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# FACTS Stepping Up to the Plate: Nutrition Standards and School Meals

# **OVERVIEW**

Nutrition standards have a part of school lunch since they were first implemented under the Truman administration out of national security concerns. The process for updating national nutrition standards began in 2004, when the U.S. Department of Agriculture (USDA) - based on requirements in the Child Nutrition and WIC Reauthorization Act of 2004 - commissioned the Institute of Medicine (IOM) to provide recommendations on what constitutes a healthy school meal.<sup>1,2</sup> In December 2010, the bipartisan Healthy, Hunger-Free Kids Act was signed into law, further empowering the USDA to update the national nutrition standards based on the IOM report for school meals and establish nutrition standards for other foods sold in schools throughout the school day.<sup>3</sup> Today, more than 99% of schools that participate in the National School Lunch Program (NSLP) are meeting these nutrition standards, up from 14% in 2009-2010.<sup>4,5</sup> This means that an overwhelming majority of children are now receiving heart-healthy lunches at school.



# A PUBLIC HEALTH VICTORY FOR KIDS

School meal standards help schools promote a healthy food environment and establish a foundation for a lifetime of healthy behaviors. Studies have suggested that a healthy school environment can help improve children's physical well-being, enhance learning, and increase attendance.<sup>6,7</sup> Additionally, updated nutrition standards have had several positive effects on school nutrition and health.

- Kids are now choosing healthier foods and are eating 16% more vegetables and 23% more fruit.<sup>8,9</sup>
- School meals are now lower in sodium and sugar.<sup>10,11</sup>
- Children who participate in the NSLP eat greater amounts of healthy foods, and have an overall better-quality diet.<sup>12</sup>
- The number of elementary schools offering fresh fruit and whole grains has increased by nearly 20% since 2006.<sup>13</sup>
- By 2025, it is estimated that healthy nutritional standards for all foods sold in schools will decrease the number of childhood obesity cases by more than two million.<sup>14</sup>
- In particular, applying standards to foods sold outside of meal programs (Smart Snacks) can lead to costs savings of nearly \$800 million.<sup>14</sup>

In addition to positive health benefits, the public, children, and parents like them too.

- Polls show that the updated nutrition standards are supported by 89% of the public.<sup>15</sup>
- 70% of elementary school administrators and food service staff report positive feedback from their students on the new lunch standards.<sup>16</sup>



# A WAY TO A HEALTHIER GENERATION

The progress brought about by this program is much needed. Currently, nearly one-third of children are overweight or obese<sup>17</sup>,<sup>18</sup> and an overwhelming majority of children aged 5-19 meet none or only one of the five components the American Heart Association uses to define a healthy diet.<sup>19</sup> Recent research found that 20% of children ages 8-17 had adverse cholesterol levels and 11% suffer from hypertension.<sup>23</sup>

Additionally, researchers have concluded that the arteries of an obese child with atherosclerosispromoting risk factors (e.g., hypertension, tobacco smoke exposure) can resemble those of a middle-aged adult and children who are obese throughout childhood have a greater risk of becoming obese adults.<sup>24,25,26</sup>

#### **LESSONS LEARNED**

There are critics of the updated school meals nutrition standards. They contend that the program is too expensive, too difficult to implement, or wastes foods. However, recent studies have concluded that while there have been some challenges in implementing the updates, school meals are now healthier than ever and challenges are expected to resolve over time as school food service and students adjust to the changes.<sup>27</sup> In fact, targeted support and technical assistance appear to have mitigated initial troubles.



- While only 37% of school food authorities report having the necessary budget to train food service personnel in implementing the updated nutrition requirements,<sup>28</sup> programs like Team Up for School Nutrition Success have connected hundreds of school food services directors to technical assistance and peer mentoring.
- Although recent media reports have warned about the NSLP's increasing fiscal burden on school districts,<sup>29</sup> a recent USDA analysis found that \$200 million in revenue has been gained since the implementation of the new standards.30
- Some reports indicate that kids are throwing away less of their entrees and vegetables.9
- Plate waste can be reduced by the manner in which fruits and vegetables are prepared and presented, and by farmto-school programs.<sup>31,32</sup>
- Incorporating technical assistance and using creative and fun games can counter plate waste and increase fruit and vegetable consumption.33,34,35
- Much plate waste can be reduced by simple changes in how the lunch day is structured, such as time of day lunch is served, length of lunch, having lunch after recess, and an inviting atmosphere.36

http://ww2.wkkf.org/2015schoolfoodpoll/share/WKKF-Food and Community-Topline.pdf. Accessed on January 2, 2018.



