November 25, 2014

## Dear Sir or Madam:

The American Academy of Pediatrics and the Academy of Nutrition and Dietetics would like to share a recent article from the *New England Journal of Medicine*. The authors, Dr. Jennifer Woo Baidal and Dr. Elsie Taveras, provide an overview of the development and implementation of the updated school meal nutrition standards and the need for Congress to invest in a healthy future for our children by protecting these standards.

Our two organizations believe that ensuring access to nutritious meals in schools protects the health of the more than 30 million American children who eat in school cafeterias daily. The school lunch standards established in the *Healthy, Hunger-Free Kids Act* offer the quantities of fruits, vegetables, and whole grains that developing children need. This science-based program is critically important to the health of children as it protects against childhood obesity and may reduce other chronic diseases like cancer and heart disease that can originate early in life.

The American Academy of Pediatrics and the Academy of Nutrition and Dietetics support the ability of children to receive healthy, nutritious foods in school, a primary goal of the *Healthy, Hunger-Free Kids Act*. Our children's health cannot wait. We urge you to put the interests of children first and maintain the updated school meal standards that are working in over ninety percent of schools today.

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waived in these circumstances to further increase incentives for potential competitors. Entry into the market of more generics manufacturers should increase competition and reduce prices. Of course, other players along the drug-distribution chain, such as wholesalers or pharmacies, may also contribute to price markups, and further investigation is needed into the relative contribution of these different actors to the high prices of drugs such as albendazole.

Meanwhile, there is little that individual consumers can do. Some drug companies, such as Amedra, offer assistance programs for indigent patients, but these programs often have complicated enrollment processes, and they do not offer an effective general safety net.<sup>5</sup> Some patients instead seek to acquire these drugs in other countries, since many of them are widely and inexpensively available outside the United States, but such foreign sources may be of variable quality. Until regulatory and market solutions are implemented to reduce prices for these older drugs, patients requiring such drugs and the physicians treating them will continue to be faced with difficult choices.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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2. Colliver V. Prices soar for some generic drugs. SFGate. January 1, 2014 (http://www.sfgate.com/health/article/Prices-soar-for -some-generic-drugs-5105538.php).

**3.** Government Accountability Office. Brandname prescription drug pricing: lack of therapeutically equivalent drugs and limited competition may contribute to extraordinary price increases. December 2009 (http:// www.gao.gov/new.items/d10201.pdf).

4. CorePharma and GlaxoSmithKline conclude agreement on US rights for Dexedrine, Albenza and Daraprim. Press release of GlaxoSmithKline, October 22, 2010 (http:// us.gsk.com/en-us/media/press-releases/ 2010/corepharma-and-glaxosmithkline -conclude-agreement-on-us-rights-for -dexedrineandreg-albenzaandreg-and -daraprimandreg).

**5.** Choudhry NK, Lee JL, Agnew-Blais J, Corcoran C, Shrank WH. Drug companysponsored patient assistance programs: a viable safety net? Health Aff (Millwood) 2009;28:827-34.

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# Protecting Progress against Childhood Obesity — The National School Lunch Program

Jennifer A. Woo Baidal, M.D., M.P.H., and Elsie M. Taveras, M.D., M.P.H.

Tutrition science has advanced greatly since the inception of the National School Lunch Program in 1946. Yet when a 2008 Institute of Medicine (IOM) committee comprising 14 child-nutrition experts examined data on the content of school lunches in the United States, its findings were stark. Children ate strikingly few fruits and vegetables, with little variety. Potatoes accounted for one third of vegetable consumption. Intake of refined grains was high. Almost 80% of children consumed more saturated fat than was recommended, and sodium intake was

excessive in all age groups. Children ate more than 500 excess calories from solid fats and added sugars per day.<sup>1</sup>

In response to these findings, Congress enacted the Healthy, Hunger-Free Kids Act of 2010 (HHFKA), which called for a revision of school-nutrition standards. The updated standards aligned school meals with the 2010 Dietary Guidelines for Americans by increasing quantities of fruits, vegetables, and whole grains; establishing calorie ranges; and limiting trans fats and sodium (see diagram). The HHFKA also provided an incentive for schools to adhere to the regulations: a much-needed increase in meal reimbursement. Implementation of the new standards has been proceeding gradually since 2012, and we have an unprecedented opportunity to improve the quality of meals consumed by U.S. children. Children consume almost half of their total calories at school, and the National School Lunch Program provides low-cost or free lunch to more than 31 million students at 92% of U.S. public and private schools.

