School Milk Is Critical to Child Nutrition

SCHOOL YEAR 2023–2024

Good nutrition is the foundation of health and wellness for children, and milk is a crucial part of a healthy diet beginning at a very young age. In fact, no other type of food or beverage provides the unique combination of nutrients that dairy contributes to the American diet – including high quality protein, calcium, vitamin D, and potassium – and health benefits including better bone health. As children grow into adulthood, milk continues to provide benefits by lowering the risk for type 2 diabetes and cardiovascular disease.

Dairy products play a critical role in the diet of children, where milk is the top source of calcium, potassium, phosphorus, and vitamin D in kids ages 2-18. According to the U.S. Departments of Agriculture and Health and Human Services, American children and adolescents over four years old are not consuming enough dairy to meet the recommendations in the federal Dietary Guidelines for Americans (DGA). Case in point: 73% of the calcium available in the food supply is provided by milk and milk products, and milk is the number one source of protein in the diets of children ages 2-11. In addition to nonfat and low-fat unflavored milk available in schools today, low-fat flavored milk is fully consistent with the DGA and provides students one of the most complete nutrient packages around while contributing only 4% of added sugars in the diets of children 2-18 years.

MILK DELIVERS
13
ESSENTIAL NUTRIENTS
THAT CHILDREN NEED TO STAY HEALTHY

Recent research has found milk to be a good hydration source[1] while delivering 13 essential nutrients that children need to stay healthy. Most recently, a panel of experts from the Academy of Nutrition and Dietetics, the American Academy of Pediatric Dentistry, the American Academy of Pediatrics, and the American Heart Association, concluded that milk—whole, low fat, and skim—offers a host of essential nutrients that young kids need to be healthy, while recommending parents strictly limit other beverages from their child's diet except for water and small amounts of juice. In fact, the joint report urged that young children not be fed most plant-based alternatives in lieu of milk, as the alternatives' nutrient profiles are largely not equivalent to milk's nutrient profile.

1 https://academic.oup.com/ajcn/article/103/3/717/4564598?

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Studies have shown that school meals are by far the healthiest meals of the day for children thanks, in part, to nutritious milk and dairy options.[2] School meals contribute significantly to the health and well-being of our nation's youth and the lives of families and communities. The nutritional quality of school meals and their consistency with the DGA make them a critical resource for millions of children. Moreover, almost 75% of the children who participate in school meals receive them at a free or reduced price—underscoring that they are reaching those who are most vulnerable. Before the COVID-19 pandemic disrupted our way of life, nearly 30 million students relied on school meals daily.[3] However, participation plummeted 30% during the pandemic,[4] and schools are struggling to recover today, meaning children are not getting access to critical nutrients. There is a need to inform the public of the nutritional quality of school meals and school milk and their critical role in nourishing future generations.

Deep Dive – Other Supporting Research

- Between 2003 and 2018, foods consumed at schools improved significantly and provided the best mean diet quality of major U.S. food sources, without population disparities.[5]
- Between the 2009-2010 and 2014-2015 school years, the Healthy Eating Index score of school breakfast increased 42% and lunch increased 41%.[6]
- Children who participate in school meals consume more dairy milk, fruits, and vegetables than non-participants, and they consume fewer desserts, snacks, and non-milk beverages.[7]
- School meals provide 77% of daily dairy milk consumption for low-income children.[8]
- According to National Dairy Council, flavored dairy milk is a good or excellent source of the same 13 essential nutrients as dairy milk, including calcium, vitamin D, and potassium – nutrients of public health concern that are lacking in the diets of many students.
- Flavored milk contributes only 4% of added sugars in the diets of children 2-18 years,[9] and flavored milk consumption is not associated with an increased BMI.[10]

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2 https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2778453

3 USDA Food & Nutrition Services. National School Lunch Program: Participation and Lunches Served, https://fns-prod.azureedge.us/sites/default/files/resource-files/slsummar-4.pdf (May 2022).

