

### Written Testimony of Jeffrey Levi, PhD Executive Director Trust for America's Health

# Before the Subcommittee on Children and Families Senate Health, Education, Labor and Pensions Committee "Childhood Obesity: The Declining Health of America's Next Generation" July 16, 2008

Good afternoon. My name is Jeffrey Levi, and I am the Executive Director of Trust for America's Health (TFAH), a nonpartisan, nonprofit organization dedicated to saving lives by protecting the health of every community and working to make disease prevention a national priority. I would like to thank the Chairman, the Ranking Member and the members of the Subcommittee for the opportunity to testify on a very serious issue – the declining health of America's children, which is closely linked to our nation's obesity epidemic. Today I would like to discuss the scope of childhood obesity in America, the potential factors that may be contributing to it, the health and economic impacts of obesity, and the importance of developing a national strategy to coordinate our response to obesity. By focusing on the impact of obesity on the health of our children, we have a chance to reshape society – and assure that our children live healthier lives than we do. If we do it right, I believe we will also improve the health and well being of lots of adults in the process because the solutions to the obesity epidemic require a societal transformation that will benefit all of us.

### Scope of the Problem

Overall, approximately 23 million children are obese or overweight, and rates of obesity have more than nearly tripled since 1980, from 6.5 percent to 16.3 percent.<sup>1</sup> Eight of the 10 states with the highest rates of obese children are in the South.<sup>2</sup>

According to a recent analysis from the National Health and Nutrition Examination Survey (NHANES), the number of U.S. children who are overweight or obese may have peaked, after years of steady increases. According to researchers from the Centers for Disease Control and Prevention (CDC), there was no statistically significant change in

<sup>&</sup>lt;sup>1</sup> Ogden, C.L., M.D. Carroll, and K.M. Flegal. "High Body Mass Index for Age among U.S. Children and Adolescents, 2003-2006." *Journal of the American Medical Association* 299, no. 20 (2008): 2401-2405.

<sup>&</sup>lt;sup>2</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *National Survey of Children's Health 2003*. Rockville, MD: U.S. Department of Health and Human Services, 2005, <u>http://www.mchb.hrsa.gov/overweight/techapp.htm</u> (accessed April 22, 2008).

the number of children and adolescents (aged 2 to 19) with high BMI for age between 2003-2004 and 2005-2006.<sup>3</sup> This is the first time the rates have not increased in over 25 years. Scientists and public health officials, however, are unsure if the data reflect the effectiveness of recent public health campaigns to raise awareness about obesity and increased physical activity and healthy eating among children and adolescents, or if this is a statistical abnormality. Scientists expect to know more when the 2007-2008 NHANES data are analyzed. The 2005-2006 National Survey on Children's Health, a large national survey with state-specific data, is also due out in late 2008 and may offer another perspective on childhood obesity rates. Even if childhood obesity rates have peaked, the number of children with unhealthy BMIs remains unacceptably high, and the public health toll of childhood obesity will continue to grow as the problems related to overweight and obesity rates return to 6.5 percent, the level prior to the start of this epidemic.<sup>4</sup>

# **Factors Contributing to Obesity Rates**

How did this problem arise? In the simplest of terms, one could argue this is just a matter of physics – children today are eating more and moving less, which inevitably leads to increases in weight. That is true, but is only a part of the story.

- We have also created a physical environment that reinforces a less active lifestyle, and we have not compensated for this in the level of physical activity we promote in the schools.
- We have placed kids in a less nutritious environment it is not just too much food, but too much bad food that kids are eating, and we have not harnessed the opportunities of the school to compensate for this.
- We have placed a particular burden on our poor and minority children, who are disproportionately overweight and obese, primarily because our poverty programs have not kept up with the rising cost of nutritious food; access to healthy foods is often limited in poor neighborhoods, and physical activity may be limited because of safety concerns or inadequate recreational facilities.

To reverse this trend, we need a national commitment to change the physical and social environment in which children live. By doing so, we will also help adults – as all Americans benefit from living in healthier communities.

The following is a sketch of the scope of the problem and some possible solutions. Our annual report on obesity, *F* as in Fat: How Obesity Policies Are Failing in America, is

<sup>&</sup>lt;sup>3</sup> Ogden, C.L., M.D. Carroll, and K.M. Flegal. "High Body Mass Index for Age among U.S. Children and Adolescents, 2003-2006." *Journal of the American Medical Association* 299, no. 20 (2008): 2401-2405.

