



**IDFA**  
International  
Dairy Foods Association

May 10, 2023

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**RE: Docket No. FNS-2022-0043: Child Nutrition Programs: Revisions to Meal Patterns Consistent with the 2020 Dietary Guidelines for Americans; Proposed Rule with Request for Comments.**

To Whom It May Concern:

We appreciate the opportunity to provide comments to the United States Department of Agriculture (USDA) regarding the proposed changes to the meal patterns for the National School Lunch Program (NSLP) and School Breakfast Program (SBP), among other federal child nutrition programs. School meals and other child nutrition programs are important sources of good nutrition for children and help set good nutritional habits throughout the rest of life.

The International Dairy Foods Association (IDFA), Washington, D.C., represents the nation's dairy manufacturing and marketing industry, which supports more than 3.3 million jobs that generate \$41.6 billion in direct wages and \$753 billion in overall economic impact. IDFA's diverse members make 90 percent of the milk, cheese, ice cream, yogurt and cultured products, and dairy ingredients produced and marketed in the United States and sold throughout the world. Safe, nutritious, affordable, and sustainable, dairy foods offer unparalleled health and consumer benefits to people of all ages.

**Executive Summary**

- Child nutrition programs, including school meals, should align with the 2020-2025 Dietary Guidelines for Americans, including encouraging increased intake of dairy products.
- Flavored milk should be available in all schools, K-12, as an important source of 13 essential nutrients.
- Milk processors that supply US schools have voluntarily committed to added sugar content of no more than 10 grams of added sugar per cup of flavored milk by School Year 2025-2026 through the Healthy School Milk Commitment.
- Lactose free dairy products should be widely available as an option in school meals.
- Nutrition standards, including those for saturated fat, added sugar and sodium, should permit an increased consumption of dairy products, rather than limit the dairy products that can be part of the child nutrition programs.
- Dairy at all fat levels should be permitted, provided that the saturated fat limit is met.

- Sodium from cheese that is present for functional, or food safety purposes should be exempted from sodium limits.

### **Nutrition of Dairy Products/Role in School Meals & Children’s Diets**

School meals are a nutritional success story. The 45.4 million meals served each day during the 2021-2022 school year<sup>1</sup> provided a variety of healthy foods and beverages, including fruits, vegetables, and dairy. School meals are a key source of nutrition for children and these meals are often the healthiest of the day, often much healthier than the meals brought from home.<sup>2,3,4</sup> American parents support these healthy school meals: in a survey by Morning Consult, 88% of parents identify making public school meals healthy and nutritious as a top or important priority.<sup>5</sup> A recent study of eating trends has demonstrated that school is the healthiest location for American children to eat, and school meals are getting healthier: the HEI-2015 score for food eaten in school was 44.1 in 2003-2004 and 51.6 in 2017-2018, the only circumstance where meal quality improved over that time period.<sup>6</sup>

Nutrition standards need to be implementable for school food authorities and food manufacturers, as well as attractive and tasty for the children who will be eating these meals. No matter what nutrition requirements are put into place for school meals, the meals and each component of the meals must be eaten to contribute to nutritious eating patterns and overall health. Dairy products, particularly flavored milk, have been shown to increase participation in school meal programs and to reduce food waste because students consume more milk, and hence students and schools throw less away. Conversely, when flavored milk and fat-varieties have been removed from school meals, those restrictions have resulted in decreased school milk consumption and increased food waste.

As nutrition standards are implemented, USDA should develop and implement measures with defined metrics that would capture the impact of the changes to the nutrition standards, such as participation, nutritional adequacy, waste, and program costs.

### **Aligning School Meals with the 2020-2025 Dietary Guidelines for Americans**

We agree with the goal of aligning the SBP and NSLP with the 2020-2025 Dietary Guidelines for Americans (DGA). Multiple versions of the DGA repeatedly recommended increased intake of dairy

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<sup>1</sup> Food Research and Action Center. The Reach of School Breakfast and Lunch During the 2021-2022 School Year. March 2023. Available at: <https://frac.org/wp-content/uploads/school-meals-2023.pdf>.

<sup>2</sup> 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.

<sup>3</sup> Farris AR, Misyak S, Duffey KJ, Davis GC, Hosig K, Atzaba-Poria N, McFerren MM, Serrano EL. Nutritional comparison of packed and school lunches in pre-kindergarten and kindergarten children following the implementation of the 2012-2013 National School Lunch Program standards. *J Nutr Educ Behav*. 2014 Nov-Dec;46(6):621-6. doi: 10.1016/j.jneb.2014.07.007. Epub 2014 Nov 7. PMID: 25457731.

<sup>4</sup> U.S. Department of Agriculture, Food and Nutrition Service, School Nutrition and Meal Cost Study, Alexandria, VA: April 2019. Available online at: [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>5</sup> Morning Consult-IDFA. National Tracking Poll on Low-fat Flavored Milk in School Meals. Survey conducted online February 16, 2022.

<sup>6</sup> 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.

products, identifying dairy as an under-consumed food group.<sup>7</sup> This is true even of many school age children, with between 68% and 76.2% of school age males and between 77.4% and 94.3% of school age females failing to meet recommended levels of dairy.<sup>8</sup> Among youth ages 9-13, 79 percent fall short of recommended dairy intakes. For all youth aged 19 and younger, mean intake of dairy is only 1.9 cup-equivalent per day.<sup>9</sup>

To support the goal of aligning with the DGA, the USDA should ensure that the nutrition standards encourage dairy consumption within the school meal programs. School meals are a significant source of dairy, with the SBP providing 40% of the dairy needed by students each day and the NSLP providing 47%.<sup>10</sup> For children, dairy is the number one source of three of the four food substances of public health concern as identified by the DGA: calcium, potassium, and vitamin D.<sup>11</sup>

Strengthening school meals will support an overall goal of supporting food and nutrition security for American schoolchildren. School meals have proven to be an incredibly important source of good nutrition through the COVID pandemic, a time when many children were facing food security challenges.

### **Child Nutrition Programs Should Adopt Policies that Encourage Increased Dairy Consumption**

The school meal programs are required to align with the goals of the DGA. The 2020-2025 DGA recommended three daily servings of milk or other dairy foods for adolescents and most children, but the DGA also shows that nearly all age groups, including all school-age groups, of both males and females, consume significantly less than the recommended amounts.<sup>12</sup>

In a study of low-income children, 77% of their daily milk intake comes from school meals.<sup>13</sup> Without milk in the school meals program, these children would consume even lower levels of milk and dairy, which is already under-consumed. Therefore, policies that keep milk in school meals and encourage

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<sup>7</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

<sup>8</sup> Dietary Guidelines Advisory Committee. 2020. *Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services*. Online Materials, Table 1.15. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC. Available at: <https://doi.org/10.52570/DGAC2020>.

<sup>9</sup> Dietary Guidelines Advisory Committee. 2020. *Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services*. Online Materials, Table 1.15. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC. Available at: <https://doi.org/10.52570/DGAC2020>.

<sup>10</sup> U.S. Department of Agriculture, Food and Nutrition Service, School Nutrition and Meal Cost Study: Volume 1 - School Meal Program Operations and School Nutrition Environments, by Sarah Forrestal et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).

