January 29, 2018

School Programs Branch
Policy and Program Development Division
Food and Nutrition Service
3101 Park Center Drive
Alexandria, Virginia 22302

Re: Docket No. FNS-2017-0021; Child Nutrition Programs: Flexibilities for Milk, Whole Grains, and Sodium Requirements

The Public Health Institute (PHI) respectfully submit comments in response to the U.S. Department of Agriculture’s (USDA) “Child Nutrition Programs: Flexibilities for Milk, Whole Grains, and Sodium Requirements” interim final rule (IFR) (82 FR 56703), and oppose weakening school nutrition standards. Virtually all schools (99 percent) participating in the National School Lunch and Breakfast Programs are making great progress toward serving healthier meals for low-income children with less sodium; more whole grains, fruits, and vegetables; and no trans-fat; and removing sugary drinks and unhealthy snack food.¹ The 2012 updates to school nutrition standards reflect sound science, support children’s health, and are consistent with the 2015-2020 Dietary Guidelines for Americans (DGA)² and the National Academies of Science, Engineering, and Medicine (formerly, Institute of Medicine) 2009 report School Meals: Building Blocks for Healthy Children.³

The Harvard University T.H. Chan School of Public Health concluded that the update to school nutrition standards is “one of the most important national obesity prevention policy achievements in recent decades.”⁴ Researchers estimate that these improvements prevent more than 2 million cases of childhood obesity and save up to $792 million in health-care related costs over ten years. Improved school nutrition is critical given that one out of three children and adolescents aged 2 to 19 years is overweight or obese⁵,⁶ and children consume one-third to one-half of daily calories during the school day.⁷ Contrary to supporting schools and children’s health, the proposed changes in the IFR could jeopardize this progress.

We oppose the proposed three-year delay (from School Year 2017-2018 to School Year 2021-2022) of the second sodium reduction targets (Target 2) for school meals that would lock in unsafe levels of sodium for children. Unfortunately, nine out of ten children consume too much sodium,⁸ increasing their risk of high blood pressure, heart disease, and stroke.⁹ Many schools,

food service companies, and others in industry are working toward or already providing healthy and appealing meals and products with less sodium. USDA should address remaining challenges through training and technical assistance. Delaying the second phase of sodium reduction puts children’s health at risk and would result in children consuming an extra 84 to 98 teaspoons of salt (over the course of the three-year delay). Further, we are opposed to any delay of the third and final phase of sodium reduction for school meals (Target 3 which is supposed to go into effect School Year 2022-2023).

There is no need to continue the whole-grain waivers. USDA concedes in the IFR that 85 percent of schools have not requested waivers and are providing children with appealing whole-grain options. If all schools in Alabama, Idaho, and Montana can serve whole grains to their students, schools in the rest of the states should be able to as well. Eating more whole grains is associated with reduced risk of heart disease, stroke, and diabetes, provides more nutrients, and are a healthful source of fiber. Children, on average, consume too few whole grains and too many refined grains.

We oppose allowing flavored low-fat (1 percent) milk for school meals and as a competitive food. The current standards that allow plain or flavored fat-free milk and plain low-fat milk are based on expert recommendations from the National Academy of Medicine’s 2009 report. The recommendations disallowed flavored low-fat milk because it would provide more calories and likely exceed the calorie maximum for school meals. The 2015 DGA similarly recommended, “increasing the proportion of dairy intake that is fat-free or low-fat milk” and “reducing the intake of added sugars” such as those in flavored milk. Similarly, the Robert Wood Johnson Foundation’s Healthier Beverage Guidelines recommend only plain fat-free and low-fat milk for children and adolescents.

Furthermore, the Robert Wood Johnson Foundation panel recommended that if schools offered flavored low-fat milk, it should be no more than 130 calories per 8 ounces. If USDA allows flavored low-fat milk, we recommend a calorie cap of no more than 130 calories per 8 ounces, consistent with the Robert Wood Johnson Foundation’s Healthier Beverage Guidelines.

