

# FACTS

## Healthy Lessons for Life:

### Creating a Strong Nutrition Environment in Schools

#### OVERVIEW

The U.S. is in the midst of a full-blown obesity epidemic and, this public health crisis includes children. Currently, one third of children are overweight or obese.<sup>1</sup> The health consequences of obesity in children are staggering. Recent research shows that an obese child's arteries resemble those of a middle-aged adult<sup>2</sup> and overweight adolescents have an overwhelming chance of becoming obese adults.<sup>3</sup> These children are being sentenced to an early future of cardiovascular disease, disability, and possible death.

Schools need to be part of the solution by establishing a foundation for a lifetime of healthy behaviors in the next generation of children. One way schools can do this is by providing nutrition education and ensuring that the school environment promotes healthy eating habits and physical activity. In December 2010, the Healthy, Hunger-Free Kids Act became law, giving the U.S. Department of Agriculture (USDA) the authority to update national nutrition standards for school meals and establish nutrition standards for other foods, called competitive foods, sold on school campuses throughout the school day. The law strengthens local wellness policies by creating more accountability and better implementation; includes funding to help schools establish school gardens; and source local foods into their cafeterias. These provisions will help schools give children the jump start they need for long, healthy lives. There is still room for state and local advocacy to bolster the law and help schools implement the provisions well across the entire country.

#### THE CURRENT STATE OF CHILDREN'S HEALTH

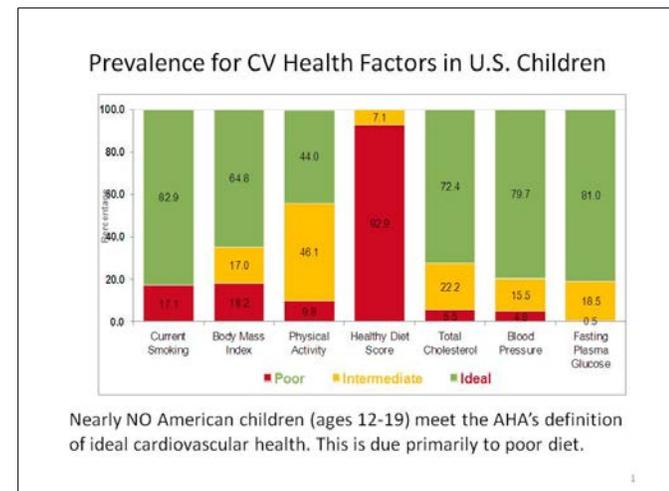
There has never been a more important time to address the environment where children spend a majority of their time:

- Hypertension in kids is at unprecedented levels; 3.6% of children ages three to 18 years in a recent study had hypertension.<sup>4</sup>
- The presence of abnormal cholesterol levels in young people age 12-19 years is 20.3%.<sup>1</sup>
- Healthcare providers are finding more and more children with type 2 diabetes, a disease that used to be seen only in older adults.<sup>1</sup>

- The rate of prescription drug use by children for diabetes, high blood pressure, and high cholesterol is increasing.<sup>5</sup>

One reason for these alarming trends is that too many kids do not eat a healthy diet:

- More than 90% of U.S. children meet none or only one of the five components that AHA uses to define a healthy diet.<sup>1</sup>
- Unfortunately, many schools are still offering junk foods and sugary sodas.<sup>6,7</sup>



Source: American Heart Association Statistical Update 2012.

#### MAKING CHILDREN HEALTHY, ACTIVE LEARNERS

A healthy school environment helps improve children's physical well-being, enhances learning, minimizes behavior problems, and increases attendance:

- Comprehensive nutrition education and promotion in schools have proven successful in preventing and reducing obesity, especially in low-income students who are disproportionately affected by the childhood obesity epidemic.<sup>8,9</sup>
- Children who participate in the National School Lunch Program eat greater amounts of healthy foods, get more essential vitamins and minerals, drink fewer sugar-sweetened beverages, and have an overall better quality diet.<sup>10</sup>

**Prevalence of Obesity\* Among U.S. Children and Adolescents (Aged 2–19 Years)**

**Survey Periods**

	NHANES III 1988–1994	NHANES 1999–2002	NHANES 2003– 2006	NHANES 2007– 2008	NHANES 2009-2010
<b>Ages 2-5</b>	7.2%	10.3%	12.4%	10.4%	12.1%
<b>Ages 6-11</b>	11.3%	15.8%	17.0%	19.6%	18.0%
<b>Ages 12-19</b>	10.5%	16.1%	17.6%	18.1%	18.4%

\*Sex- and age-specific BMI ≥ 95th %ile based on the CDC growth charts

**Sources:**

Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among U.S. children and adolescents, 1999–2000. *JAMA* 2002;288:1728–1732.

Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. *JAMA*. 2012 Feb 1;307(5):483-90. Epub 2012 Jan 17.

**THE AHA ADVOCATES**

The American Heart Association (AHA) will advocate for:

- Robust state and federal nutrition standards for competitive foods, which are sold from vending machines, à la carte, school stores, and other foods sold outside of the federal meal programs, and to apply these standards to the whole campus for the entire day. These standards will include reducing sodium; eliminating *trans* fat; decreasing saturated fat; minimizing fried foods; offering healthy beverages; and increasing the offering of fruits and vegetables, whole grains, seafood, and low fat dairy.
- State laws that hold schools accountable for implementation of robust local wellness policies that are transparent, shared with parents and the community, evaluated regularly, written into school improvement plans, and potentially expand into areas not covered by the federal law including food marketing and advertising to children in the school environment, physical education, and staff promotion and wellness.
- State laws and local policy to require schools to establish standing local wellness committees that meet regularly and have representation from school food service, physical education and health education, school administration, parents, students, social services, counseling, school nurses, and others connected to the health of the student and school environment

- Robust technical assistance to support schools in implementing nutrition standards, effective nutrition education, and nutrition promotion and model local wellness policies with effective implementation and evaluation.
- Effective and timely implementation of the recently released USDA regulations around nutrition standards for school meals.<sup>11</sup>
- Regional or local cooperative agreements between school districts to increase purchasing power for healthy foods.
- Cooperative agreements with local farmers and markets, as well as implementation of school gardens to increase the use of fresh fruits and vegetables in the school meal program and foster nutrition education that increases learning opportunities.

References:

<sup>1</sup> Roger V, et al. Heart Disease and Stroke Statistics -- 2012 Update: A Report From the American Heart Association. *Circulation*. December 16, 2011.

<sup>2</sup> Raghuvver G. Lifetime cardiovascular risk of childhood obesity. *Am J Clin Nutr*. 2010 May;91(5):1514S-1519S

<sup>3</sup> Baker JL, Olsen LW, Sorensen T. Childhood bmi and the risk of coronary heart disease in adulthood. *New Engl J Med*. 2007;357(23):2329-2337.

<sup>4</sup> Hansen ML, Gunn PW, Kaelber DC. Underdiagnosis of hypertension in children and adolescents. *JAMA*. 2007;298:874–879.

<sup>5</sup> Cox ER, Halloran DR, Homan SM, et. al. Trends in the prevalence of chronic medication use in children: 2002-2005. *Pediatrics* 2008;122:e1053-e1061.

<sup>6</sup> Turner L, Chaloupka FJ, Chriqui JF and Sandoval A. School Policies and Practices to Improve Health and Prevent Obesity: National Elementary School Survey Results .2010. <http://www.rwjf.org/files/research/bridgingthegap20101123mongraphrevised.pdf>.

<sup>7</sup> Chaloupka FJ, Turner L and Sandoval A. School policies and practices to improve health and prevent obesity. *Bridging the Gap*. January 2012.

<sup>8</sup> Madsen KA, et al., Physical activity opportunities associated with fitness and weight status among adolescents in low-income communities. *Arch Pediatr Adolesc Med*. 2009; 163(11):1014-1021.

<sup>9</sup> Foster GD, Sherman S, Borradaile KE, Grundy KM, Vander Veur SS, Nachmani J, Karpyn A, Kumanyika S, Shults J, A policy-based school intervention to prevent overweight and obesity. *Pediatrics* 121:4(e794-802)2008 Apr

<sup>10</sup> *School Nutrition Dietary Assessment Study-II: Summary of Findings*. USDA, 2001.

<sup>11</sup> Institute of Medicine. School meals: building blocks for healthy children. October 20, 2009. National Academies Press. Washington, DC. Accessed November 20, 2009 at <http://www.iom.edu/Reports/2009/School-Meals-Building-Blocks-for-Healthy-Children.aspx>.