<sup>11</sup> Keast, Fulgoni, Nicklas, O'Neil. Food Sources of Energy and Nutrients among Children in the United States: National Health and Nutrition Examination Survey 2003-2006. *Nutrients* 2013, 5, 283-301, doi: 10.3390/nu5010283

<sup>12</sup> Dietary Guidelines Advisory Committee. 2020. *Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services*. Online Materials, Table 1.15. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC. Available at: <https://doi.org/10.52570/DGAC2020>.

<sup>13</sup> Cullen KW, Chen TA. The contribution of the USDA school breakfast and lunch program meals to student daily dietary intake. *Prev Med Rep*. 2016 Nov 28;5:82-85. doi: 10.1016/j.pmedr.2016.11.016. PMID: 27957411; PMCID: PMC5149064.

children to select and consume the milk included in school breakfast and lunches are essential to ensuring students are receiving the nutrition they need to thrive.

### **Flavored Milk Should Be Available in All Schools at All Levels**

Flavored milk should remain an option as part of meals in schools at all levels, Kindergarten through 12<sup>th</sup> grade. It is a key component of healthy school lunches and breakfasts, and of children's diets overall. When flavored milk is available to children in school meals, they consume more of it, getting more of the 13 essential nutrients from milk, and throwing less away, reducing food waste. When flavored milk is not included as an option in school meals, significantly less milk is selected by children.<sup>14</sup> Therefore, the proposal to remove flavored milk from some schools will result in less milk consumption in school meals, directly contradicting the goal of increasing dairy intake from the 2020-2025 DGA. It is imperative to maintain the option of flavored milk in school meals to help meet the stated goals of the DGA.

Flavored milks provide the same micronutrients as white milk, but with a flavor that many children prefer. Flavored milks, like all cow's milk, are a good or excellent source of 13 essential nutrients, including calcium, vitamin D, and potassium. Flavored milk aligns with the DGA basis for the NSLP, SBP and other child nutrition programs. Specifically, the DGA recommends both low-fat and fat-free milk as nutrient-dense foods and note that small amounts of added sugars can be added to nutrient-dense foods – including low-fat or fat-free milk – to help meet food group recommendations.

Nutrition research highlights the impact of flavored milk on children's diets. Children from 2 to 18 years of age who drank flavored milk drank more milk than children who did not drink flavored milk, and therefore the flavored milk consumers had significantly higher intakes of vitamin D, calcium, potassium, and other nutrients.<sup>15,16</sup>

Children consuming flavored milk in their diets had superior nutrient intakes compared to children that consumed only plain milk, with no differences in body mass index.<sup>17</sup> Another study demonstrated that flavored milk consumption is associated with improvements in nutrient intake, but not associated with increased body weight of normal weight children.<sup>18</sup> In looking at diets overall, milk and flavored milk was a top source of calcium, vitamin D and potassium in children's diets while providing much less added sugar to children's diets relative to their nutrient contribution.<sup>19</sup> In fact, flavored milk

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<sup>14</sup> Cohen JFW, Richardson S, Rimm EB. Impact of the Updated USDA School Meal Standards, Chef-Enhanced Meals, and the Removal of Flavored Milk on School Meal Selection and Consumption. *J Acad Nutr Diet*. 2019;119(9):1511-1515. doi:10.1016/j.jand.2019.04.003

<sup>15</sup> 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.

<sup>16</sup> Nicklas TA, O'Neil C, Fulgoni V 3rd. Flavored Milk Consumers Drank More Milk and Had a Higher Prevalence of Meeting Calcium Recommendation Than Nonconsumers. *J Sch Health*. 2017;87(9):650-657. doi:10.1111/josh.12537

<sup>17</sup> Murphy MM, Douglas JS, Johnson RK, Spence LA. Drinking flavored or plain milk is positively associated with nutrient intake and is not associated with adverse effect on weight status in US children and adolescents. *J Am Diet Assoc* 2008. 108:631-639.

<sup>18</sup> Fayet-Moore F. Effects of flavored milk vs plain milk on total milk intake and nutrient provision in children. *Nutrition Reviews*, 2016. 74(1):1-17.

<sup>19</sup> O'Neil CE, Nicklas TA, Fulgoni VL 3rd. Food Sources of Energy and Nutrients of Public Health Concern and Nutrients to Limit with a Focus on Milk and other Dairy Foods in Children 2 to 18 Years of Age: National Health and

consumption has been found, in or out of schools, to make up only 4% of the added sugars in children's diets.<sup>20</sup>

An important consideration when examining the role of flavored milk in children's diets and the nutrition that flavored milk supplies is to ensure that the nutritional studies used to support flavored milk nutrition are specific to flavored milk consumption. In the Proposed Rule, a reference is made to the contribution of sugar sweetened beverages (SSBs) to added sugar intake by children, with the inference that these studies could be used to argue against the inclusion of flavored milk in school meals. However, it is important to consider each of these studies individually and examine whether flavored milk was included in the study's definition of SSBs. In most cases, flavored milk is not considered an SSB and therefore the results of the study should not be applied to the nutritional impact of flavored milk and particularly not to policy setting regarding flavored milk. The studies cited in the above paragraphs did examine the dietary and nutritional impacts of flavored milk in the diets of children and therefore would be more appropriate for consideration of flavored milk in the school meal programs. One recent study of added sugars in children's diets excluded flavored milk from the definition of sugar sweetened beverages and identified the dietary contribution of added sugars from flavored milk specifically, separately from sugar sweetened beverages.<sup>21</sup>

An overall decline in school milk consumption has been identified, with reductions in both average daily participation (ADP) in school lunch programs and school milk consumption. Annual school and processor surveys conducted by the Milk Processor Education Program (MilkPEP), which is overseen by the Department of Agriculture, regularly found declines in milk consumption – specifically, a decline of 9 percent in total volume between the 2011-12 and 2015-16 school years. The percentage of reduction is even higher for flavored milk (12.5 percent),<sup>22</sup> indicating that children were not pleased with the fat-free versions of flavored milk. This decline coincided with the 2012 regulations which, among other things, prohibited low-fat flavored milk in school lunches, breakfasts and (through a subsequent regulation) foods sold in competition with school meals. Until the 2011-12 school year, low-fat (1 percent) flavored milk had been the most widely purchased variety of milk by schools.<sup>23</sup>

With the reintroduction of low-fat flavored milk, 15 million gallons of low-fat flavored milk were sold in schools during the 2017-18 school year.<sup>24</sup> Data from schools in Texas and Oklahoma that reintroduced low-fat flavored milk in 2018 showed that this change resulted in an 8% increase in flavored milk consumption in schools, with a 2% increase in total school milk consumption.<sup>25</sup>

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Nutrition Examination Survey, 2011-2014. *Nutrients*. 2018;10(8):1050. Published 2018 Aug 9. doi:10.3390/nu10081050

<sup>20</sup> Dairy Research Institute®, NHANES 2007-2010. (Nutrition Impact, LLC analysis. Ages 2+ years). Data Source: U.S. Department of Agriculture, Agricultural Research Service. 2013.

<sup>21</sup> Bowman SA, Clemens JC, Friday JE, et al. Added Sugars in American Children's Diet: What We Eat in America, NHANES 2015-2016. 2019 Dec. In: FSRG Dietary Data Briefs [Internet]. Beltsville (MD): United States Department of Agriculture (USDA); 2010-. Dietary Data Brief No. 26. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK589213/>

<sup>22</sup> Prime Consulting. School Milk Information: From Milk Processor Education Program Data. 2015 Edition. August 2016.