Additional detailed comments follow:

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10 Difference between Target 1 and Target 2 sodium levels: grades k-5: 350 mg/day; grades 6-8: 390 mg/day; grades 9-12: 410 mg/day. Three-year delay is equivalent to mg/day x 185 school days x 3 school years (1 teaspoon = 2,325 mg): grades k-5: 194,250 mg (84 teaspoons); grades 6-8: 216,450 mg (93 teaspoons); grades 9-12: 227,550 mg (98 teaspoons).
14 Id. Institute of Medicine. School Meals: Building Blocks for Healthy Children.
The three-year delay in the second sodium reduction levels would harm children’s health

We appreciate USDA’s efforts thus far to decrease the sodium content of school meals. The sodium reduction guidelines in the 2012 final rule (77 FR 4088) are aligned with the 2010 and 2015 DGAs and expert recommendations from the National Academy of Medicine’s 2009 report.17

Nine out of ten children consume more sodium than is recommended for good health.18 Excess sodium consumption is strongly associated with the development and worsening of high blood pressure and an increased risk of coronary heart disease, stroke, heart failure, kidney failure, gastric cancer, and osteoporosis.19 A substantial number of studies show that as dietary sodium intake rises, so does blood pressure.20 Studies show a link between high blood pressure in childhood and high blood pressure in adulthood, and high blood pressure in childhood is linked to early development of heart disease and risk for premature death.21

Of concern, the prevalence of high blood pressure is increasing in American children.22 Already about one in six children aged 8-17 have raised blood pressure.23 Children are at higher risk of developing heart disease and elevated blood pressure at earlier ages if they are obese or eat too much sodium.24 Children who eat higher-sodium diets are about 40 percent more likely to have elevated blood pressure than children who eat lower-sodium diets.25

The good news is that lowering sodium consumption can have a tremendous impact on public health. Studies show that reduced sodium intake can lower blood pressure, control hypertension, and prevent cardiovascular disease.26,27 In addition, lowering sodium consumption, and thereby lowering blood pressure, can reduce medical costs. From 2012 to 2013, high blood pressure cost the United States an estimated $51.2 billion in direct and indirect costs.28

Emphasizing the alignment and strength in the science, the 2015 DGA reaffirmed the need to bring sodium consumption levels down to at least 2,300 mg a day. The 2015 DGA recommends

17 Id., Institute of Medicine. School Meals: Building Blocks for Healthy Children.
18 Id., Jackson SL.
21 Id., Appel LJ.
25 Id., Rosner B.
that children consume no more than 1,900 to 2,300 mg of sodium per day.\textsuperscript{29} Unfortunately, children on average consume a lot more than that: between 2,500 to 4,200 mg of sodium per day, which is well over safe levels.\textsuperscript{30} Along with the DGAs, the Centers for Disease Control and Prevention, the World Health Organization, the American Heart Association, and other experts all recommend limiting sodium intake to less than 2,300 mg.\textsuperscript{31} At the current levels (Target 1), an elementary school lunch has on average 1,230 mg, or about two-thirds a day’s worth of sodium for a child in one meal. Similarly, a high school lunch has on average 1,420 mg, or about half a day’s worth.

One of the reasons given by USDA for delaying sodium reduction efforts at Target 1 is that industry needs more time to reformulate. While reformulation does take time and resources, industry already had five years to meet Target 2 (since the 2012 final rule)\textsuperscript{32} and the proposed three-year delay would result in a total of eight years—nearly a decade to reformulate. We are concerned that delaying sodium reduction levels could slow or prevent industry from continuing to move forward with school-food product reformulation, especially given continued efforts to further delay or remove Target 2 and 3 sodium levels.

Appealing products with safe levels of sodium are now more readily available and demand for these products has grown. For example, food companies such as Revolution Foods provide school meals that already meet the Target 3 sodium levels. Schwan’s Company—the largest producer of school pizza—produces the pizza for Revolution Foods and has already invested in the technology and resources to make appealing school pizzas that meet Targets 2 and 3. In addition, many companies—including Aramark,\textsuperscript{33} ConAgra Foods,\textsuperscript{34} Domino’s Pizza (Smart Slice),\textsuperscript{35} General Mills,\textsuperscript{36} Kellogg’s,\textsuperscript{37} Kraft Foods,\textsuperscript{38} Mars,\textsuperscript{39} Nestlé,\textsuperscript{40} and PepsiCo,\textsuperscript{41} and


Unilever—are engaged in voluntary sodium reduction across their full lines of consumer products, which should aid school sodium reduction efforts. This also complements state and local efforts such as New York City’s National Salt Reduction Initiative. A variety of methods and technologies are available to help reduce levels of sodium in many food categories.