<sup>&</sup>lt;sup>4</sup> U.S. Department of Health and Human Services, National Center for Health Statistics. *Prevalence of Overweight Among Children and Adolescents: United States, 1999.* Hyattsville, MD: National Center for Health Statistics; 2001. <u>http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm..(accessed</u> July 14, 2008).

available at our website, <u>www.healthyamericans.org</u>, and provides a more comprehensive look at these issues. The 2008 edition will be released in August.

### Food and Physical Activity

Many American children are consuming more calories, eating less healthful foods, engaging in less physical activity and instead spending their time engaging in sedentary activities. Overall, "added sugar" consumption for Americans is nearly three times the U.S. Department of Agriculture's (USDA) recommended level,<sup>5</sup> and adolescent females ages 12-15 consumed approximately four percent more calories in 1999-2000 than they did in 1971-1974.<sup>6</sup> In 2003, a USDA report characterized America's per capita fruit consumption as "woefully low" and noted that vegetable consumption "tells the same story."<sup>7</sup> Moreover, since the 1970's, fast food consumption in children has increased five-fold. In the late 1970s, children received approximately two percent of their daily meals from fast food; by the mid-1990s, that increased to 10 percent. Children who consume fast food, as compared with those who do not, have higher caloric intake, more fat and saturated fat, and more added sugar.<sup>8</sup>

In addition to developing poor dietary habits, many children are becoming less physically active. For example, 30 years ago, nearly half of American children walked or biked to school; today, less than one in five either walk or bike to school.<sup>9</sup> Increased screen time – whether television or computers – is associated with higher rates of overweight and obesity. Furthermore, according to the CDC's latest School Health Policies and Programs Study, only 3.8 percent of elementary schools, 7.9 percent of middle schools and 2.1 percent of high schools provided daily physical education or its equivalent. Some attribute at least part of this decline in physical activity programs to the academic requirements of No Child Left Behind. That is unfortunate as there is growing evidence that fitter more active students perform better academically.

# Health Impacts

The health impacts of obesity and physical inactivity are dire and can start at a young age. Physical inactivity is tied to heart disease and stroke risk factors in children and adolescents. A number of studies have documented how obesity increases a child's risk for a number of health problems, including the emerging onset of type 2 diabetes, increased cholesterol and hypertension among children, and the danger of eating disorders among obese adolescents.<sup>10</sup> Some studies have shown that obesity and

<sup>&</sup>lt;sup>5</sup> Putnam, J., J. Allshouse, and L. S. Kantor. "U.S. per Capita Food Supply Trends: More Calories, Refined Carbohydrates, and Fats." *Food Review* 25, no. 3 (2002): 1-14.

<sup>&</sup>lt;sup>6</sup> Briefel, R. R. and C. L. Johnson. "Secular Trends in Dietary Intake in the United States." *Annual Review* of *Nutrition* 24, (2004): 401-431.

<sup>&</sup>lt;sup>7</sup> Putnam, J., J. Allshouse, and L. S. Kantor. "U.S. per Capita Food Supply Trends: More Calories, Refined Carbohydrates, and Fats." *Food Review* 25, no. 3 (2002): 1-14.

<sup>&</sup>lt;sup>8</sup> Asche, K. "Fast Foods May Increase Childhood Obesity Rates." University of Minnesota Extension. (2005). <u>http://www.extension.umn.edu/extensionnews/2005/fastfood.html</u> (accessed July 14, 2008).

<sup>&</sup>lt;sup>9</sup> McDonald, N. C. "Active Transportation to School: Trends among U.S. Schoolchildren, 1969-2001." *American Journal of Preventive Medicine* 32, no. 6 (2007): 509-516.

<sup>&</sup>lt;sup>10</sup> U.S. Department of Health and Human Services (USDHHS). *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Washington, D.C.: USDHHS, 2001.

overweight in children also negatively affect children's mental health and school performance. The recent recommendation by the American Academy of Pediatrics for cholesterol screening of kids – with the possibility of prescription of cholesterol lowering drugs for young children – is just another tragic example of how much obesity has affected the health of our children.