<sup>23</sup> Prime Consulting. School Milk Information: From Milk Processor Education Program Data. 2015 Edition. August 2016.

<sup>24</sup> Prime Consulting. September 2018.

<sup>25</sup> Prime Consulting for DairyMax. VOLUME IMPACT FROM REINTRODUCTION OF 1% FLAVORED MILK IN SCHOOLS. Spring 2019.

The School Nutrition and Meal Cost Study (SNMCS) found that flavored milk was less likely to be wasted than unflavored fat-free or low-fat milk.<sup>26</sup> If there is less waste with low-fat flavored milk, more milk and more essential nutrients are being consumed when low-fat flavored milk is a part of school meals. SNMCS analysis also showed that one-quarter or more of available vitamin A, vitamin C, vitamin D, calcium, and potassium in school meals were wasted, with four of these five nutrients present in dairy products.<sup>27</sup>

If schools implement changes to their meal programs that would have the effect of reducing milk consumption, students are missing out on the 13 essential nutrients provided by milk. Schools that eliminated flavored milk found that less milk was consumed.<sup>28, 29</sup>

Therefore, policies that uphold the intent of the DGA, by increasing dairy consumption, should be a goal of the school meal programs and as demonstrated above, policies that eliminated flavored milk reduced milk consumption in school meals. These policies would appropriately include flavored milk as an option in school meals for students who prefer this type of milk. Providing low-fat flavored milk as an option in schools also aligns with the preferences of American adults. A national survey conducted for IDFA by Morning Consult shows that 86% of parents with children in public school support including fat-free or low-fat flavored milk in school meals.<sup>30</sup>

### **IDFA Healthy School Milk Commitment**

Flavored milk is a key source of essential nutrients in school meal programs. In order to continue providing this important source of nutrition in school meals, with lower levels of added sugars, IDFA was pleased to announce last month the Healthy School Milk Commitment. The Commitment demonstrates milk processors' willingness to provide school milk options with no more than 10 grams of added sugar per 8-fluid ounce serving by the 2025-2026 school year. The full Commitment can be found attached as an appendix to these comments.

Milk processors have significantly reduced the calorie and added sugar contents of flavored school milk. Between the 2006-2007 and 2020-2021 school years, average added sugar levels declined by 57

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<sup>26</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, School Nutrition and Meal Cost Study, Final Report Volume 4: Student Participation, Satisfaction, Plate Waste, and Dietary Intakes by Mary Kay Fox, Elizabeth Gearan, Charlotte Cabili, Dallas Dotter, Katherine Niland, Liana Washburn, Nora Paxton, Lauren Olsho, Lindsay LeClair, and Vinh Tran. Project Officer: John Endahl. Alexandria, VA: April 2019.

<sup>27</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, School Nutrition and Meal Cost Study, Final Report Volume 4: Student Participation, Satisfaction, Plate Waste, and Dietary Intakes by Mary Kay Fox, Elizabeth Gearan, Charlotte Cabili, Dallas Dotter, Katherine Niland, Liana Washburn, Nora Paxton, Lauren Olsho, Lindsay LeClair, and Vinh Tran. Project Officer: John Endahl. Alexandria, VA: April 2019.

<sup>28</sup> Quann EE, Adams D. Impact on milk consumption and nutrient intakes from eliminating flavored milk in elementary schools. *Nutrition Today*. 2013;48(3):127–134

<sup>29</sup> 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(4):e91022[PubMed]

<sup>30</sup> Morning Consult-IDFA. National Tracking Poll on Healthy School Milk Commitment. Survey conducted online March 17-19, 2023. Of 500 American adult parents surveyed, response to the survey question "Do you agree or disagree that non-fat or low-fat flavored milk (i.e., chocolate and strawberry) should remain an option for children in public school meals in your community?" was as follows: 59% strongly support, 27% somewhat support, 3% don't know, 6% somewhat oppose, 5% strongly oppose.

percent, going from 16.7 grams to 8.2 grams in an 8-fluid ounce serving of flavored school milk.<sup>31</sup> This reduction and overall average is noteworthy because USDA is proposing to limit added sugars in flavored milk to no more than 10 grams per 8-fluid ounce serving.

Processors who provide flavored milk products to U.S. public schools are committed to supporting families and students in their efforts to maintain a healthy diet and lifestyle. That is why, by way of these public comments, IDFA, on behalf of America's school milk processors, is informing USDA that milk processors are committing to providing school milk options with no more than 10 grams of added sugar per 8-fluid ounce serving by the 2025-2026 school year and thereafter. While the industry average for added sugar levels was 8.2 grams in an 8-fluid ounce serving of flavored school milk in the 2020-2021 school year, as noted above, there are a few processors currently providing flavored milk options in excess of 10 grams of added sugar, albeit within the current standards. This voluntary and industry-wide effort, known as the Healthy School Milk Commitment, will ensure that all milk processors provide flavored milk products with 10 grams or less of added sugar per 8-fluid ounce serving by the 2025-2026 school year while continuing to deliver milk's 13 essential nutrients to America's students. The Healthy School Milk Commitment reinforces our industry's commitment for product innovation with a longstanding promise to provide healthy, nutritious dairy options to school kids everywhere. This includes developing new and reformulated milks with less added sugar and fewer calories to align with the Commitment and working with USDA staff and nutrition professionals to educate school staff and students about the benefits of healthy milk options in the diets of children and adolescents.

In addition to reducing the added sugars in flavored school milk, processors have also reduced the average number of calories. The average calorie content of flavored school milk declined significantly by 40 calories on average between school years 2006-2007 and 2019-2020.<sup>32</sup> A similar survey also demonstrated that flavored school milk is just 25 calories more than the white milk served in schools.<sup>33</sup>

### **Lactose Free Milk and Milk Products Should be Encouraged in the School Meal Programs**

We agree with USDA's proposal to require schools to offer lactose free milk as an option in all reimbursable meals. Providing lactose free milk, as well as other dairy products with low lactose content, will allow more school children, including those with lactose malabsorption or lactose intolerance, to find a dairy option that meets their needs and will provide them with good nutrition. Lactose free varieties of milk, along with dairy products that are naturally low in lactose, such as yogurt and natural cheese, are important options for consumers that need to avoid lactose in their diet, while also providing the same essential nutrients as their conventional dairy counterparts.

As USDA noted in the proposed rule, African Americans, American Indians, Asian Americans and Hispanics/Latinos are more likely to have lactose malabsorption or lactose intolerance than Americans whose families are from Europe.<sup>34</sup> Potentially due to concerns over lactose in dairy products, non-Hispanic Black and non-Hispanic Asian children have been found to have the lowest intake of dairy

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<sup>31</sup> Prime Consulting. All Channel Tracking: The Projection of Milk Volume by Sales Channel, 2019 Edition, August 2020. Update citation to match updated numbers.

<sup>32</sup> Prime Consulting. All Channel Tracking: The Projection of Milk Volume by Sales Channel, 2019 Edition, August 2020.

<sup>33</sup> Prime Consulting. August 2016.

