Authoritative Nutriton Guidance Recognizes the Positive Role of Flavored Milk

"Healthy eating patterns limit added sugars to less than 10 percent of calories per day...which means meeting nutrient and food group needs through nutrient-dense food and beverage choices and staying within calorie limits."

2015 Dietary Guidelines for Americans. http://health.gov/dietaryguidelines/2015/guidelines/chapter-2/a-closer-look-at-current-intakes-and-recommended-shifts/

"Some sweetened milk and yogurt products may be included in a healthy eating pattern as long as the total amount of added sugars consumed does not exceed the limit for added sugars, and the eating pattern does not exceed calorie limits." 2015 Dietary Guidelines for Americans. http://health.gov/dietaryguidelines/2015/guidelines/chapter-2/a-closer-look-at-current-intakes-and-recommended-shifts/

"When sugars are added to otherwise nutrient-rich foods, such as sugar-sweetened dairy products like flavored milk and vogurt and sugar-sweetened cereals, the quality of children's and adolescents' diets improves, and in the case of flavored milks, no adverse effects on weight status were found.

Dietary sugars intake and cardiovascular health: a scientific statement from the American Heart Association. Circulation 2009;120:1011-1020.

"Sugars can promote enjoyment of meals and snacks. It is preferable that discretionary calories from sugar are added to otherwise nutrient-rich foods, such as dairy products (flavored milk and yogurt) and foods that provide whole grains and fiber (sugar-sweetened cereals)."

American Heart Association. Frequently Asked Questions About Sugar. Updated May 19, 2014. http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/Frequently-Asked-Questions-About-Sugar_UCM_306725_ Article.jsp#.VqfBFWdljIU

Flavored Milk is Not a Major Source of Added **Sugars and is Nutrient-Dense**

- Flavored milk contributes only about 4% of added sugars in the diets of children.1
- School-aged children who drink flavored milk do not have higher added sugar intakes compared to children who do not drink milk.2
- Children (2-18 yrs) who drink flavored milk have higher total milk intakes compared to those who exclusively drink white milk, and total milk drinkers do not have higher Body Mass Indices (BMIs) compared to non-[milk]-drinkers.3
- Sweetened, nutrient-dense foods such as milk, yogurt and cereals contribute to improved nutrient intakes.4
- Flavored milk consumption contributed to better dairy-related Healthy Eating Index scores as compared to non-flavored milk consumers and regardless of ethnicity, flavored milk consumption is not related to increased body weight or BMI z-score in American children and adolescents.5

Studies Indicate Removing Flavored Milk from **Schools May Lead to Significant Declines in School Milk Consumption**

- Steady progress has been made in reducing the added sugar content of flavored milk offered in schools. The sugar level in chocolate milk has declined by 7.5 grams per serving, or 45%, over six years (2007-2012).6
- In Boston schools, removal of flavored milk during 2012-2013 led to a 24% decrease in total milk selected during the second year after removal, and students consumed 10% less of the milk selected.7
- In a school district in Colorado, when flavored milk was removed on 1 to all days of the week, there was a 26.0% reduction in milk sales and an 11.4% increase in the percentage of milk discarded, resulting in a 37.4% decrease in milk consumption.8
- A study published in 2014 found that when flavored milk is removed from schools, it may lead students to take less milk overall, drink less (waste more) of the white milk that is taken and no longer purchase school lunch.9

- 1 Dairy Research Institute®, NHANES 2007-2010. (Nutrition Impact, LLC analysis. Ages 2+ years). Data Source: U.S. Department of Agriculture, Agriculture, Agricultural Research Service. 2013.
- Food Patterns Equivalent Intakes from Food: Consumed per Individual, by Gender and Age, What We Eat in America, NHANES 2007-2008, 2009-2010. Available at: www.ars.usda.gov/ba/bhnrc/fsrg
- 2 Johnson RK, Frary C, Wang MQ. The nutritional consequences of flavored-milk consumption by school-aged children and adolescents in the United States. J Am Diet Assoc 2002;102:853-856.
 3 Murphy MM, Douglass JS, Johnson RK, Spence LA. Drinking flavored or plain milk is positively associated with nutrient intake and is not associated with adverse effects on weight status in US children and adolescents. J Am Diet Assoc 2008;108:631-639.
- 4 Frary CD, Johnson RK, Wang MQ. Children and adolescents' choices of foods and beverages high in added sugars are associated with intakes of key nutrients and food groups J Adolesc Health 2004;34:56-63.
- 5 Cifelli CJ, Houchins JA, Demmer E, Fulgoni V. The Relationship Between Flavored Milk Consumption, Diet Quality, Body Weight, and BMI z-score Among Children and Adolescents of Different Ethnicities.' 2016. FASEB Journal vol. 30 no. 1 Supplement 1154.12.

 6 Prime Consulting Group. MilkPEP Annual School Survey 2012-2013 Report. June 2013. http://milkdelivers.org/sites/default/files/2012-13-annual-school-survey-report-final-2.pdf
- 7 Cohen JFW, Richardson S, Parker E, Catalano PJ, Rimm EB. Impact of the New U.S. Department of Agriculture School Meal Standards on Food Selection, Consumption, and Waste Am J Prev Med 2014:46(4):388-394).
- 8 Quann EE, Adams D. Impact on milk consumption and nutrient intakes from eliminating flavored milk in elementary schools. Nutr Today 2013;48:127-134.
- 9 Hanks AS, Just DR, Wansink B. Chocolate milk consequences: a pilot study evaluating the consequences of banning chocolate milk in school cafeterias. PLoS One 2014;9:e91022



