring for and treating patients with diabetes—is a very large number as well."

The investigators also analyzed how a 1 cent per ounce tax on sugar-sweetened beverages might have limited coronary heart disease costs, had it been implemented in the year 2000. Based on economic studies, the computer model assumed that such a tax would decrease consumption by 10%. This would translate to a savings of $170 million in health care costs over 10 years.

Commenting on the findings, the American Heart Association issued a statement that it "acknowledges the importance of limiting intake of added sugars, including sugar-sweetened beverages. The association is still evaluating the research to determine which strategies accomplish this best, comparing more punitive strategies like taxation with more positive incentives like subsidies or lowering prices for healthy foods. … Robust evaluation should be part of any tax measures that are passed and advocates for broader nutrition policy efforts that make healthy foods more affordable and accessible to all consumers and bring food pricing and subsidies in line with federal dietary guidelines and AHA nutrition recommendations."

Asked what message primary care physicians should take from the findings, Dr. Lambrakos said that "what we're talking about here is primary prevention. … It's important for the general public and physicians to understand that these drinks may lead to adverse health outcomes over time, and that they really shouldn't be considered a staple of the American diet." ■

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