<sup>34</sup> 88 FR 8050 Child Nutrition Programs: Revisions to Meal Patterns Consistent With the 2020 Dietary Guidelines for Americans, Proposed Rule

overall.<sup>35</sup> A review points to the link between low intake of dairy due to concerns over lactose intolerance and decreased bone density. This review recommends that consumers with lactose intolerance consume the recommended three servings of lactose-free dairy to avoid nutrient shortfalls and ensure healthy bones.<sup>36</sup> Avoiding dairy can impact getting enough calcium, potassium, and vitamin D - nutrients already lacking in the American diet.<sup>37,38</sup>

Lactose free dairy can be particularly important for helping to reduce the underconsumption gap for populations that may have concerns regarding lactose intolerance or maldigestion. In many cases, people who are lactose intolerant or believe they are lactose intolerant mistakenly believe that they cannot consume any dairy products.

Cow's milk with lower levels of lactose, such as milk with lactase enzyme added, provides the same nutrients as regular milk. However, the lower amount of lactose may ensure that the milk is more comfortable for students with lactose maldigestion to include in their meals. These types of milk will still provide the same dairy nutrition.

In addition, yogurt is, for many people, a more easily digestible alternative to conventional milk because, on average, it contains less lactose than milk.<sup>39</sup> In addition, yogurt's live and active cultures continue to have activity in the intestinal tract and may allow lactose intolerant individuals to enjoy dairy products with fewer associated symptoms.<sup>40</sup>

Natural cheese is naturally low in lactose. For people who choose to not regularly consume fluid milk products because of their lactose content, cheese is an excellent way of obtaining the nutrition of dairy foods. Natural cheeses such as cheddar, Colby, Monterey Jack, mozzarella and Swiss contain minimal amounts of lactose, because most of the lactose is removed when the curds are separated from the whey in the cheesemaking process. According to the Institute of Medicine, those with lactose intolerance can rely on cheese as a source of calcium: "... virtually unrestricted amounts of reduced-fat hard cheeses with very low amounts of lactose may be ingested to ensure adequate intakes of calcium."<sup>41</sup>

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<sup>35</sup> Cifelli CJ, Fulgoni K, Fulgoni VL, Hess JM. Disparity in dairy serving intake by ethnicity and age in NHANES 2015-2018. *Current Developments in Nutrition*. 2023; 7(2) <https://doi.org/10.1016/j.cdnut.2022.100010>

<sup>36</sup> Hodges JK et al. Lactose Intolerance and Bone Health: The Challenge of Ensuring Adequate Calcium Intake. *Nutrients*. 2019, 11, 718.

<sup>37</sup> U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015-2020 Dietary Guidelines for Americans 8th Edition.

<sup>38</sup> Savaiano DA, Boushey CJ, McCabe GP. Lactose intolerance symptoms assessed by meta-analysis: a grain of truth that leads to exaggeration. *J Nutr*. Apr 2006;136(4):1107-1113.

<sup>39</sup> Webb D, Donovan SM, Meydani SN. The role of yogurt in improving the quality of the American diet and meeting dietary guidelines. *Nutr Rev*. 2014; 72(3):180-189.

<sup>40</sup> Lomer MC, Parkes GC, Sanderson JD. Review article: lactose intolerance in clinical practice—myths and realities. *Aliment Pharmacol Ther*. 2008;27:93–103.

<sup>41</sup> IOM (Institute of Medicine). *Dietary Reference Intakes for Calcium and Vitamin D*. Washington, D.C.: The National Academies Press; 2011:498.



A National Institute of Health expert committee urged Americans who think they may be lactose intolerant to get tested before they unnecessarily eliminate dairy foods from their diet.<sup>42</sup> The 2020-2025 DGA recommended low lactose or lactose-reduced dairy products such as lactose reduced milk, yogurt and cheese, as a way for individuals to avoid lactose, yet still obtain the nutritional benefits of dairy.<sup>43</sup>

This advice is doubly important when considering the nutrient contribution of lactose-free milk and dairy products. If students avoid dairy due to concerns over lactose content, the intake of these nutrients can be negatively affected. The National Medical Association has taken a position that the nutrients provided by dairy products are important and that avoiding these products due to a concern about lactose intolerance could lead to negative health outcomes.<sup>44</sup>

Based on the nutrient package that is unique to dairy foods and the loss of nutrients when dairy is not consumed, school meal nutrition standards should encourage yogurt, cheese and lactose-reduced milk as the first choice in school meals for lactose intolerant children.

### **Yogurt is an Important Source of Nutrition in School Meals**

Yogurt has been an important meat alternate in school meals in the past and should continue to be part of the protein group for meal planning purposes, as proposed. Yogurt is a nutrient rich dairy product that provides many of the same essential nutrients as milk, such as calcium and protein. As with milk, yogurt is widely available in both unflavored and flavored varieties to be used either as an ingredient, eaten on its own or in conjunction with other foods, such as fruit. Yogurt is also widely available in a variety of formats, in large tubs for use as an ingredient or portioned out, or in individual cups or containers. These individual servings are particularly convenient for serving, especially for grab-and-go meals or in-classroom breakfast.

Consumption of yogurt has been associated with higher diet quality in children, with higher intake of multiple nutrients, including calcium, potassium, magnesium, and vitamin D.<sup>45</sup> Yogurt consumption has been associated with lower incidence of cardiovascular risk factors in adolescents, particularly total and abdominal excess body fat.<sup>46</sup>

In flavored yogurt, the amount of added sugar can also help increase the consumption of dairy, in keeping with recommended intakes of the DGA. This use of added sugar aligns with the recommendations of the 2020-2025 DGA that added sugars may be used to increase the intake of

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<sup>42</sup> Suchy FJ, Brannon PM, Carpenter TO, Fernandez JR, Gilsanz V, Gould JB, Hall K, Hui SL, Lupton J, Mennella J, Miller NJ, Osganian SK, Sellmeyer DE, Wolf MA. NIH Consensus Development Conference Statement: Lactose Intolerance and Health. NIH Consensus Scientific Statements. 2010 Feb 22-24; 27(2):1-27).

<sup>43</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

<sup>44</sup> Bailey RK et al. Lactose Intolerance and Health Disparities Among African Americans and Hispanic Americans: An Updated Consensus Statement. *J Natl Med Assoc*. 2013; 105; 112-127.

<sup>45</sup> Cifelli CJ, Agarwal S, Fulgoni V. Association of Yogurt Consumption with Nutrient Intakes, Nutrient Adequacy and Diet Quality in American Children and Adults. *Nutrients* 2020, 12, 3435; doi:10.3390/nu12113435.

<sup>46</sup> Moreno LA, Bel-Serrat S, Santaliestra-Pasías A, Bueno G. Dairy products, yogurt consumption, and cardiometabolic risk in children and adolescents. *Nutr Rev*. 2015 Aug;73 Suppl 1:8-14. doi: 10.1093/nutrit/nuv014. PMID: 26175484.

nutrient-dense foods and beverages.<sup>47</sup>Yogurt products are available with varying levels of sugar, so that schools can purchase the variety that best meets the needs of their students.