### Economic Impact

These health impacts come at a great cost to our nation. According to the Department of Health and Human Services, obese and overweight adults cost the U.S. anywhere from \$69 billion to \$117 billion per year.<sup>11</sup> One study found that obese Medicare patients' annual expenditures were 15 percent higher than those of normal or overweight patients. The cost of childhood obesity is also growing. Between 1979 and 1999, obesity-associated hospital costs for children (ages 6 to 17 years) more than tripled, from \$35 million to \$127 million.<sup>12</sup>

The poor health of Americans of all ages is putting the nation's economic security in jeopardy. More than a quarter of U.S. health care costs are related to physical inactivity, overweight and obesity. Health care costs of obese workers are up to 21 percent higher than non-obese workers. Obese and physically inactive workers also suffer from lower worker productivity, increased absenteeism, and higher workers' compensation claims. To maintain our economic competitiveness and our general health and well-being, we must improve the health of America's next generation. To do that, we must improve diet and physical activity levels.

### National Security Impact

The problem of obesity and overweight has reduced the number of volunteers for military service who must meet height and weight requirements. At a time when military recruiters are struggling to meet the needs of our armed forces, we are finding more and more volunteers who are overweight and obese. In 1993, 25.6 percent of 18-year-old volunteers were overweight or obese; in 2006 that percentage rose to almost 34 percent.<sup>13</sup> This problem continues during active duty. Each year between 3,000 and 5,000 servicemembers are forced to leave the military because they are overweight.<sup>14</sup>

### An Environment that Discourages Physical Activity and Healthy Eating

The built environment and community design can have a great impact on nutrition and physical activity levels. For children, the placement of schools and access to safe venues for physical activity are particularly important. One study found that the primary reason

<sup>&</sup>lt;sup>11</sup> U.S. Centers for Disease Control and Prevention. "Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity." U.S. Department of Health and Human Services, http://www.cdc.gov/nccdphp/publications/factsheets/Prevention/obesity.htm. (accessed July 14, 2008).

 <sup>&</sup>lt;sup>12</sup> Ibid.
<sup>13</sup> Hsu, L.L., R.L. Nevin, S.K. Tobler, and M.V. Rubertone. "Trends in Overweight and Obesity among 18-

Year-Old Applicants to the United States Military, 1993-2006." *The Journal of Adolescent Health* 41, no. 6 (2007): 610-612.

<sup>&</sup>lt;sup>14</sup> Cable News Network. "Discharged Servicemen Dispute Military Weight Rules." *CNN.com*, September 6, 2000. <u>http://www.cnn.com/2000/HEALTH/09/06/military.obesity/index.html</u> (accessed May 2, 2008).

that children do not walk or bike to school is because their school is too far away. Other concerns included too much traffic, no safe route, fear of abduction, crime in the neighborhood, and lack of convenience.<sup>15</sup> A Government Accountability Office study found that "areas of low socioeconomic status and high minority populations had fewer venues for physical activity" and "adolescents in unsafe neighborhoods engage in less physical activity" than their peers. Even where opportunities for physical activity may be available – such as school playgrounds – many communities are encountering liability concerns as an impediment to after-hours use of these community resources.

Access to nutritious foods is another important issue that can affect children's health. Everything from the foods sold in schools to the presence or absence of grocery stores and markets selling fresh fruits and vegetables in communities to the foods that parents serve to their children can influence obesity levels and ultimately health care costs.

What occurs in schools can be critical – given the number of children who depend on school breakfast and lunch for their meals and the patterns that school food access can create for all children. In 2004, the Child Nutrition and WIC Reauthorization Act of 2004 (P.L. 108-265) required the U.S. Secretary of Agriculture to issue school nutrition guidelines that would ensure that American schoolchildren consume foods recommended in the most recent Dietary Guidelines for Americans (DGAs); however, USDA has issued no proposed regulations in the 3 years since the release of the 2005 DGAs.<sup>16</sup> Instead, USDA contracted with the Institute of Medicine (IOM) to convene a panel of experts on child nutrition. In late 2009, the IOM Committee on Nutrition Standards for School Lunch and Breakfast Programs is expected to provide USDA with recommendations for updating the school meal programs' nutrition requirements. Once USDA receives the IOM recommendations, agency officials will then seek to incorporate them into formal USDA guidance, which is expected to be issued some time in 2010. A final rule will take even longer to be issued. This turn of events effectively postpones the update of school meal nutrition standards by 5 years beyond when they were due. Given the fact that school meal nutrition standards lack standards for sodium, trans fat, and whole grains, and that the fruit and vegetable content is too low, this delay is of considerable public health concern.