4 FRAC. School Meals Report, 2020-2021 School Year, https://frac.org/wp-content/uploads/SchoolMealsReport2022.pdf (Feb 2022)

5 Liu J, Micha R, Li Y, Mozaffarian D. Trends in Food Sources and Diet Quality Among US Children and Adults, 2003-2018. JAMA Netw Open. 2021;4(4):e215262. doi:10.1001/jamanetworkopen.2021.5262

6 Gearan EC, Fox MK. Updated Nutrition Standards Have Significantly Improved the Nutritional Quality of School Lunches and Breakfasts. J Acad Nutr Diet. 2020 Mar;120(3):363-370.

7 USDA Food & Nutrition Services. Lunches Consumed from School are the Most Nutritious, https://www.fns.usda.gov/infographic/lunches-consumed-schools-most-nutritious (July 2021)

8 Cullen & Chen, 2017. The contribution of the USDA school breakfast and lunch program meals to student daily dietary intake.

9 National Dairy Council. NHANES 2015-2018. Data Source: Centers for Disease control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services. http://www.cdc.gov/nchs/nhanes.htm.

10 Cifelli C, Houchins J, Demmer E, Fulgoni IIIV. The Relationship Between Flavored Milk Consumption, Diet Quality,

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Flavored Milk Drives Consumption of Nutrient-Rich Foods in School Meals

School meal programs are critically important to students' overall nutrition and health, and this includes helping them reach the recommended daily dairy servings. As noted above, fat-free and low-fat flavored milks are consistent with the Dietary Guidelines for Americans. These varieties deliver the same **13 essential nutrients** as unflavored milk, including calcium, vitamin D, and potassium—nutrients of public health concern that are lacking in the diets of many kids—and contribute just 4% of the added sugars in the diets of children 2-18 years. The 2020-2025 DGA noted, "A small amount of added sugars… can be added to nutrient-dense foods and beverages to help meet food group recommendations." Milk processors have met this challenge by reducing the calorie and added sugar content of flavored milk by 54%, from 16.7 grams to 7.6 grams of added sugar between school years 2006-2007 and 2022-2023.

Chocolate milk is the most popular milk choice in schools, and children who drink it come closer to meeting daily dairy recommendations than those who only consume unflavored milk.[11] In addition, flavored milk consumption is not associated with an increased BMI. When flavored milk is taken away, kids drink less milk and get fewer nutrients.[12] Studies have reported that the removal of flavored milk from schools can lead to a decrease in total milk consumption, which could negatively impact children's nutrient intake. In a school district in Colorado, when flavored milk was removed on one or more days of the week, there was an 11.4% increase in the percentage of milk discarded (a.k.a. food waste), resulting in a 37.4% decrease in milk consumption. Likewise, in an urban school district in Massachusetts, significantly fewer students selected milk when flavored milk was removed (56.8% vs. 94%), resulting in significantly lower (54.8% vs. 63.7%) milk consumption.[13]

Body Weight, and BMI z-Score Among Children and Adolescents of Different Ethnicities. FASEB J. April 2016;30: supplement 1154.12. https://faseb.onlinelibrary.wiley.com/doi/10.1096/fasebj.30.1_supplement.1154.12

11 Johnson RK, Fray 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(6):853-6.

12 Quann, E. E. & Adams, D. Impact on Milk Consumption and Nutrient Intakes from Eliminating Flavored Milk in Elementary Schools. Nutrition Today. 2013;48(3), 127-134.

13 Cohen, J., Richardson, S., & Rimm, E. B. (2019). Impact of the Updated USDA School Meal Standards, Chef- Enhanced Meals, and the Removal of Flavored Milk on School Meal Selection and Consumption. Journal of the Academy of Nutrition and Dietetics. 2019;119(9), 1511–1515.

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Keith Ayoob, a pediatric nutritionist, registered dietitian, and clinical practitioner who served as director of the nutrition clinic at the Children's Evaluation and Rehabilitation Center at the Albert Einstein College of Medicine in the Bronx for more than 30 years, wrote in a New York Daily News article[14]:

> *"Let me address the sugar issue straight away: I don't want kids eating excess added sugar, nor should parents. The consequences of that are serious. … But I also know that small amounts of sugar can be useful in balanced diets, specifically to drive the consumption of nutrient-rich and under-consumed foods. Flavored milk and yogurt are examples of how to properly spend the few added sugar calories allowed in balanced eating styles. No food is nutritious unless it's eaten."*

The low-fat flavored milk offered in schools today contains 54% less added sugar and 41 fewer calories than it did 16 years ago, with all the same nutritional benefits kids need. The calories in school milk have consistently fallen over the years as milk processors have worked with schools to reduce added sugars in flavored milk. Today, the average 8-ounce flavored milk served in schools has 125.5 calories (just 29 more calories than unflavored milk) and 7.6 grams of added sugar.