But now, just 2 years after its implementation began, the HHFKA is at risk of being under-

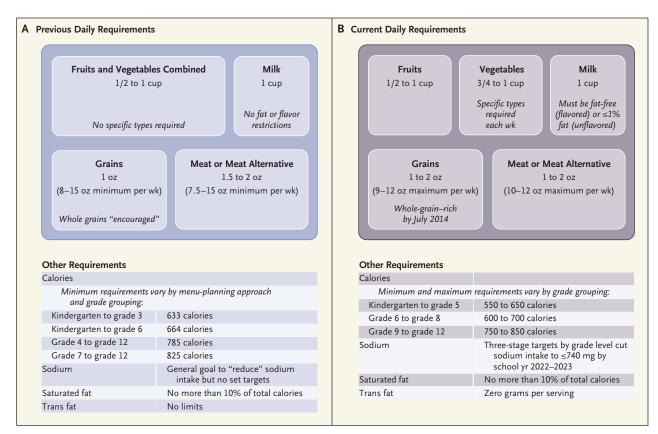
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#### Previous and Current Federal Requirements for Meal Components and Nutrients in School Lunches.

Beginning in the 2012–2013 school year, federal requirements for school lunches mandated the inclusion of both fruit and vegetable choices, and students were required to take at least one half cup of fruits or vegetables. Over the course of the week, schools were required to offer all vegetable subgroups established in the 2010 Dietary Guidelines for Americans: dark green vegetables, red or orange vegetables, beans or peas, starchy vegetables, and "other" vegetables. In school years 2012–2013 and 2013–2014, it was required that half of the grain products offered in school lunches must be rich in whole grains. Adapted from the U.S. Government Accountability Office.

mined in substantial ways. Some school officials, food-industry advocates, and the School Nutrition Association (SNA, a professional organization that represents school-lunch programs and whose members include food manufacturers) have raised concerns about increased food waste, decreased school-lunch participation, difficulties in meeting whole-grain and sodium goals, and potential for increased operating costs. In response, the House of Representatives included waivers for schoollunch nutrition standards in its fiscal-year 2015 Agriculture Appropriations Bill. The provision

would allow schools with a 6-month net loss of revenue to opt out of providing the healthier meals outlined by the HHFKA. A deficit of any amount from any cause could allow schools to return to the same meals that the IOM found in 2008 to be nutritionally lacking. The possibility of such waivers remains real: after elections this November, appropriations bills and reauthorization of child-nutrition standards will be on the congressional agenda, and waivers will probably be back on the table.

Complaints by school officials and the SNA about increased food

waste lie at the heart of the argument for waivers. School officials and school-lunch programs have an interest in providing meals at the lowest possible cost, and discarded meal components are a waste of both food and money. And indeed, fruit and vegetable waste has been a reality of school meals for years. But one study found no increase in food waste in four low-income schools after the new regulations were implemented.<sup>2</sup> Researchers who followed nearly 6000 students, in 2011 and 2012, weighed individual food items after each meal they consumed. They found that

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children who were served meals meeting the new standards ate greater proportions of their entrées and vegetables than they had when they were given meals meeting the old standards, even though the vegetable servings were larger; they also found that more children ate fruit when they were served the new meals. The findings suggest that children consume more fruits and vegetables and do not waste more food under the new mandate.<sup>2</sup>

