



April 17, 2023

U.S. Department of Agriculture  
Food and Nutrition Service  
School Meals Policy Division  
P.O. Box 9233  
Reston, Virginia 20195

**Re: Docket No. FNS-2022-0043 for Child Nutrition Programs: Revisions to meal patterns consistent with the 2020 Dietary Guidelines for Americans.**

The American Cancer Society (ACS) and the American Cancer Society Cancer Action Network (ACS CAN) appreciate the opportunity to comment on the proposed rule to revise the child nutrition program requirements for meal patterns to be consistent with current nutrition science and federal dietary guidance.

ACS is the leading cancer-fighting organization with a vision to end cancer as we know it, for everyone. For more than 100 years, we have been the only organization improving the lives of people with cancer and their families through advocacy, research, and patient support, to ensure that everyone has an opportunity to prevent, detect, treat, and survive cancer. ACS CAN is making cancer a top priority for public officials and candidates at the federal, state, and local levels. ACS CAN empowers advocates across the country to make their voices heard and influence evidence-based public policy change, as well as legislative and regulatory solutions that will reduce the cancer burden. As the ACS' nonprofit, nonpartisan advocacy affiliate, ACS CAN is more determined than ever to end cancer as we know it, for everyone.

**Background**

The school breakfast and school lunch programs may be the only nutritious meals many eligible children eat during the day. ACS and ACS CAN have an interest in child nutrition program standards because what children eat today affects their future cancer risk. Scientific literature has shown that nutrition, physical activity, and body weight play a direct role in the risk, development, and survival of some types of cancer. In fact, approximately 4%-5% of all cancer cases are attributed to poor diet, and 18.2% are attributed to excess body weight,

physical inactivity, alcohol consumption and diet combined.<sup>1</sup> There is increasing evidence that excess body fat over the course of a lifetime, beginning in childhood, has adverse health consequences.<sup>2</sup> Poor diet, including the consumption of high-calorie foods and beverages, is a major contributor to excess weight and increases the risk of cancer. In 2020, ACS published an updated [Guideline for Diet and Physical Activity for Cancer Prevention](#) which emphasizes the importance of an overall healthy dietary pattern, comprised of a variety of vegetables, whole fruit, and whole grains. The guideline also recommends limiting or eliminating red and processed meat, sugary drinks, refined grains and highly-processed foods, in reducing the risk of cancer and boosting overall health. The guideline is consistent with recommendations of the 2020-2025 *U.S. Dietary Guidelines for Americans*.

In addition, evidence suggests that children with overweight or obesity tend to carry those conditions into adulthood,<sup>3</sup> and, according to the ACS and other leading cancer organizations, overweight and obesity are associated with an increased lifetime risk of developing at least 13 cancers: breast cancer in postmenopausal women, colon and rectal cancer, endometrial cancer, kidney cancer, esophageal cancer, ovarian cancer, cancers of the gastric cardia, liver, gallbladder, pancreas, and thyroid, meningioma and multiple myeloma.<sup>4,5</sup> From 2017 to early 2020, the prevalence of overweight/obesity was 29% among children ages 2-5 years, 37% among children ages 6-11 years, and 40% among adolescents ages 12-19 years.<sup>6</sup> Given the high prevalence of excess body weight among children and the important role school meals play in overall diet quality, robust nutritional standards for the school meal programs would promote ability to develop healthy dietary patterns and improve the long-term health of millions of children across the country. In fact, a recent study comparing body mass index (BMI) trends in kids prior to the implementation of the nutrition standards mandated by the Healthy, Hunger-Free Kids Act with BMI trends after full implementation found a significant decrease in BMI z-scores (variance in BMI that accounts for differences by age and sex) among school-aged youth.<sup>7</sup> The findings suggest that the school meal programs can be an effective intervention for obesity in children and adolescents, underscoring the critical need to maintain and strengthen the nutrition standards on which these programs are based.

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<sup>1</sup> Islami F, Goding Sauer A, Miller KD, et al. Proportion and number of cancer cases and deaths attributable to potentially modifiable risk factors in the United States. *CA Cancer J Clin*. 2018;68(1): 31-54.