In February 2022, the U.S. Department of Agriculture released transitional standards for school meals through the 2023-2024 school year affirming the benefits of low-fat flavored milk for children and adolescents.

Deep Dive – Other Supporting Research

- A 2021 study found that children (2-18 years) who drank flavored milk had significantly higher consumption of fiber, calcium, potassium, magnesium, phosphorus, and vitamins D, A, B-12, and riboflavin than non-flavored milk drinkers.[15]
- A 2016 study found that children who drank flavored milk consumed more of the nutrients of public health concern (e.g., calcium, potassium, vitamin D, and fiber) compared to non-flavored milk drinkers. Additionally, flavored milk consumption was not associated with an increased body mass index (BMI).[16]
- Flavored milk contributes only 4% of added sugars in the diets of children 2-18 years.[17]

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14 https://www.nydailynews.com/opinion/ny-oped-let-them-drink-flavored-milk-20220411-cwycwubkxjggrceaompyko-kas4-story.html

15 Nicklas TA, Saab R, Fulgoni VL. Is flavored milk really a bad beverage choice? The nutritional benefits of flavored milk outweigh the added sugars content. Acta Scientific Nutritional Health. 2022;6.1: 114-132.

16 Cifelli C, Houchins J, Demmer E, Fulgoni IIIV. The Relationship Between Flavored Milk Consumption, Diet Quality, Body Weight, and BMI z-Score Among Children and Adolescents of Different Ethnicities. FASEB J. April 2016;30: supplement 1154.12. https://faseb.onlinelibrary.wiley.com/doi/10.1096/fasebj.30.1_supplement.1154.12

17 National Dairy Council. NHANES 2015-2018. Data Source: Centers for Disease control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services. http://www.cdc.gov/nchs/nhanes.htm.

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School Milk Processors Commit to Lower Sugar in School Milk Options

The International Dairy Foods Association (IDFA), on behalf of America's school milk processors, is leading a voluntary effort to reduce added sugars in school milk by the 2025-2026 school year.

Beginning with the 2025-2026 school year, flavored milk processors commit to providing school milk options with no more than 10 grams of added sugar per 8 fluid ounce serving. When the Commitment was announced in April 2023, flavored milk products offered in schools contained an average of 8.2 grams of added sugar per serving. By July 2023, the average had fallen to 7.6 grams of added sugar per serving.

This effort, known as the **Healthy School Milk Commitment**, aims to deliver milk's 13 essential nutrients to America's students while reducing calories and added sugars in flavored milk. The Healthy School Milk Commitment combines our industry's passion for product innovation with a long-standing promise to provide healthy, nutritious dairy options to schoolkids everywhere. This includes developing new and reformulated milks with less added sugar and working with school meals professionals and nutrition professionals to educate school staff and students about the benefits of healthy milk options in the diets of children and adolescents.

The following dairy companies have signed on to the Healthy School Milk Commitment.

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By a Wide Margin, Parents Support Serving Milk in School Meal Programs

According to a Morning Consult national tracking poll commissioned by the International Dairy Foods Association (IDFA) conducted in June 2023, 89% of parents with children in school support including low-fat flavored milk in public school meals.[1]

The survey results show:

- 90% of parents with children in public schools believe providing milk to children for public school meals is important for their daily nutritional intake
- 89% of parents with children in public schools agree that non-fat or low-fat flavored milk should remain an option in school meals
- 88% of parents with children in public schools support the following message: Offering milk in school meals plays an important role in the diet and nutrition of children because milk contains 13 essential vitamins and nutrients that children need for growth, development, healthy immune function, and overall wellness.

IDFA International Dairy Foods Association

NMPF NATIONAL MILK PRODUCERS FEDERATION

SCHOOL NUTRITION ASSOCIATION

1 www.idfa.org/schoolmilksurvey