Proponents of the waivers also argue that many children dropped out of the school-lunch program as a result of 2012 changes to school meals. In fact, the number of students paying full price for school lunch has been decreasing by an average of nearly 5% annually since the 2007–2008 school year, while the number of students qualifying for free meals has been increasing. Several factors may have led to an overall 3.7% decrease in student participation from the 2010-2011 school year through the 2012-2013 school year, including the recession, price increases for full-price participants, students' wariness of new foods, and negative media coverage of school-lunch content. In a January 2014 report, the Government Accountability Office noted

### An audio interview with Dr. Woo Baidal is available at NEJM.org

that it was unclear how much each of these factors con-

tributed to changes in program participation and did not recommend changes to the new nutrition standards.<sup>3</sup> Many school officials expect some of these challenges to diminish over time, as schools and students become accustomed to the new program — and indeed, reports of improved acceptance among students are emerging. In a nationwide survey conducted in the spring of 2013, 70% of school officials said they believed that elementary-school students liked the new meals.<sup>4</sup>

Finally, students' taste preferences are cited as a barrier to consumption of school meals that adhere to the new guidelines. But research demonstrates that children — even infants as young as 4 months old — who are repeatedly exposed to new foods are more willing to accept them.<sup>5</sup> Thus, repeated opportunities for children to try healthy foods create a pathway for improving nutrition early in life.

Attempts to roll back the modernization and improvement of school-meal standards threaten future progress in reducing obesity and other chronic diseases that originate in early childhood. After 30 years of escalating prevalence of childhood obesity, recent plateaus suggest that progress has been made on many fronts. Federal improvements to school meals represented a key victory — yet now they are under attack. As pediatricians, we worry that this attack undermines schools' ability to foster health-promoting behaviors and represents a disinvestment in children's health.

This past spring, the American Academy of Pediatrics, the American Heart Association, the Academy of Nutrition and Dietetics, and more than 200 other organizations joined First Lady Michelle Obama and Secretary of Agriculture Tom Vilsack in opposing the challenges to the new schoolnutrition standards. Although current leaders of the SNA are vocal advocates for rollbacks and waivers, a group of 19 past SNA presidents opposes the waivers.

We can help ensure that U.S.

children have access to healthy foods and reduce their risk of obesity. Waivers of new schoollunch standards would represent a large step backward. Instead, we believe that the scientific integrity of school-meal standards should be maintained and that the U.S. Department of Agriculture should work with stakeholders to evaluate progress in implementing the new regulations.

The Robert Wood Johnson Commission to Build a Healthier America recommends that we create a "culture of health" for U.S. children. Doing so requires investing in physical and mental wellness beginning in early childhood and creating communities that foster health-promoting behaviors. Pediatricians can talk with children and their families about the importance of eating whole grains, fruits, and vegetables. Parents can tell school officials and lawmakers that they want healthy school meals. Schools can work with local chefs, dietitians, parents, and students to make school meals more appealing and to incorporate culturally appropriate foods.

The prevalence of childhood obesity has increased sharply over the past 30 years. It will take time to reverse this trend, but recent plateaus in obesity rates suggest that multipronged initiatives spanning health care, public health, and education settings are well worth the effort. School nutrition is a matter of children's health; it should not be driven by politics.

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1. Committee on Nutrition Standards for National School Lunch and Breakfast Programs. School meals: building blocks for healthy children. Washington, DC: National Academies Press, 2010 (http://www.nap.edu/ openbook.php?record\_id=12751). 2. Cohen JF, Richardson S, Parker E, Catalano PJ, Rimm EB. Impact of the new U.S. Department of Agriculture school meal standards on food selection, consumption, and waste. Am J Prev Med 2014;46:388-94.

 Government Accountability Office. School lunch: implementing nutrition changes was challenging and clarification of oversight requirements is needed. February 27, 2014 (http://www.gao.gov/products/GAO-14-104).
Turner L, Chaloupka FJ. Perceived reactions of elementary school students to changes in school lunches after implementation of the United States Department of Agriculture's new meals standards: minimal backlash, but rural and socioeconomic disparities exist. Child Obes 2014;10:349-56.

**5.** Forestell CA, Mennella JA. Early determinants of fruit and vegetable acceptance. Pediatrics 2007;120:1247-54.

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