While we are not aware of USDA collecting data on implementation beyond Target 1, we know that many schools have been working hard and are at or very close to meeting Target 2 levels. For example, the school meals program in Elbert County Schools, Georgia has done tremendous work to get their menus down to safe levels of sodium. They have employed tactics such as training staff to analyze sodium content in their menus; educating students on nutrition and menu changes; working with local and regional companies to find alternative products that met their sodium needs; and re-working their recipes to keep their foods with less sodium appealing to students. Other schools have also lowered sodium by using spice bars and salad bars that gives students more options to provide flavor with less salt. Schools all around the country—from Virginia to California, Indiana to Kansas, Oklahoma to New York, and Georgia to North Dakota—have successfully used these best practices to meet the Target 1 and Target 2 sodium levels. USDA should put greater effort into elevating and sharing these methods and encouraging their adoption by other schools around the country.

USDA programs like “Team Up for School Nutrition Success” and the “What’s Shaking?” initiative have been beneficial, and we are pleased to read that USDA will continue these important initiatives. However, USDA needs to focus on targeted technical assistance that delivers more intensive and personalized training for those programs that may still have difficulties lowering sodium. In addition, while the USDA Foods (commodities) program has set a good example for schools by providing more moderate-sodium options, that work should continue.

While we agree that USDA should re-evaluate the sodium reduction targets with the release of the 2020 DGA, that should not stand in the way of implementing the Target 2 sodium standards now. The DGAs have recommended sodium reduction since their inception in 1980, and the evidence for the health benefits of moderate sodium intake have only grown stronger over time. USDA should continue to support schools’ efforts to work toward meeting existing DGA recommendations. If the original timeline for sodium reduction is kept, schools would meet current DGA recommendations by School Year 2022-2023 (the third and final target) which would be close to the release of the 2020 DGA.

In summary, we oppose the proposed three-year delay (from School Year 2017-2018 to School Year 2021-2022) of the second sodium reduction targets (Target 2) and oppose any delay of the

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third and final phase of sodium reduction for school meals (Target 3, which is supposed to go into effect School Year 2022-2023).

**Continuing the whole-grains waiver is unnecessary**

The 2015 DGA recommends making at least half of grains whole grain. Children aged 4 to 18 do not meet the recommended intake for whole grains and exceed the recommended limit for refined grains. Eating more whole grains is associated with reduced risk of heart disease, stroke, and diabetes, provides more nutrients, and are a healthful source of fiber.

Whole grain-rich products are widely prevalent in the marketplace. As of December 2017, the Alliance for a Healthier Generation’s Smart Food Planner, an online database that features food and beverage products that align with the school nutrition standards, shows that approximately 874 whole grain-rich products are currently available for purchase by schools. Further, USDA Foods provides more whole-grain products and has developed a number of resources that list whole grain-rich options.

Many schools across the U.S. are offering whole grain-rich products on their menus that students enjoy. Successful strategies for encouraging students to eat more whole grains include student surveys, samples and taste tests, experimenting with new products and recipes, and peer-to-peer sharing of food preparation techniques. These techniques have also been successful in sodium reduction efforts.

USDA concedes in the IFR that 85 percent of schools have not requested waivers and are providing children with appealing whole-grain options. Some states do not have any schools requesting waivers such as Alabama, Idaho, and Montana, and others do not allow waivers such as Arkansas, Maryland, and Rhode Island. Some states have multiple waivers for only one type of product (e.g., pasta) like South Dakota, while North Dakota does not. If the vast majority of schools can provide whole-grain options, the rest should be able to as well. We encourage USDA to instead provide additional training and technical assistance to the minority of school districts that currently are asking for waivers and are having difficulty meeting the whole grain-rich requirements.

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47 *Males (grains in ounce-equivalents):* aged 4 to 8: average whole grains 0.7, average refined grains 5.4, recommended range for whole or total grains 2.0–3.0; aged 9 to 13: average whole grains 0.7, average refined grains 6.6, recommended range for whole grains 2.5–4.5; aged 14 to 18: average whole grains 0.8, average refined grains 7.5, recommended range for whole grains 3.0–5.0. *Females (grains in ounce-equivalents):* aged 4 to 8: average whole grains 0.5, average refined grains 5.0, recommended range for whole grains 2.0–3.0; aged 9 to 13: average whole grains 0.6, average refined grains 6.0, recommended range for whole grains 2.5–3.5; aged 14 to 18: average whole grains 0.5, average refined grains 5.5, recommended range for whole grains 3.0–4.0. Data source: U.S. Department of Agriculture and U.S. Department of Health and Human Services. *What We Eat in America, NHANES 2007-2010.* Beltsville, MD: USDA, 2010.