### Disparities

Unfortunately, as with too many other health problems facing our nation, obesity often disproportionately affects minorities and the poor. African American children are almost

<sup>&</sup>lt;sup>15</sup> U.S. Centers for Disease Control and Prevention (CDC). "Barriers to Children Walking and Biking to School--United States, 1999." *Morbidity and Mortality Weekly Report* 51, no. 32 (2002): 701-704.

<sup>&</sup>lt;sup>16</sup> U.S. Department of Agriculture (USDA). Incorporating the 2005 Dietary Guidelines for Americans into School Meals. SP 04-2008. Washington, D.C.: USDA, 2007.

twice as likely to be obese<sup>17</sup>. Black and Hispanic adolescents have higher rates of physical inactivity (by 5-6 percentage points).<sup>18</sup>

Equally disturbing, is the apparent relationship between being overweight and poverty. The National Survey on Children's Health (2003) shows that rates of overweight decline as income rises (22.4 percent of kids below 100% of poverty were overweight; only 9.1 percent of kids at 400 percent or more of poverty were overweight). Similarly, rates of physical inactivity are greater for poor kids (17% who were under 100 percent of poverty engaged in no vigorous physical activity each week; only 7.8% of those at 400% of poverty fell into that category). Eating healthier can be very expensive. Calorie dense foods tend to be less expensive; supermarkets are less likely to be accessible in poor neighborhoods; and poor children are more dependent on school nutrition programs, which are not always meeting the highest standards. The current rise in food prices raises serious concerns about the impact on obesity among poor children. Programs such as food stamps are not keeping up with rising prices and do not provide adequate financial incentives to encourage healthier eating by providing larger benefits for healthier food, though some notable improvements were made through the passage of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246).

### **Community Prevention**

As a nation, we tend to over-medicalize health problems. In fact, given the state of today's science – medicine can only address the consequences of overweight and obesity, not prevent it. Real prevention requires changing the communities in which children (and adults) live and approaching this as a community-wide, not just an individual challenge. It will also be the most cost effective way to mitigate this epidemic. To truly tackle the obesity epidemic, we must make healthy choices easy choices for all Americans, regardless of where they live or what school they attend. We need a cultural shift, one in which healthy environments, physical activity and healthy eating become the norm.

Tomorrow Trust for America's Health will release a new report, *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*, which examines how much the country could save by strategically investing in community disease prevention programs. The report concludes that an investment of \$10 per person per year in proven community-based programs to increase physical activity, improve nutrition, and prevent smoking and other tobacco use could save the country more than \$16 billion annually within five years. This is a return of \$5.60 for every \$1. The economic findings are based on a model developed by researchers at the Urban Institute and a review of evidence-based studies conducted by the New York Academy of Medicine. The researchers found that many effective prevention programs cost less than \$10 per person, and that these programs have

<sup>&</sup>lt;sup>17</sup> U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *National Survey of Children's Health 2003*. Rockville, MD: U.S. Department of Health and Human Services, 2005.

<sup>&</sup>lt;sup>18</sup> U.S. Centers for Disease Control and Prevention. "Youth Risk Behavior Surveillance -- United States, 2007." *Morbidity and Mortality Weekly Report* 57, no. SS-4 (2008): 1-136.

delivered results in lowering rates of diseases that are related to physical activity, nutrition, and smoking. The evidence shows that implementing these programs in communities reduces rates of type 2 diabetes and high blood pressure by 5 percent within 2 years; reduces heart disease, kidney disease, and stroke by 5 percent within 5 years; and reduces some forms of cancer, arthritis, and chronic obstructive pulmonary disease by 2.5 percent within 10 to 20 years, which, in turn, can save money through reduced health care costs to Medicare, Medicaid and private payers.

### **Examples of Successful Interventions**

Community and school-based approaches aimed at using reducing obesity in the United States have already shown to be successful. The Child and Adolescent Trial for Cardiovascular Health (CATCH) elementary school program provides education for students, modifications for improvements in school lunches and physical education, and increased education for staff and teachers. Results have shown that students in the program consumed healthier diets and engaged in more physical activity.

The town of Somerville, Massachusetts developed a comprehensive program called "Shape Up Somerville" to curtail childhood obesity rates. The project included partners across the community. Various restaurants started serving low-fat milk and smaller portion sizes; the school district nearly doubled the amount of fresh fruit at lunch and started using whole grain breads; the town expanded a local bike path and repainted crosswalks; and the town targeted crossing guards to areas where children are most likely to walk to school. Researchers evaluated the program after one year and found that children in Somerville gained less weight than children in surrounding communities. (Growing children are expected to gain some weight.)