#### ASSOCIATION ADVOCATES

Despite some growing pains and challenges, schools have stepped up to the plate and are serving more healthy meals than ever. The association will continue to support keeping robust school nutrition standards in place to ensure the health and wellbeing for all children and the success of the programs.

To find out more, visit www.heart.org/schoolmeals.

<sup>19</sup> Lloyd-Jones, DM., et al.(2010), Defining and setting national goals for cardiovascular health promotion and disease reduction the American Heart Association's Strategic Impact Goal through 2020 and beyond. Circulation 121.4: 586-613.

Challenges Implementing Changes in Nutrition Standards." Available at: http://www.gao.gov/assets/680/672477.pdf Accessed on January 2, 2018. <sup>28</sup> Kids Safe and Healthful Foods Project. Pew Charitable Trusts and RWJF. (2015).Serving Healthy

School Meals: Staff Development and Training Needs. Available at: http://www.pewtrusts.org media/assets/2015/08/serving\_healthy\_school\_meals\_report.pdf.

Accessed on January 2, 2018. <sup>29</sup> School Nutrition Association. State of School Nutrition: 2014. Summary available at https://schoolnutrition.org/5--News-and-Publications/2--Press-Releases/Press-Releases/School-Nutrition-Association-Releases-%E2%80%9CState-of-School-Nutrition-2014%E2%80%9D / Accessed on January 2, 2018.

<sup>30</sup> USDA. Fact Sheet: Healthy, Hunger-Free Kids Act School Meals Implementation. 2014. Available http://www.fns.usda.gov/pressrelease/2014/009814. Accessed on January 2, 2018.

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<sup>&</sup>lt;sup>1</sup> Child Nutrition and WIC Reauthorization Act of 2004, Pub. L. No. 108-265, 118 Stat. \$103 <sup>2</sup> Institute of Medicine. (2009). School Meals: Healthy Building Blocks for Healthy Children. Available at http://www Available at http://www.nap.edu/read/12751/chapter/1. Accessed on January 13, 2016. Healthy Hunger-Free Kids Act of 2010, Pub. L. No. 111-296, 124 Stat. 3183, §§ 101-105,201-210.

<sup>4</sup> US Department of Agriculture. Percent of School Food Authorities (SFA) certified for the performance based reimbursement as of June. 2015. Available at: http://www.fns.usda.gov/school-meals/school-meal-certification-data. Accessed on January 12, 2016.

<sup>&</sup>lt;sup>5</sup> US Department of Agriculture. School Nutrition Dietary Assessment Study IV. 2012. Available at http://www.fns.usda.gov/school-nutrition-dietary-assessment-study-iv. Accessed on January 12, 2016

<sup>&</sup>lt;sup>6</sup> Edwards JU, et al. Relationship of nutrition and physical activity behaviors and fitness measures to academic performance for sixth graders in a midwest city school district. Journal of School Health: 2011; 81.2: 65-73.

<sup>&</sup>lt;sup>2011</sup>, 31.2. (3)-7.3. <sup>7</sup> Anzman-Frasca, S, et al. (2015). Estimating Impacts of a Breakfast in the Classroom Program on School Outcomes. JAMA pediatrics. 169.1: 71-77. <sup>8</sup> Johnson, DB., et al. (2016). Effect of the Healthy Hunger-Free Kids Act on the Nutritional Quality of Meals Selected by Students and School Lunch Participation Rates. JAMA Pediatr 170(1):

<sup>9</sup> Cohen, JF., et al. (2014). Impact of the new U.S. Department of Agriculture school meal standards on food selection, consumption, and waste. Am J Prev Med **46**(4): 388-394.