<sup>2</sup> American Cancer Society. *Cancer Facts & Figures 2022*. Atlanta: American Cancer Society; 2022.

<sup>3</sup> Cunningham SA, Kramer MR, Venkat Narayan KM. Incidence of childhood obesity in the United States. *New England Journal of Medicine* 2014; 370: 403-411.

<sup>4</sup> Kushi LH, Doyle C, McCullough M, et al. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: Reducing the Risk of Cancer With Healthy Food Choices and Physical Activity. *CA Cancer J Clin* 2012; 62: 30-67.

<sup>5</sup> Lauby-Secretan B, Scoccianti C, Loomis D, Grosse Y, Bianchini F, Straif K. Body fatness and cancer — Viewpoint of the IARC working group. *New England Journal of Medicine* 2016; 375(8): 794-798.

<sup>6</sup> National Center for Health Statistics. National Health and Nutrition Examination Survey Data, 2017-March 2020. Available from URL: <https://wwwn.cdc.gov/nchs/nhanes/Default.aspx> [accessed February 27, 2022].

<sup>7</sup> Chandran A, Burjak M, Petimar J, et al. Changes in Body Mass Index Among School-Aged Youths Following Implementation of the Healthy, Hunger-Free Kids Act of 2010. *JAMA Pediatr*. Published online February 13, 2023. doi:10.1001/jamapediatrics.2022.5828.

## **Recommendations**

Research has shown that improvements to the child nutrition standards have reduced BMI among school-aged youth.<sup>8</sup> Despite this progress, many provisions within the proposed rule are needed to ensure school meals are better aligned with the Dietary Guidelines. We support the USDA's continual effort to improve the nutritional quality of school meals and snacks, based on the latest nutritional science, with this rule's proposed revisions to the school meal nutrition requirements. This includes the new proposal to limit added sugars, as well as revisions to flavored milk, whole grains, sodium and other standards intended to improve the nutritional quality of the meals in order to better align with the current scientific evidence. Specific comments follow.

## **Added Sugars**

Research has shown that the higher diets are in added sugars, the lower they are in a variety of vitamins and minerals.<sup>9</sup> ACS and ACS CAN support and appreciate USDA proposing an added sugar limit in both the school lunch and breakfast programs. Specifically, we support the dual approach of initially adding a product-based limit and then an additional weekly dietary limit of added sugar to less than 10% of calories per week for both the breakfast and lunch programs. As noted, the weekly limit will be more effective than the stand-alone product-based limits to allow children who eat school meals, especially school breakfast, to meet the current Dietary Guidelines for Americans (DGA)-recommended added sugar limit of “less than 10%<sup>10</sup> Consuming foods high in added sugars makes it more difficult to meet nutrient needs and stay within recommended calorie limits. In contrast, foods high in natural sugars, such as fruits and dairy products, are often rich in nutrients.

As food manufacturers continue to develop products that meet either proposal, we urge the agency to consider the fact that food manufacturers may replace sugar with artificial sweeteners in order to meet the lower added sugar requirements. This is concerning because while once considered physiologically inert, accumulating evidence demonstrates that artificial sweeteners are metabolically active and may exacerbate risk factors for chronic disease.<sup>11,12</sup> Therefore, instead of simply replacing sugar with artificial sweeteners, we encourage meeting US dietary guidance for added sugar through approaches such as limiting the amounts and portions of sweets offered.

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<sup>8</sup> Chandran A, Burjak M, Petimar J, et al. Changes in Body Mass Index Among School-Aged Youths Following Implementation of the Healthy, Hunger-Free Kids Act of 2010. *JAMA Pediatr*. Published online February 13, 2023. doi:10.1001/jamapediatrics.2022.5828.

<sup>9</sup> Marriott BP, Olsho L, Hadden L, and Connor P. Intake of added sugars and selected nutrients in the United States, National Health and Nutrition Examination Survey (NHANES) 2003–2006. *Critical Reviews in Food Science and Nutrition*, 2010; 50 (3): 228-258.