Another example of a coordinated approach to obesity reduction at the community level is the YMCA's Pioneering Healthier Communities. This project supports local communities in promoting healthy lifestyles. Examples of interventions have included offering fruits and vegetables and encouraging physical activity during after school programs; influencing policymakers to "put physical education back in schools and include physical activity in after school programs"; building or enhancing bicycle and pedestrian trails; and increasing access to fresh produce in communities through community gardens, farmers markets and other activities.

#### **National Strategy**

Clearly, it has taken years for the childhood obesity epidemic to develop, and it will take a coordinated effort over time to begin to mitigate it. At this time, we have no national, coordinated effort to combat obesity. TFAH supports the development of a *National Strategy to Combat Obesity*. This needs to be a comprehensive, realistic plan that involves every department and agency of the federal government, state and local governments, businesses, communities, schools, families, and individuals. It must outline clear roles and responsibilities. Our leaders should challenge the entire nation to share in the responsibility and do their part to help improve our nation's health. All levels of government should develop and implement policies to make healthy choices easy choices – by giving Americans the tools they need to make it easier to engage in the recommended levels of physical activity and choose healthy foods, ranging from improving food served and increasing opportunities for physical activity in schools to securing more safe, affordable recreation places for all Americans.

The "National Strategy for Pandemic Influenza Planning" provides a strong example for how this type of effort can be undertaken. With leadership and goals identified by health agencies and experts, every cabinet agency has taken charge of developing and implementing policies and programs in their jurisdiction that all contribute to our nation's preparedness for a pandemic flu outbreak. Similarly, the United Kingdom has announced an anti-obesity strategy to "transform the environment" in which people in England live, including launching a campaign to promote healthy living and healthy towns with bicycle and pedestrian routes.

### Conclusion

Our country needs to focus on developing policies that help Americans make healthier choices about nutrition and physical activity. We know that even small changes can make a big difference in people's health – and that individuals don't make decisions in a vacuum. If we want our children to lead healthy, productive lives, we need a strong partnership from the government, private and nonprofit sectors, as well as parents and teachers, to emphasize wellness and enhance nutrition and physical activity. The challenge is a big one, but we can make a difference together. Thank you again for the opportunity to testify.

### Testimony of Jeffrey Levi, PhD, Executive Director, Trust for America's Health Before the Subcommittee on Children and Families, Senate Health, Education, Labor and Pensions Committee "Childhood Obesity: The Declining Health of America's Next Generation"

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A number of factors have contributed to the nation's childhood obesity epidemic. Children are eating more and moving less, which inevitably leads to increases in weight, but that is only a part of the story. We have also created a physical environment that reinforces a less active lifestyle, and we have not compensated for this in the level of physical activity we promote in the schools. We have placed kids in a less nutritious environment – it is not just too much food, but too much bad food that kids are eating, and we have not harnessed the opportunities of the school to compensate for this.

The health and economic impacts of obesity are very serious. According to the Department of Health and Human Services, obese and overweight adults cost the U.S. anywhere from \$69 billion to \$117 billion per year. More than a quarter of U.S. health care costs are related to physical inactivity, overweight and obesity. To maintain our economic competitiveness and our general health and well-being, we must improve the health of America's next generation. To do that, we must improve diet and physical activity levels.

Real prevention requires changing the communities in which children (and adults) live and approaching this as a community-wide, not just an individual challenge. It will also be the most cost effective way to mitigate this epidemic. To truly tackle the obesity epidemic, we must make healthy choices easy choices for all Americans, regardless of where they live or what school they attend. We need a cultural shift, one in which healthy environments, physical activity and healthy eating become the norm.

It has taken years for the childhood obesity epidemic to develop, and it will take a coordinated effort over time to begin to mitigate it. At this time, we have no national, coordinated effort to combat obesity. We need a National Strategy to Combat Obesity, a comprehensive, realistic plan that involves every department and agency of the federal government, state and local governments, businesses, communities, schools, families, and individuals. If we want our children to lead healthy, productive lives, we need a strong partnership from the government, private and nonprofit sectors, as well as parents and teachers, to emphasize wellness and enhance nutrition and physical activity.