Yogurt's role as a meat alternate/protein food is particularly key in the School Breakfast Program. In addition to being well-accepted as a breakfast food, a study identified yogurt inclusion at breakfast triggering an improvement in nutrient intake and in other nutrient dense foods, like fruit.<sup>48</sup> When considering a variety of breakfast options, the optimal breakfast pattern for children was characterized by the inclusion of yogurt and milk among other foods and beverages.<sup>49</sup> Yogurt is also a meat alternate/protein source in the school meal patterns that contains lower sodium than other options, helping school food service operators manage sodium in menus.

Scientific studies are pointing to the favorable effect of yogurt on the gut microbiome and related health status. Yogurt, including both low-fat and full-fat yogurt, has been shown to have beneficial influence on the microbiome, as well as associations with healthier dietary patterns and reduced visceral fat mass.<sup>50</sup> Diets high in fermented foods, including yogurt, can increase microbiota diversity and decrease markers of inflammation.<sup>51</sup>

### **Standard of Identity for Yogurt**

FDA has recently updated the yogurt standard of identity, with the new requirements found in 21 CFR 131.200. As with the standard of identity for milk, this updated standard lays out requirements for a full fat version, with the allowance for reduced fat, low-fat and fat-free varieties in keeping with the regulations for the appropriate claim as well as 21 CFR 130.10.

Since the publication of the yogurt standard of identity final rule in 2021,<sup>52</sup> there have been updates and changes to that standard, including modifications published in December 2022<sup>53</sup> and a Temporary

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<sup>47</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

<sup>48</sup> López-Sobaler AM, Cuadrado Soto E, Salas González M<sup>ª</sup>D, Peral Suárez Á, Jiménez Ortega AI, Ortega RM. Papel del yogur en el desayuno de los niños [Role of yogurt in children's breakfast]. *Nutr Hosp*. 2019 Aug 27;36(Spec No3):40-43. Spanish. doi: 10.20960/nh.02806. PMID: 31368331.

<sup>49</sup> Drownowski A, Rehm CD, Vieux F. Breakfast in the United States: Food and Nutrient Intakes in Relation to Diet Quality in National Health and Examination Survey 2011-2014. A Study from the International Breakfast Research Initiative. *Nutrients*. 2018 Sep 1;10(9):1200. doi: 10.3390/nu10091200. PMID: 30200424; PMCID: PMC6163505.

<sup>50</sup> Le Roy CI, Kurilshikov A, Leeming ER, Visconti A, Bowyer RCE, Menni C, Fachi M, Koutnikova H, Veiga P, Zhernakova A, Derrien M, Spector TD. Yoghurt consumption is associated with changes in the composition of the human gut microbiome and metabolome. *BMC Microbiol*. 2022 Feb 3;22(1):39. doi: 10.1186/s12866-021-02364-2. Erratum in: *BMC Microbiol*. 2022 Feb 28;22(1):66. PMID: 35114943; PMCID: PMC8812230.

<sup>51</sup> Wastyk HC, Fragiadakis GK, Perelman D, Dahan D, Merrill BD, Yu FB, Topf M, Gonzalez CG, Van Treuren W, Han S, Robinson JL, Elias JE, Sonnenburg ED, Gardner CD, Sonnenburg JL. Gut-microbiota-targeted diets modulate human immune status. *Cell*. 2021 Aug 5;184(16):4137-4153.e14. doi: 10.1016/j.cell.2021.06.019. Epub 2021 Jul 12. PMID: 34256014.

<sup>52</sup> Milk and Cream Products and Yogurt Products; Final Rule to Revoke the Standards for Lowfat Yogurt and Nonfat Yogurt and To Amend the Standard for Yogurt, 86 Federal Register 31117 (June 11, 2021) (to be codified at 21 CFR 131.200)

<sup>53</sup> International Dairy Foods Association and Chobani, Inc: Response to the Objections and Requests for a Public Hearing on the Final Rule to Revoke the Standards for Lowfat Yogurt and Nonfat Yogurt and To Amend the Standard for Yogurt, 87 Federal Register 76559 (December 15, 2022) (to be codified at 21 CFR 131.200)

Marketing Permit published in March 2023.<sup>54</sup> In order to ensure that the yogurt requirements for the school meal and child nutrition programs align with the FDA’s yogurt standard, we ask that the compliance date the relevant child nutrition program regulations related to the standard of identity for yogurt be set at either 18 months after the final rule is published, or at the compliance date for the relevant provision in the final yogurt SOI, whichever is later. This will ensure that the final regulations are clear that yogurt products that align with the standard of identity that applies at the time of sale will be eligible to be served as a protein food in school meals.

### **Cheese Provides Important Nutrients to School Meals**

Cheese is a significant source of nutrition in school meals. While different varieties of cheese have different nutrient profiles, cheeses are important sources of the dairy nutrient package, including calcium, high quality protein and other nutrients.

Cheese is available in many configurations of packaging and format. It can be used as an ingredient in other dishes or can be packaged individually in sticks or shapes. These individual servings can be a key part of grab and go or pre-packed meals.

Cheese has long been identified as a meat alternate in the school meal programs, and in the proposed rule would continue to be part of the protein group. We agree with this categorization since, in many cases cheese is a major component of meal entrees. Cheese as a protein source becomes even more important as schools serve meat-free meal options. In many cases, these vegetarian options rely on cheese as the protein to meet meal pattern requirements.

### **Dairy At All Fat Levels Should Be Allowed, As Long as The Saturated Fat Limit Is Met**

Research on milkfat and dairy products at all fat levels is progressing and will likely be considered in the 2025-2030 DGA. Flexibility for dairy products should be provided to reduce delays in adjusting to the next DGA. In fact, the Australian Heart Foundation has changed their dietary recommendations to include dairy at all fat levels for the general population, while recommending reduced fat varieties for those with high cholesterol.<sup>55</sup>

Whole (3.25% milkfat) and reduced fat milk (2% milkfat) contains the same nutrients as all other fluid milk, including calcium, phosphorus, protein, vitamins A, D and B12, pantothenic acid, riboflavin, and niacin. This is true of other dairy products at all fat levels. While they do have higher levels of saturated fat than low fat versions, a growing body of evidence indicates that consumption of full fat dairy foods (milk, cheese, and yogurt) is not associated with higher risk of negative health outcomes, including obesity, diabetes, and heart disease.<sup>56</sup>

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<sup>54</sup> Yogurt Products Deviating From Standard of Identity; Temporary Permit for Market Testing, 88 FR 18322 (March 28, 2023)

<sup>55</sup> “Milk, yoghurt and cheese.” *Heart Foundation*. National Heart Foundation of Australia. <https://www.heartfoundation.org.au/healthy-eating/food-and-nutrition/dairy-foods>. Accessed October 2, 2019.

<sup>56</sup> Dariush Mozaffarian, Dairy foods, dairy fat, diabetes, and death: what can be learned from 3 large new investigations?, *The American Journal of Clinical Nutrition*, , nqz250, <https://doi.org/10.1093/ajcn/nqz250>.

Several recent research studies (including systematic reviews and meta-analysis) examining the effect of higher fat milk consumption found that it was associated with lower childhood obesity and concluded that dietary guidelines that recommend reduced fat milk versions might not lower the risk of childhood obesity.<sup>57,58,59,60</sup> One of these systematic reviews<sup>61</sup> also examined cardiometabolic health in children (2 to 18 y) in addition to adiposity and concluded that full fat dairy consumption was not associated with increased body weight and adiposity, or with cardiometabolic risk in children.