Allowing flavored low-fat milk is inconsistent with expert dietary advice and school needs

Allowing schools to serve flavored low-fat milk would be inconsistent with expert nutrition recommendations based on the National Academy of Medicine’s 2009 report\textsuperscript{52} and the 2015 DGA.\textsuperscript{53} Similarly, the Robert Wood Johnson Foundation’s Healthier Beverage Guidelines recommend only plain fat-free and low-fat milk for children and adolescents.\textsuperscript{54}

USDA claims that the IFR is consistent with congressional intent. However, Congress required a waiver (Section 747 of the Consolidated Appropriations Act, 2017) that SFAs must demonstrate an increase in milk waste, a decline in milk sales, or significant negative feedback from students and parents on the lack of availability of flavored low-fat milk or palatability of flavored fat-free milk. The IFR removes this requirement and allows flavored low-fat milk into schools without demonstrating any hardship. For instance, USDA states that allowing flavored low-fat milk will help schools address the significant challenges they face regarding milk. However, according to USDA’s report Special Nutrition Program Operations Study School Year 2013-2014, only 13 percent of school food authorities (SFAs) found the milk standards challenging overall—this rate was the second lowest reported for any food category.\textsuperscript{55} For breakfast, the rate was even lower, at 6 percent—the lowest reported among all challenges.\textsuperscript{56} USDA also suggests that allowing flavored low-fat milk could reduce milk waste, but cites an unpublished study. That study suggests that the updated milk requirements would not change overall milk consumption.\textsuperscript{57} When the new milk requirements went into effect, 75 percent of SFAs stated that they did not observe any change in the amount of milk wasted, suggesting that student acceptance was not a problem.\textsuperscript{58} Further, roughly one in five SFAs reported choosing milk as the item to offer students who requested more food on the lunch line, showing that it remains an appealing beverage option for students.\textsuperscript{59} Finally, virtually all SFAs (over 90 percent) have employed strategies to encourage milk consumption, such as displaying plain milk in all-milk coolers, having plain milk account for at least one-third of the drinks displayed in each cooler, and placing plain milk in front of or before flavored milk or other sugary beverages.\textsuperscript{60} USDA should encourage these strategies and address any remaining challenges for the few SFAs through training and technical assistance.

If USDA allows flavored low-fat milk, the Department should, at minimum, include a calorie cap of no more than 130 calories per 8 ounces consistent with the Robert Wood Johnson Foundation’s Healthier Beverage Guidelines.

USDA underestimates the reduced health benefits to children

USDA states in the IFR that, “…we expect the health benefits in this rule to be similar to the overall benefits of improving the diets of children cited in the RIA [regulatory impact analysis] for the final meal standard rule.” However, the proposed three-year delay of the second sodium reduction targets keeps school meals at high and unsafe levels of sodium, reducing the health

\textsuperscript{52} Id., Institute of Medicine. School Meals: Building Blocks for Healthy Children.
\textsuperscript{54} Id., Healthy Eating Research. Recommendations for Healthier Beverages.
\textsuperscript{56} Id., Murdoch J.
\textsuperscript{58} Id., Murdoch J.
\textsuperscript{59} Id., Murdoch J.
\textsuperscript{60} Id., Murdoch J.
benefit children would have had under the original timeline established by the 2012 final rule. Continuing to allow a whole-grains waiver and allowing flavored low-fat milk could also lower the estimated health benefits over time—by decreasing whole grain consumption and increasing calories and added sugar intake. USDA goes on to state that, “Further, we do not anticipate this interim final rule will deter the significant progress made to date by State and local operators, USDA, and industry manufacturers to achieve healthy palatable meals for students.” We are concerned that delaying sodium reduction levels could lead to industry halting efforts to innovate and reformulate, and halting school efforts that would otherwise have met the targets. The RIA does not provide a sufficiently thorough assessment of lost benefits. USDA cites the RIA for the 2012 final rule which indicated that, “…the likelihood is reasonable that the benefits of the rule exceed the costs, and that the final rule thus represents a cost-effective means of conforming NSLP [National School Lunch Program] and SBP [School Breakfast Program] regulations to the statutory requirements for school meals.” In the final rule, USDA must calculate the reduced benefit to children for any changes it makes to the school nutrition standards related to sodium, whole grains, or flavored milk.