<sup>10</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>11</sup> Sylvestsky AC, Rother KI. Nonnutritive Sweeteners in Weight Management and Chronic Disease: A Review. *Obesity (Silver Spring)*. 2018 Apr;26(4):635-640. DOI: 10.1002/oby.22139. PMID: 29570245.

<sup>12</sup> Meng Y, Li S, Khan J, et al. Sugar- and Artificially Sweetened Beverages Consumption Linked to Type 2 Diabetes, Cardiovascular Diseases, and All-Cause Mortality: A Systematic Review and Dose-Response Meta-Analysis of Prospective Cohort Studies. *Nutrients* 2021; 13 2021/08/28. DOI: 10.3390/nu13082636.

## **Milk**

The proposed rule includes two alternatives to revise the current requirements for milk; alternative A that would not allow flavored milk to be offered to elementary and middle school students, and alternative B that would allow all students to be offered flavored milk that meets the proposed rule’s added sugar limits beginning in SY 2025-2026. Due to the fact that there is a significant amount of sugar added to flavored milk, ACS and ACS CAN oppose flavored milk being offered to students of all ages and therefore we do not support either proposal. Instead of the two existing proposals outlined in the rule, we urge USDA to consider no longer offering flavored milk as an option.

## **Whole Grains**

Whole grains are grain products in their most nutrient-dense forms and typically provide fiber, which is under consumed in the population. Whole grains are a natural source of dietary fiber, and dietary fiber is also related to lower risk of colorectal cancer according to recent reviews.<sup>13</sup> Additionally, while research shows that Americans are eating enough grain products overall, consumption of whole grains is low.<sup>14</sup> This means that for people to eat the recommended amount of whole grains, they must shift some of their consumption of refined grains to whole grains. The Dietary Guidelines recommend that Americans “make at least half of your grains whole.”<sup>15</sup> The ACS guidelines also recommend that individuals consume whole grain products in place of refined grains.<sup>16</sup>

Many students currently do not consume enough whole grains. ACS and ACS CAN support rigorous nutritional standards for school meals, including the existing whole grain requirement that at least 80% of the weekly grains offered are whole grain-rich. We also support the alternative proposal as outlined in the rule to require all grains offered in the school lunch and breakfast programs meet the whole grain-rich requirement, except that one day each school week, when schools would be allowed to choose to offer enriched grains—which is compatible with the 80% requirement. Lastly, we support including the definition of “whole grain-rich” as a regulatory definition, being a product containing a grain content between 50% to 100% whole grain.

## **Sodium**

In 2023, cancer is the second most common cause of death in the U.S., exceeded only by heart disease.<sup>17</sup> The typical sodium intake—about 4,000 milligrams per day—may lead to high blood pressure, or hypertension.<sup>18</sup> An estimated 46% of U.S. adults suffer from that condition,

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<sup>13</sup> WCRF and AICR, 2018.

<sup>14</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>15</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>16</sup> Rock, CL et al. American Cancer Society guideline for diet and physical activity for cancer prevention. *CA Cancer J Clin* 2020; 0:1-27.

<sup>17</sup> American Cancer Society. *Cancer Facts & Figures 2023*. Atlanta: American Cancer Society; 2023.

<sup>18</sup> Cogswell ME, Loria CM, Terry AL, Zhao L, Wang CY, Chen TC, Wright JD, Pfeiffer CM, Merritt R, Moy CS, Appel LJ. Estimated 24-Hour Urinary Sodium and Potassium Excretion in US Adults. *JAMA*. 2018; 319(12):1209–1220. Accessed at <<https://www.ncbi.nlm.nih.gov/pubmed/29516104>>.

which increases the risk of heart disease and stroke.<sup>19</sup> Together, coronary heart disease and stroke kill about 500,000 people annually in the United States.<sup>20</sup>

