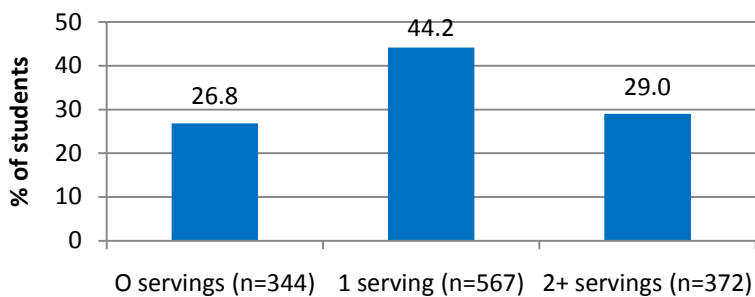


## Sugar Sweetened Beverage Consumption among Iowa 3<sup>rd</sup> Grade Children

The New England Journal of Medicine (Sept. 16, 2009) has indicated that the consumption of sugar-sweetened beverages has been associated with risks for obesity, diabetes, and heart disease; given this, a persuasive justification can be made for the need to reduce consumption of these beverages

During Spring 2009, the Iowa Department of Public Health collected statewide data from third grade students in public schools. In addition, parents were given a short survey to complete. The survey asked parents how many sugar-sweetened beverages (SSB) their child consumed each day.

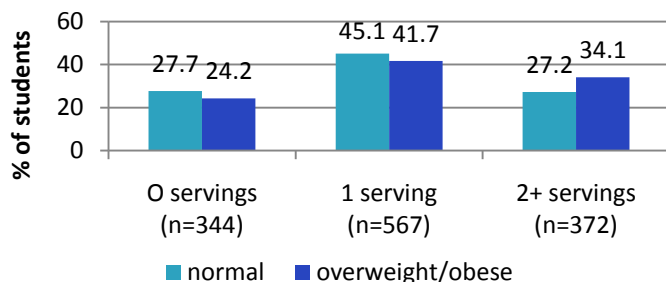
**SSB Consumption among Iowa 3<sup>rd</sup> Graders, Spring 2009**



*“Sugar-sweetened beverages are beverages that contain added, naturally derived caloric sweeteners such as sucrose (table sugar), high-fructose corn syrup, or fruit-juice concentrates, all of which have similar metabolic effects.”* *New England Journal of Medicine, Sept. 16, 2009*

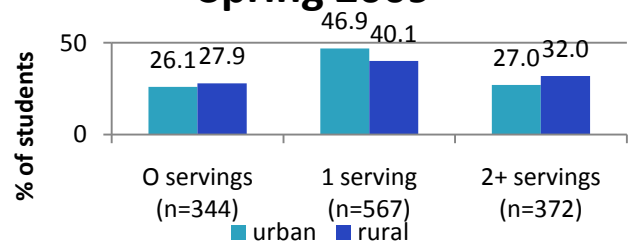
Of the 1,130 parents responding to the question, most indicated their child consumed one SSB or less daily (71%). However, 29% drank two or more SSB daily. Across the U.S., the most recent data (2005–2006) show that children and adults consume about 172 and 175 calories daily, respectively, per capita from sugar-sweetened beverages. *New England Journal of Medicine, Sept. 16, 2009*

**SSB by BMI among Iowa 3<sup>rd</sup> Graders, Spring 2009**



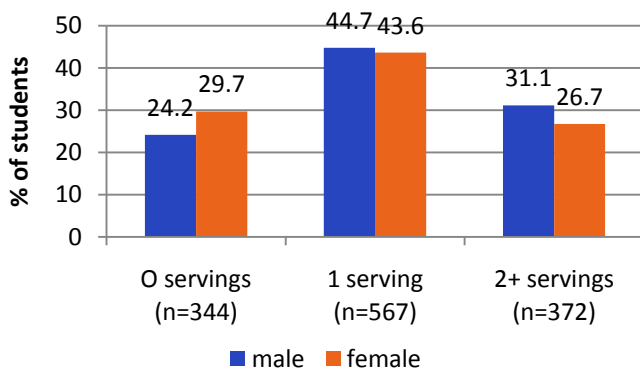
Among 3<sup>rd</sup> graders, over one-third (34%) who were overweight/obese drank two or more SSB daily.

