**Background:** Currently, flavored or unflavored low-fat (1%) and non-fat milk can be served to children 2 years and older as part of CACFP. Unflavored whole milk must be served to children 12 to 23 months of age.



**USDA's Proposed Rule:** Unflavored low-fat (1%) and nonfat milk and flavored nonfat milk may be served to children two years of age and older. Only unflavored whole milk may be served to children 12 to 23 months of age.<sup>1</sup>

**Our Recommendation:** Consistent with the IOM Committee on CACFP, we recommend that flavored milk should not be allowed in CACFP.<sup>2</sup>

**Rationale:** Milk intake is nutritionally important and a leading source of calcium and vitamin D in the diets of U.S. children.<sup>3,4</sup> Flavored milk has been promoted as a way to get children to drink more milk<sup>5</sup> and in the past three decades flavored milk intake has increased,<sup>6</sup> currently averaging 28% of total milk consumed by children 2-11 years old.<sup>7</sup>

However, calcium intakes by young children exceed recommended amounts; 96% of 2-3 years old children and 77.2% of 4-8 year old children have intakes above the Adequate Intake for calcium.<sup>4</sup> In addition, there are health risks associated with drinking flavored milk. Compared to children who do not consume flavored milk, flavored-milk consumers have lower intakes of folate, vitamin A and vitamin C, and higher intakes of total calories and percent of energy from saturated fat.<sup>7,8,9</sup> On average, fat-free flavored milk (140 calories and 25 g sugar per cup) has the same calorie content as whole, unflavored milk (140 kcals and 12 g sugar per cup).<sup>10</sup> A child drinking a cup of flavored milk at breakfast and a cup at lunch is ingesting 5-8 tsp of added sugar every day, the equivalent of drinking an 8 oz serving of soda. The American Heart Association, however, recommends that 4 to 8 years olds consume no more than 3 tsp of added sugar daily.<sup>11</sup> Further, based on a California statewide study of childcare, flavored milk is served by a minority of childcare sites, suggesting the flavored milk is neither necessary nor difficult to do without.<sup>12</sup> Finally, flavored milk can cost more than unflavored milk.<sup>13</sup>

These findings suggest that young children are consuming adequate amounts of milk without the need to introduce flavored milk with added sugar and calories into childcare settings. Given that habits developed in early childhood tend to track into later years, <sup>14</sup> serving young children unflavored milk in childcare settings can set the stage for lifelong healthy habits. Conversely, providing flavored milk to young children may make them more likely to prefer sugared milk later in life.

<sup>&</sup>lt;sup>1</sup> USDA FNS Proposed Rules. Child and Adults Care Food Program: Meal pattern Revisions Related to the Healthy, Hunger-Free Kids Act of 2010. January 15, 2015.http://www.gpo.gov/fdsys/pkg/FR-2015-01-15/pdf/2015-00446.pdf. Accessed 1/16/15.

<sup>&</sup>lt;sup>2</sup> Murphy SP, Yaktine AL, Suitor CW, Moats S, Editors; Committee to Review Child and Adult Care Food Program Meal Requirements; Institute of Medicine. Child and Adult Care Food Program: Aligning dietary guidance for all. Washington, DC: The National Academies Press. 2011.

<sup>&</sup>lt;sup>3</sup> Nicklas TA, O'Neil CE, Fulgoni VL. The role of dairy in meeting the recommendations for shortfall nutrients in the American diet. J Am Coll Nutr. 2009;28:73S-81S.

<sup>&</sup>lt;sup>4</sup> U.S. Department of Agriculture, Agricultural Research Service. Fluid milk Consumption in the United States: What We Eat In America, NHANES 2005-2006. Food Surveys Research Group Dietary Data Brief. 2010. Available at: http://www.ars.usda.gov/SP2UserFiles/Place/80400530/pdf/DBrief/3\_milk\_consumption\_0506.pdf.

<sup>&</sup>lt;sup>5</sup> 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. 2002:102:853-6.

<sup>&</sup>lt;sup>6</sup> Fulgoni VL 3rd, Quann EE. National trends in beverage consumption in children from birth to 5 years: analysis of NHANES across three decades. Nutr J 2012;11:92.

Kranz S, Lin PJ, Wagstaff DA. Children's dairy intake in the United States: too little, too fat? J Pediatr. 2007;151:642-6.

<sup>&</sup>lt;sup>8</sup> Nicklas TA, O'Neil CE, Fulgoni VL. The Nutritional Role of Flavored and White Milk in the Diets of Children. J Sch Health. 2013;83:728-33.

<sup>&</sup>lt;sup>9</sup> Murphy MM, Douglass JS, Johnson R et al. 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;108:631-9.

<sup>10</sup> USDA, Agricultural Research Service. What's In The Foods You Eat Search tool, 5.0 (updated May 2013). Available at: http://www.ars.usda.gov/Services/docs.htm?docid=17032.

<sup>&</sup>lt;sup>11</sup> Johnson RK, Appel LJ, Brands M, et al.; American Heart Association Nutrition Committee of the Council on Nutrition, Physical Activity, and Metabolism and the Council on Epidemiology and Prevention. Dietary sugars intake and cardiovascular health: a scientific statement from the American Heart Association. Circulation. 2009;120:1011-20.

<sup>12</sup> Ritchie LD, Boyle M, Chandran K et al. Participation in the child and adult care food program is associated with more nutritious foods and beverages in child care. Child Obes 2012;8:224-9.

<sup>&</sup>lt;sup>13</sup> National Dairy Council. Flavored Milk in Perspective.2009. Available at:

http://www.nationaldairycouncil.org/SiteCollectionDocuments/child\_nutrition/general\_nutrition/FlavoredMilk\_V13.pdf. Accessed 1/16/15.

<sup>&</sup>lt;sup>14</sup> Stein AD, Shea S, Basch CE, Contento IR, Zybert P. Variability and tracking of nutrient intakes of preschool children based on multiple administrations of the 24-hour dietary recall. Am J Epidemiol. 1991:134:1427-37.