ACS and ACS CAN support the gradual approach to reducing sodium in both school breakfast and lunch that is more consistent with the FDA's recent voluntary sodium reduction targets. Specifically, we strongly urge the agency to consider strengthening the sodium reduction limit to better align with the quantitative recommendations outlined in most recent DGAs which recommends limiting sodium to less than 1,500mg per day for children aged 5-8, less than 1,800mg per day for adolescents aged 9-13 and less than 2,300mg per day for youth ages 14-18+.<sup>21</sup> Whereas, under the proposed rule, the average sodium intake for children will continue to exceed the recommended DGA limits. For example, an elementary school lunch could contain up to 810mg of sodium after the third sodium reduction occurs in 2029, which represents more than half (54%) of the daily sodium limit for children aged 5-8-year-olds from lunch alone. School breakfast could provide an additional 435mg or 29% of the daily limit for that same age group. That means for children up to age 8 who enjoy both school breakfast and lunch could consume 83% of their daily sodium limit eating school meals alone, leaving just 17% for dinner and snacks. This would make it extremely difficult for children to meet the DGAs' sodium recommendations. As a result, again ACS & ACS CAN strongly urge USDA to adopt stronger sodium standards that fully align with the quantitative recommendations in the DGAs.

To help schools achieve these new sodium limits, USDA could revise the proposed sodium reductions to require a larger percent reduction between limits. For example, for school lunch, USDA could require reductions of 15-20% each in 2025, 2027, and 2029 instead of 10% as currently proposed. Alternatively, USDA could extend the sodium timeline, such as adding a third reduction for breakfast and a fourth reduction for lunch. Or, USDA could adopt a combination of these two approaches.

Schools can – over time – meet sodium limits that fully align with the DGAs. Schools have already made significant progress. A nationally representative study of elementary schools found that during the pandemic many schools were meeting existing nutrition standards in 2022. Specifically for sodium the study found average sodium intake decreased and the vast majority of schools were near or on target to meet future sodium-reduction levels outlined in

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<sup>19</sup> Whelton PK, Carey RM, Aronow WS, Casey DE Jr, Collins KJ, Dennison Himmelfarb C, DePalma SM, Gidding S, Jamerson KA, Jones DW, MacLaughlin EJ, Muntner P, Ovbigele B, Smith SC Jr, Spencer CC, Stafford RS, Taler SJ, Thomas RJ, Williams KA Sr, Williamson JD, Wright JT. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol*. 2018; 71(19):e127-e248. Accessed at: <<https://www.ncbi.nlm.nih.gov/pubmed/29146535>>.

<sup>20</sup> Benjamin EJ, Blaha MJ, Chiuve SE, Cushman M, Das SR, Deo R, de Ferranti SD, Floyd J, Fornage M, Gillespie C, Isasi CR, Jimenez MC, Jordan LC, Judd SE, Lackland D, Lichtman JH, Lisabeth L, Liu S, Longenecker CT, Mackey RH, Matsushita K, Mozaffarian D, Mussolino ME, Nasir K, Neumar RW, Palaniappan L, Pandey DK, Thiagarajan RR, Reeves MJ, Ritchey M, Rodriguez CJ, Roth GA, Rosamond WD, Sasson C, Towfighi A, Tsao CW, Turner MB, Virani SS, Voeks JH, Willey JZ, Wilkins JT, Wu JHY, Alger HM, Wong SS, Muntner P. Heart Disease and Stroke Statistics—2017 Update: A Report from the American Heart Association. *Circulation*. 2017; 135(10):e146-e603. Accessed at: <<https://www.ncbi.nlm.nih.gov/pubmed/28122885>>.

<sup>21</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).

this proposed rule.<sup>22</sup> USDA can help schools build on this progress to meet stronger sodium standards by providing targeted technical assistance.

ACS and ACS CAN also support the inclusion of USDA-recommended sodium limits for certain products such as condiments, sandwiches, and other high sodium products to enable schools to meet the sodium limits. In response to the USDA’s request for specific products, ACS and ACS CAN recommend the agency should require product specific sodium limits for all allowable processed foods.

### **Menu Planning Options for American Indian and Alaska Native Students**

ACS and ACS CAN support the USDA’s proposal to add tribally operated schools, schools operated by the Bureau of Indian Education and schools primarily serving American Indian and Alaska Native children, to the list of schools allowed to serve vegetables to meet the grain requirements and allow for culturally appropriate specific menu options.