**Background on the progress on healthier school foods**

Schools have made extraordinary progress toward serving healthier meals with less sodium; more whole grains, fruits, and vegetables; and no trans-fat, and removing soda, other sugary drinks, and unhealthy snack foods.61

**Participation is increasing**

Contrary to claims in the IFR, changes in participation are not the result of changes to the nutrition standards. In fact, participation is increasing. USDA correctly states that the decline in participation is among students purchasing full-priced meals and this decline began in 2008 (five years before the updated school nutrition standards went into effect in September 2012). However, USDA did not state that participation among students receiving free meals has dramatically increased (from 15.4 million children in 2008 to 20 million children in 2017) and remains the largest category (about two-thirds of participating students in 2017).62 Overall participation remains high with more than 30 million students participating in 2017. Many other factors impact participation, such as sales of competitive foods, increased charges for paid meals, time to eat, long lunch lines, and school closures and consolidations.

**Healthy school foods can reduce health disparities**

Improvements in school foods have been critical to reducing health disparities and stigma for low-income children. According to research by Bridging the Gap, prior to the updated school nutrition standards, students in more affluent and larger schools were more likely to have access to healthier foods than those in lower-income and smaller schools.63 Another study found that improved school nutrition standards are associated with a decrease in obesity among low-income students.64 While USDA claims that the IFR provides flexibility and that it is up to schools whether to use them—such as not meeting the second phase of sodium reduction until SY 2021-2022—in reality this could negatively impact the progress to close health disparities.

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61 Id., U.S. Department of Agriculture. *School Meal Certification Data* (as of September 2016).
For instance, the IFR may result in low-income students in poorer schools having decreased access to healthier school meals with less sodium—which may be the only meals they consume that day—than students in more affluent schools that are already meeting or working toward the second phase of sodium reduction.

**Consumption of healthy school foods has increased; plate waste has remained the same or decreased**

Students are eating more healthy food and studies show that plate waste has either remained the same or decreased since the updated school nutrition standards. A May 2014 Harvard School of Public Health study shows that children are now eating 16 percent more vegetables and 23 percent more fruit at lunch. A study released in March 2015 by the University of Connecticut's Rudd Center for Food Policy & Obesity found that students are eating more nutritious foods and discarding less of their lunches under the healthier standards. Children ate 13 percent more of their entrees, nearly 20 percent more vegetables, and chose 12 percent more fruit in 2014 compared to 2012, which means that students threw away less food than in the past.

**Overwhelming bipartisan support for healthy school meals**

The public overwhelmingly supports healthier school meals. Nine out of ten Americans support the school nutrition standards. Nearly 70 percent believe school meals are excellent or good, compared to just 26 percent in 2010, before schools implemented the updated school nutrition standards. Students also like the taste of the healthier school meals. A September 2014 poll released by The Pew Charitable Trusts, the Robert Wood Johnson Foundation, and the American Heart Association shows that 72 percent of parents favor strong nutrition standards for school meals and 91 percent support serving fruits or vegetables with every meal. According to an August 2014 survey by the Robert Wood Johnson Foundation, the majority of school leaders nationwide reported that students liked the new lunches. Many statewide polls have demonstrated overwhelming support for the updated school nutrition standards. For instance, in Alabama, Kentucky, Louisiana, and North Carolina, more

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than 70 percent of parents support the standards. In addition, support for healthier school meals is bipartisan: the majority of registered voters with children in public schools are supportive of healthier school meals.\textsuperscript{74}

\textbf{School lunch revenue can increase}

School lunch revenue can also increase with healthier school food. A study by the Robert Wood Johnson Foundation found that schools that implemented healthier nutrition standards for meals and snacks reported revenues rebounding to original profits two years after the updated standards went into effect (in 2014) and participation in the school meals program rose significantly among students from low-income families during the same period.\textsuperscript{75}

\textbf{Conclusion}

We oppose further delay of the sodium reduction targets (both Target 2 and Target 3), the continuation of the whole-grains waiver, and allowing flavored low-fat milk. Rather than weakening school nutrition standards, we urge the administration to support efforts to continue the progress to improve school food.

Sincerely,

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Nora Connors \\
Deputy Director, Public Policy & Partnerships
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\textsuperscript{74} Id., Kids’ Safe and Healthful Foods Project. Parents Support Healthier School Food Standards.