**SSB by Urban/Rural Status among Iowa 3<sup>rd</sup> Graders, Spring 2009**



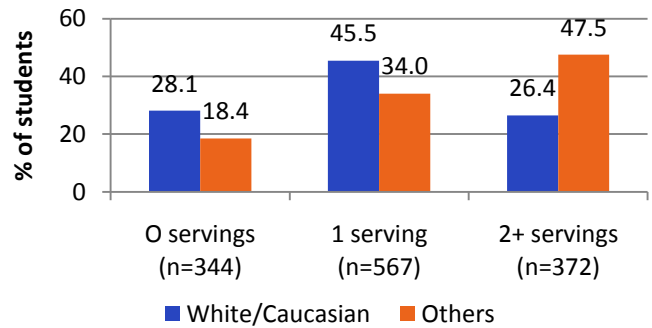
27% of urban 3<sup>rd</sup> graders drank two or more servings of SSB daily compared to 32% of rural 3<sup>rd</sup> grade students.

## SSB by Gender among Iowa 3rd Graders, Spring 2009



Among 3<sup>rd</sup> grade boys, almost one-third (31%) drank two or more SSB daily. For girls, 27% drank two or more daily.

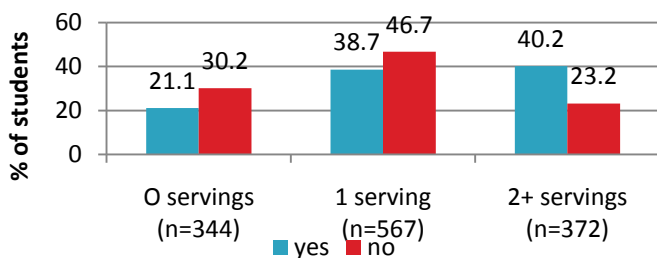
## SSB by Race/Ethnicity among Iowa 3rd Graders, Spring 2009



Among Caucasian 3<sup>rd</sup> graders, one-quarter (26%) drank two or more SSB daily. However, among minority children, 48% drank two or more SSB daily.

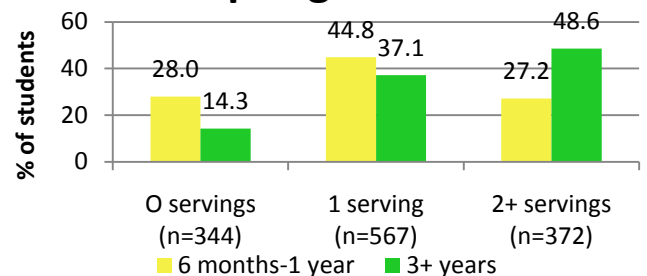
In 2005, the Dietary Guidelines for Americans recommended that Americans drink beverages without added sugar.<sup>1</sup> Limiting sugar-sweetened drinks has continued to be a focus. The 2009 American Heart Association Pediatric Dietary Guidelines recommends reducing added sugars including sweetened drinks and juices.<sup>2</sup> In the sample of elementary school students from across Iowa, only about 27% of children follow these guidelines.

## SSB by Free/Reduced Lunch Eligibility among Iowa 3rd Graders, Spring 2009



Among 3<sup>rd</sup> graders who qualify for free or reduced lunch, 40% have two or more SSB daily. Only 23% of those who do not qualify have two or more SSB daily.

## SSB by Last Dental Visit among Iowa 3rd Graders, Spring 2009



27% of 3<sup>rd</sup> graders whose last dental visit was within the last year drink two or more SSB daily. Among 3<sup>rd</sup> graders whose last visit was three or more years ago, 49% drink two or more SSB daily.

<sup>1</sup> Department of Health and Human Services and US Department of Agriculture. Dietary guidelines for Americans. Washington, DC: Department of Health and Human Services, US Department of Agriculture, 2005

<sup>2</sup> *Circulation* 2009;119:1161-1175. Mennella, Barry Popkin, Jonelle Rowe, Linda Van Horn and Laurie Whitsel Samuel S. Gidding, Alice H. Lichtenstein, Myles S. Faith, Allison Karpyn, Julie A.

Pressure Research Nursing, Council on Epidemiology and Prevention, and Council for High Blood Arteriosclerosis, Thrombosis and Vascular Biology, Council on Cardiovascular Metabolism, Council on Cardiovascular Disease in the Young, Council on Nutrition Committee of the Council on Nutrition, Physical Activity and Guidelines: A Scientific Statement From the American Heart Association

The measurement of BMI in Iowa's 3<sup>rd</sup> grade children was a collaborative effort between the Iowa Department of Public Health, Division of Health Promotion and Chronic Disease Prevention and the Center for Health Statistics. Funding for this project was provided by the Wellmark Foundation.