### **Traditional Foods**

ACS and ACS CAN support the USDA’s proposal to explicitly state in the regulation that traditional foods may be served in reimbursable school meals to both provide clarity and support schools wanting to incorporate traditional foods in school meals. We also support the inclusion of the proposed broad definition of “traditional food.” Health is not always “one size fits all,” and we must be intentional, thoughtful, and inclusive if we are to have long-lasting impact.

### **Afterschool Snacks**

ACS and ACS CAN support the proposed rule alignment of the school lunch program snacks with the Child and Adult Care Food Program (CACFP) and that the offering of breakfast cereals and yogurts will be required to meet the added sugar limits as outlined in the proposed rule.

### **Substituting Vegetables for Fruits at Breakfast**

The evidence that non-starchy vegetables lower the risk of aerodigestive cancers (mouth, pharynx, larynx, nasopharynx, esophagus, lung, stomach and colorectal) is “probable.” Carotenoid-rich vegetables and fruit are associated with lower risk of harder-to-treat estrogen receptor-negative breast tumors.<sup>23,24</sup> Moreover, according to the most recent Dietary Guidelines for Americans, nearly 90% of the U.S. population does not meet the recommended

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<sup>22</sup> Chapman LE, Richardson S, Harb AA, Fear E, Daly TP, Olarte DA, Hawley M, Zukowski E, Schwartz C, Maroney M, Cohen JFW. Nutrient Content and Compliance with Sodium Standards in Elementary School Meals in the United States Pre- and Post-COVID-19. *Nutrients*. 2022; 14(24):5386.

<sup>23</sup> Eliassen AH, Liao X, Rosner B, Tamimi RM, Tworoger SS, Hankinson SE. Plasma carotenoids and risk of breast cancer over 20 y of follow-up. *Am J Clin Nutr*. 2015;101(6):1197-1205.

<sup>24</sup> Bakker MF, Peeters PH, Klaasen VM, et al. Plasma carotenoids, vitamin C, tocopherols, and retinol and the risk of breast cancer in the European Prospective Investigation into Cancer and Nutrition cohort. *Am J Clin Nutr*. 2016;103(2):454-464.

intake of vegetables,<sup>25</sup> yet vegetables are part of a healthy diet that can reduce one's risk of cancer.

ACS and ACS CAN support the proposed rule allowing schools to substitute vegetables, especially non-starchy vegetables, for fruits at breakfast and the new requirement for schools that do so more than once a week must offer a variety of non-starchy vegetable subgroups.

### **Nuts and Seeds**

ACS and ACS CAN support the USDA's proposal to simplify the nut and seed crediting for the full protein sources component in all school nutrition programs.

### **Competitive Foods – Hummus Exemption**

ACS and ACS CAN support the proposed rule's inclusion of hummus as a standalone product to be exempt from the total fat standard in the competitive food or Smart Snack regulations.

### **Miscellaneous Changes**

ACS and ACS CAN support the miscellaneous changes in the proposed rule that include revising the terminology from "meat/meat alternative" to "protein sources" and "legumes (beans and peas)" to "beans, peas, and lentils."

### **Conclusion**

As mentioned initially, healthy dietary patterns reduce cancer risk, and poor diets can lead to overweight and obesity as well as increased cancer risk. Learning healthy eating habits early is critical to preventing long term poor dietary behaviors that can be difficult to change later and instead can have positive long-term effects on children's health. For all of these reasons, ACS and ACS CAN support the majority of the revisions included in this proposed rule. We believe that this proposed rule to revise the current nutrition quality standards for school meals and after school snacks will help to better align school meals with the latest nutritional science.

Thank you for the opportunity to provide input on this important topic. If we can provide additional information, please contact Christy Cushing, MPP, Senior Analyst, Prevention & Health Equity at ACS CAN, at [christy.cushing@cancer.org](mailto:christy.cushing@cancer.org). Thank you.

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<sup>25</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).