Higher consumption of full fat dairy has been shown to be associated with lower risk of total body fat mass in children.<sup>62</sup> A systematic review showed that high-fat dairy products were inversely associated with risk of obesity.<sup>63</sup>

A summary of multiple studies on full fat dairy foods found that the evidence showed no association with high blood pressure, cardiovascular disease, and type 2 diabetes. Some of the studies reviewed showed full fat dairy was associated with lower risk of obesity.<sup>64,65</sup> One recent study has demonstrated that higher intake of dairy saturated fat was associated with better measures of body fat and serum lipoproteins.<sup>66</sup>

Consumption of full fat dairy has been found to be associated with neutral or lower risk of heart disease.<sup>67</sup> A meta-analysis of 29 studies indicated that there is no negative effect on heart health of dairy, milk and yogurt, no matter whether those dairy products were full fat or low fat.<sup>68</sup> A review of the recent science stated: “No long-term studies support harms, and emerging evidence suggests some

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<sup>57</sup> Vanderhout SM, Aglipay M, Torabi N, Jüni P, da Costa BR, Birken CS, O'Connor DL, Thorpe KE, and Maguire JL. Whole milk compared with reduced-fat milk and childhood overweight: a systematic review and meta-analysis. *Am J Clin Nutr* 2019;00:1–14.

<sup>58</sup> O'Sullivan TA, Schmidt KA, and Kratz M. Whole-Fat or Reduced-Fat Dairy Product Intake, Adiposity, and Cardiometabolic Health in Children: A Systematic Review. *Adv Nutr* 2020;00:1–23.

<sup>59</sup> Dougkas A, Barr S, Reddy S and Summerbell CD. A critical review of the role of milk and other dairy products in the development of obesity in children and adolescents. *Nutrition Research Reviews* (2019), 32, 106–127.

<sup>60</sup> Kang K, Sotunde OF, and Weiler HA. Effects of Milk and Milk-Product Consumption on Growth among Children and Adolescents Aged 6-18 Years: A Meta-Analysis of Randomized Controlled Trials. *Adv Nutr* 2019;10:250-261

<sup>61</sup> O'Sullivan TA, Schmidt KA, and Kratz M. Whole-Fat or Reduced-Fat Dairy Product Intake, Adiposity, and Cardiometabolic Health in Children: A Systematic Review. *Adv Nutr* 2020;00:1–23.

<sup>62</sup> Bigornia SJ, LaValley MP, Moore LL, Northstone K, Emmett P, Ness AR, Newby PK. Dairy intakes at age 10 years do not adversely affect risk of excess adiposity at 13 years. *J Nutr*. 2014 Jul;144(7):1081-90. doi: 10.3945/jn.113.183640. Epub 2014 Apr 17. PMID: 24744312; PMCID: PMC4056647.

<sup>63</sup> Kratz M, Baars T, Guyenet S. The relationship between high-fat dairy consumption and obesity, cardiovascular, and metabolic disease. *Eur J Nutr* 2013;52:1-24.

<sup>64</sup> Astrup A, et al Regular-fat dairy and human health: a synopsis of symposia presented in Europe and North American (2014-2015). *Nutrients* 2016, 8, 463.

<sup>65</sup> Givens DI. Saturated fats, dairy foods and cardiovascular health: No longer a curious paradox? *Nutr Bull*. 2022 Dec;47(4):407-422. doi: 10.1111/nbu.12585. Epub 2022 Oct 26. PMID: 36285545.

<sup>66</sup> Yuan M, Singer MR, Pickering RT, Moore LL. Saturated fat from dairy sources is associated with lower cardiometabolic risk in the Framingham Offspring Study. *Am J Clin Nutr* 2022; 116: 1682-1692.

<sup>67</sup> Lordan R, A Tsoupras, B Mitra, I Zabetakis. Dairy fats and cardiovascular disease: do we really need to be concerned? *Foods* 2018;7, 29.

<sup>68</sup> Guo J et al. Milk and dairy consumption and risk of cardiovascular diseases and all-cause mortality: dose-response meta-analysis of prospective cohort studies. *Eur J Epidemiol* 2017 32(4): 269-287.

potential benefits, of dairy fat or high-fat dairy foods ....<sup>69</sup> Another stated, “The present evidence suggests that whole-fat dairy foods do not cause weight gain, that overall dairy consumption increases lean body mass and reduces body fat, that yogurt consumption and probiotics reduce weight gain, that fermented dairy consumption including cheese is linked to lower CVD risk, and that yogurt, cheese, and even dairy fat may protect against type 2 diabetes. Based on the current science, dairy consumption is part of a healthy diet, without strong evidence to favor reduced fat products; while intakes of probiotic-containing unsweetened and fermented dairy products such as yogurt and cheese appear especially beneficial.”<sup>70</sup>

The dairy matrix, meaning the components and nutrients that are core to dairy products, may have a significant influence on the health outcomes seen when consuming dairy at all fat levels. One article, referring to studies of full fat dairy products, indicated that “the concept that the food matrix may influence the cardiometabolic impacts of nutrients such as SFAs is both intriguing and challenging.”<sup>71</sup>

As indicated above, while milkfat in dairy foods contains various types of saturated fatty acids, a growing body of emerging research has shown the role of milkfat in the diet and health is different from saturated fats from other sources. With recent research on the health effects of diets that include dairy at all fat levels, limiting milk to low-fat and fat-free varieties does not reflect the current state of nutrition science. Based on recent research regarding the health effects of milkfat, we ask USDA to include dairy products at all fat levels in the school meal programs, provided that the total amount of saturated fat remains within the weekly limits.

### **Added Sugars Limits**

While a goal of the DGA was for Americans to consume less added sugar the 2020-2025 DGA recommended that the best use of added sugars in a healthy diet is to add them to nutrient-rich foods that are under-consumed, to increase consumption of these nutritious options.<sup>72</sup> The 2020-2025 DGA also stated that “[a] small amount of added sugars, saturated fat, or sodium can be added to nutrient-dense foods and beverages to help meet food group recommendations...” The 2015-2020 DGA were even more explicit, stating “Healthy eating patterns can accommodate other nutrient-dense foods with small amounts of added sugars, such as... fat-free yogurt, as long as calories from added sugars do not exceed 10 percent per day, total carbohydrate intake remains within the Acceptable Macronutrient Distribution Range, and total calories intake remains within limits.”<sup>73</sup> The 2015-2020 DGA also states, “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.”<sup>74</sup>

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<sup>69</sup> Mozaffarian D. Dietary and Policy Priorities for Cardiovascular Disease, Diabetes, and Obesity: A Comprehensive Review. *Circulation* 2016; 133: 187-225.

<sup>70</sup> Mozaffarian Dariush, Dairy Foods, Obesity, and Metabolic Health: The Role of the Food Matrix Compared with Single Nutrients, *Advances in Nutrition*, Volume 10, Issue 5, September 2019, Pages 917S–923S, <https://doi.org/10.1093/advances/nmz053>

<sup>71</sup> Lamarche B. (2022). Yet another study stirring the debate on saturated fat, *The American Journal of Clinical Nutrition*. [116], 1466–1467, <https://doi.org/10.1093/ajcn/nqac270>

<sup>72</sup> Ibid.