<sup>&</sup>lt;sup>10</sup> Cummings, PL, et al. (2014).Nutrient content of school meals before and after implementation of nutrition recommendations in five school districts across two US counties, Preventive medicine, 67,

S21-S27.
<sup>11</sup> Cummings, P L., et al. (2014).Evaluating changes to sodium content in school meals at a large, urban school district in Los Angeles County, California. Journal of Public Health Management and Practice, 20: S43-S49.

<sup>&</sup>lt;sup>12</sup> Farris, AR et al. (2014) Nutritional comparisons of Packed and School Lunches in Pre-Kindergarten and Kindergarten Children Following Implementation of 2012-2013 National School Lunch Program. Journal of Nutrition Education and Behavior. 46(6): 621-626. <sup>13</sup> Turner L, et al. (2015). Improvements in School Lunches Result in Healthier Options for Millions

of U.S. Children: Results from Public Elementary Schools between 2006-07 and 2013-14. A BTG Research Brief. Available at:

http://www.bridgingthegapresearch.org/ asset/kvqrxl/BTG School Lunch Improvements brief Apr <u>12015.pdf</u>. Accessed on January 12, 2016.
 <sup>14</sup> Gortmaker, S. L., et al. (2015). Three Interventions that Reduce Childhood Obesity Are Projected

To Save More Than They Cost To Implement. Health Aff (Millwood) 34(11): 1932:1939. <sup>15</sup> WK Kellogg Foundation. (2015). Food for Thought. Available at

Turner, L, et al. (2014). 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, Childhood Obesity 10.4.349-356.

<sup>&</sup>lt;sup>17</sup>Ogden, L., et al (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. JAMA, 311.8; 806-814.

<sup>&</sup>lt;sup>18</sup>Mozaffarian, D., et al. (2016). Heart Disease and Stroke Statistics-2016 Update: A Report From the American Heart Association. Circulation.

<sup>23</sup> Kit, BK., et al. (2015). Prevalence of and Trends in Dyslipidemia and Blood Pressure Among US Children and Adolescents, 1999-2012. JAMA pediatrics.

<sup>&</sup>lt;sup>24</sup> Le, Joseph, et al. (2010). "Vascular age" is advanced in children with atherosclerosis-promoting risk factors, Circulation: Cardiovascular Imaging 3.1: 8-14.

<sup>&</sup>lt;sup>25</sup> Cote, AT, et al. (2015).Obesity and Arterial Stiffness in Children Systematic Review and Meta-Analysis. Arteriosclerosis, Thrombosis, and Vascular Biology. 2015 Apr;35(4):1038-44.
<sup>26</sup> Goldhaber-Fiebert, JD, et al (2013). The utility of childhood and adolescent obesity assessment in

relation to adult health. Medical Decision Making, 33(2): 163-175. <sup>27</sup> Government Accountability Office. "USDA Has Efforts Underway to Help Address Ongoing

at: <u>http://www.fns.usda.gov/pressrelease/2014/00701+</u>, Accesse on annual 31 US Department of Agriculture, Farm to School Census, 2013-2014, Available at https://farmtoschoolcensus.fns.usda.gov/news/new-usda-data-show-growing-farm-school-efforts-

help-reduce-plate-waste-increase-student. Accessed on January 2, 2018. <sup>32</sup> Bontrager Yoder, AB., et al. (2015). Factors affecting fruit and vegetable school lunch waste in Wisconsin elementary schools participating in Farm to School programmes. Public Health Nut 18(15): 2855-2863

<sup>&</sup>lt;sup>33</sup> Just, D, et al. (2013). Default options, incentives and food choices: evidence from elementaryschool children. Public health nutrition. 16.12: 2281-2288.

<sup>&</sup>lt;sup>4</sup> Jones, BA, et al. (2014). The FIT Game: preliminary evaluation of a gamification approach to <sup>35</sup> Just, DR, et al. (2014). Chefs move to schools. A pilot examination of how chef-created dishes can increase school lunch participation and fruit and vegetable intake. Appetite. 83: 242-247.

<sup>&</sup>lt;sup>36</sup> United States Department of Agriculture. Reducing Food Waste, What Schools Can Do Today. Accessed October 18, 2017 at: https://fns-prod.azureedge.net/sites/default/files/cnd/Infographic-foodwaste.pdf