<sup>73</sup> U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015-2020 Dietary Guidelines for Americans 8th Edition.

<sup>74</sup> U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015-2020 Dietary Guidelines for Americans 8th Edition.

A recent report from USDA to Congress identified flavored yogurt and flavored milk as top contributors to added sugar content in the NSLP and SBP.<sup>75</sup> Dietary intake research, however, shows yogurt and flavored milk are not top contributors to added sugar intake in the overall diets of kids. This same research shows these foods do positively impact intakes of dairy and accompanying nutrients such as calcium and vitamin D. Added sugar should be considered in context of the nutrient density of a food, how it fits in an overall healthy diet pattern and the role of the food in helping kids to meet DGA recommendations. It is important for schools and students to have access to a variety of nutrient-dense dairy foods to promote intakes of this important food group, drive program participation and help operators serve students.

These products are prime examples of nutrient-dense foods that benefit from limited amounts of added sugars to address consumer preferences and help those consumers meet the recommended intake of dairy and accompanying nutrients. Flavored, sweetened dairy products, such as milk and yogurt, contain the same vitamin and mineral composition as their unflavored counterparts and count toward the recommended servings of the dairy group.

Adding new limits for added sugars in the programs, while balancing these limits with the other requirements of the program, such as saturated fat, calorie, and sodium limits, will make meeting all of these requirements even more difficult to meet, particularly when taking into account the need for palatability by children and convenience in preparation and serving.

Should added sugars standards be implemented as proposed, USDA should work with operators to ensure these standards don't unintentionally increase the levels of other nutrients to limit in the meal program. For example, yogurt is often combined with a grain such as in a parfait and should the added sugar standards limit yogurt and/or grain in the program, operators may choose to include a protein option other than yogurt to menu, which could increase sodium and/or saturated fat in the menu.

In the 2012 final rule updating school meals nutrition standards<sup>76</sup>, a limit on added sugar was not implemented due to the inherent limitation on added sugar content by the calorie ranges. These calorie limits are still in place, which will help limit the added sugar content in the overall meals while still providing room for moderate levels of added sugar in foods to help boost student consumption of foods and beverages that contribute essential nutrients and under-consumed food groups.

### **Sodium Limits**

While we appreciate USDA's more gradual approach to reducing sodium in school meals, there continue to be challenges and concerns with further reductions of sodium, especially in cheese where salt and sodium provide significant functionality and safety. In many cases, reformulation to provide schools with lower sodium choices has already been underway or completed, with lower sodium options already available. One company has reduced the sodium in their school products by 40-50% over the past 10 years. With past efforts resulting in lower sodium products for schools, any potential further reduction in sodium must be carefully evaluated for practicality and safety.

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<sup>75</sup> U.S. Department of Agriculture, Food and Nutrition Service. "Added Sugars in School Meals and Competitive Foods: A Report to Congress." May 2022.

<sup>76</sup> Nutrition Standards in the National School Lunch and School Breakfast Programs. 77 FR 4087 (January 26, 2012).

As USDA works toward any further sodium reductions in school meals, we encourage the Department to engage with stakeholders and food suppliers to identify levels that will support nutritious meal patterns that can include a wide range of foods, as well as providing an adequate timeframe needed to reformulate without jeopardizing food safety, student acceptance or increasing food waste.

Making any further reductions gradually and with stakeholder consultation would be helpful to the many schools that have found it challenging to obtain food items with lower sodium that are also acceptable to students, especially for school districts that are not set up for from-scratch cooking. The additional time would be particularly useful as school food authorities are currently undergoing significant changes to the school meal programs as they continue to deal with changes resulting from the COVID-19 pandemic.

If changes are made to sodium requirements, there must be sufficient time after publication of these new requirements, but prior to mandatory implementation, to provide for several steps, including reformulation of both ingredients and final products, taste testing and adjustment of student tastes, and the lead time needed to meet the bidding process. Even with this time, there may be some products or ingredients that are unable to meet lower sodium requirements without significant food safety, food waste and functionality implications.

An additional consideration as timelines for sodium reduction are set is that these levels must be stable. While the food industry will do their best to meet sodium levels required for school meals, these reductions cannot result in continual reformulation to meet lower and lower levels.

While there continue to be efforts from food companies to develop lower sodium products, there are some foods such as cheese for which salt and hence sodium serves a functional and food safety role that makes it particularly difficult to formulate new options. In cheese, salt promotes food safety by affecting fermentation, which can influence pH and water activity, while also preventing the growth of pathogens, including *Bacillus cereus*, *Clostridium spp.*, *Salmonella Spp.*, *Listeria monocytogenes*, *Staph aureus* and *E.coli*. Salt is not added to cheese beyond levels necessary for functionality and for food safety parameters. Sodium also plays a role in the texture of cheeses, including melting and creaminess. There are multiple hurdles to reducing sodium levels in many types of cheese, including technological feasibility, efficacy of salt substitutes and regulatory requirements. While some reductions may be technically feasible, the final product may not be acceptable due to flavor. In some cases, reducing sodium could result in products that would present a significant food safety risk, increased food waste and decreased shelf-life.

Salt substitutes have been proposed as an option for helping to lower the sodium content in foods, including through FDA's recent proposal to permit salt substitutes in standard of identity foods. However, there are multiple hurdles when formulating cheese products with these ingredients, especially for school products. In many cases, cheeses and especially cheeses that are used in school meals have a relatively mild flavor, allowing them to pair well with other food products. But these mild flavors do not cover the bitter flavor of salt substitutes, reducing acceptance of these products. In some cases, schools are not interested in purchasing products that contain salt substitutes due to various concerns, such as their perceived flavor.

The regulatory requirements for meat alternates can also make sodium reductions more difficult. When cheese is used as a meat alternate in school meals, either on its own or as part of an entrée, two ounces

of cheese must be served to satisfy the meat alternate requirement for school lunch. When cheese is used as part of an entrée and combined with other components of that entrée, such as sauce and crust in a pizza, the meal pattern requirements and functionality of salt in each component add further challenges to sodium reductions.

In considering the steps for sodium reduction, the 2027-2028 and 2029-2030 limits are particularly difficult to achieve. A typical K-5 menu of a reduced sodium reduced fat whole grain mac and cheese, breadstick, cup of pineapple, cup of broccoli, and a half pint of skim milk would provide 895mg of sodium. This amount is just under the 900 mg allowed in School Year 2027-2028 and over the 810mg allowed in School Year 2029-2030. While this is one meal that would be calculated in a weekly average, the amount of sodium in this meal would need to be offset by another meal that is even lower in sodium. It is important to note that this meal pattern modeling uses already sodium-reduced products and the further reductions of sodium in cheese that could be required for SY 29-30 may not be achievable due to functional and food safety purposes already identified.

As stated above, there is a significant balance between the levels of added sugars and sodium. In many cases, reformulating a product to make it lower in one of these nutrients will require an increase in the other nutrient. Additionally, by reformulating existing products for lower sodium, there may be no product development capacity to reformulate new products, particularly those with lower sodium content.

#### **Sodium from Cheese and Naturally Occurring Sodium Should Be Exempt from Sodium Limits**

The sodium contributed by cheese for food safety and functional purposes should not be counted toward the sodium limit. USDA should exclude salt and sodium used in cheese from being counted toward the sodium limit until the Department has consulted with the Food and Drug Administration and engaged with cheesemakers to determine an amount of sodium that is used for food safety and functional purposes in cheese-making in order to identify the amount of sodium to be excluded from sodium limit requirements.

Sodium is also present naturally in milk and a variety of other foods, including vegetables. The sodium that is naturally occurring in these products should not be counted toward any sodium limit set for any child nutrition program. When the 2020-2025 DGA recommended limited intakes of sodium, the focus was on sodium that may be added to foods or as an ingredient in processed foods. This naturally-occurring sodium was never the target of intended sodium reductions. And while the levels of naturally occurring sodium are lower than the amounts present in processed foods and other prepared foods, when considering the sodium limit set for the 2029-2030 school year, especially for elementary schools, natural sodium will contribute to a significant amount of this limit, calculated as 25-30% of sodium at breakfast and 14-17% of the sodium limit for lunch.

#### **Non-dairy Milk Alternates**

Non-dairy alternates are important options for people who cannot consume dairy products due to food allergy or other health needs. There are also cultural reasons that students and their families choose other alternates. However, it is important that these choices do not have a negative impact on their overall nutrition.



An important requirement for alternate products is that these provide similar levels of nutrients to the dairy products they would substitute for in the food packages. This would ensure that similar nutrition is being provided into the overall diet.

### **Competitive Food Requirements Should Align with School Meals**

Milk sold in schools as competitive options, either a la carte or in vending machines, should align with the milk sold in school meals. We urge USDA to keep flavored milk as a competitive beverage option in all schools, Kindergarten through 12<sup>th</sup> grade. We also agree that a similar level of added sugar, no more than 10 grams of added sugar per 8 fluid ounces, or 15 grams in 12 fluid ounces of milk, should be permitted in milk sold in schools outside of the school meal programs.

### **Child and Adult Care Food Program Nutrition Standards Should Allow Operators to Access Compliant Foods**

It is logical that the nutrition standards of federal nutrition programs are as consistent as possible, considering the ages of the participants and the setting of the meals or snacks. However, one additional consideration is how the operators of each program purchase the foods and beverages they serve and the availability of these foods and beverages.

Many family childcare homes and smaller childcare centers buy the foods and beverages that they use in their meals and snacks from retail stores or club-type stores. The products that these smaller CACFP operators can purchase in retail are those that are widely available to the public and reflect the demand of the general public. These may be different from the products that are sold to schools in large quantities via the bid process, which are often formulated specifically for the school market to meet the needs of the school meal programs.

The products available to large schools and those available via retail to smaller CACFP participants may be very different nutritionally. Smaller CACFP homes and centers may not be able to access products that meet the nutrition standards set for schools, since there may be little to no demand for these products in grocery stores, so they may not be stocked there.

If a product is not widely available in grocery stores and other retail outlets where CACFP-participating family childcare homes and centers buy their supplies, then this product should not be mandated for CACFP. The nutrition standards for CACFP should allow participating homes and centers to access appropriate products, no matter how they purchase foods and beverages.

Flavored milk should continue to be available as an option for those participants in CACFP programs that are 5 years of age and older. As in school, many children aged 5 and older and adults that participate in CACFP may prefer flavored milk, making it the preferred method of consuming a serving of milk and dairy with their meal or snack.

### **Special Milk Program Should Include Flavored Milk for All Ages**

For schools that provide milk through the Special Milk Program, flavored milk should remain an option for all students K-12 in these schools as well as schools that participate in the NSLP and SBP. The nutritional benefits of flavored milk apply to all children, no matter which program their school participates in.

Flavored milks provide the same micronutrients as white milk, but with a flavor that many children prefer. Flavored milks, like all cow's milk, are a good or excellent source of 13 essential nutrients, including calcium, vitamin D, and potassium. Children from 2 to 18 years of age who drank flavored milk drank more milk than children who did not drink flavored milk, and therefore the flavored milk consumers had significantly higher intakes of vitamin D, calcium, potassium, and other nutrients.<sup>77</sup>

Children consuming flavored milk in their diets had superior nutrient intakes compared to children that consumed only plain milk with no differences in body mass index.<sup>78</sup> Another study demonstrated that flavored milk consumption is associated with improvements in nutrient intake, but not associated with increased body weight of normal weight children.<sup>79</sup>

### **Afterschool Snacks Should Include Flavored Milk and Yogurt for All Ages**

The products permitted as part of afterschool snacks served in schools should include flavored milk for all grade levels and yogurt and cheese, as permitted by the NSLP and SBP regulations. These products are well-liked by students, convenient for service and provide 13 essential nutrients, so they are important ways to provide convenient and nutritious snacks.

### **Buy American Provisions Continue to be Unclear and Could Interfere with Trade Obligations**

Following USDA's request for input on Buy American in 2021, IDFA submitted comments asking for clarification on numerous issues in the Buy American program. We appreciate USDA's clarification on some issues, but additional information will still be needed in order to understand the potential impact on the availability of products for school meals and other child nutrition programs.

Assuming the proposed 5% limit on non-domestic foods purchased by schools for use in the school meal programs applies to the finished good only, not the ingredients, IDFA encourages USDA to consider the consistency of the proposed Buy American policy with Article 2.1 of the Agreement on Technical Barriers to Trade within the World Trade Organization. While IDFA strongly supports U.S.-origin dairy products being made available in schools, there may be other ways for USDA to encourage such availability without the potential introduction of either unintended consequences during ongoing supply chain disruptions affecting the availability of products or WTO inconsistencies. For example, USDA may consider setting a voluntary policy that encourages the use of domestic products but does not mandate a certain level of US-made foods and beverages. Buy American does not need strict government regulation to be an effective policy; for example, fluid milk in school lunches is impractical to import and would therefore meet Buy America criteria by default.

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<sup>77</sup> 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.

<sup>78</sup> Murphy MM, Douglas JS, Johnson RK, Spence LA. Drinking flavored or plain milk is positively associated with nutrient intake and is not associated with adverse effect on weight status in US children and adolescents. *J Am Diet Assoc* 2008. 108:631-639.

<sup>79</sup> Fayet-Moore F. Effects of flavored milk vs plain milk on total milk intake and nutrient provision in children. *Nutrition Reviews*, 2016. 74(1):1-17.

## Conclusion

Dairy products, including milk, yogurt and cheese, are important and vital contributors to the nutrition provided by child nutrition programs, including school meals. It is critical that, in aligning with the DGA, the nutrition standards and policies of USDA's child nutrition programs promote increased intake of dairy as recommended by the 2020-2025 DGA. In order to encourage increased intake of dairy products and the 13 essential nutrients they provide, a variety of dairy products should be available for use in school meals and other child nutrition programs, including: flavored milk, lactose free dairy products, dairy at all fat levels, yogurt and cheese. This variety of options will permit schools to include the dairy products that best fit the needs of the school and their students.

IDFA members are proud of the nutritious dairy products that they supply to schools and look forward to continuing to provide nutrient-rich milk, cheese and yogurt.

Sincerely,

A handwritten signature in black ink that reads "Joseph Scimeca". The signature is written in a cursive, flowing style.

Joseph Scimeca, PhD  
Senior Vice President  
Regulatory and Scientific Affairs