Childhood Obesity in America Today:

*SNAP out of It!*

March 23, 2013
The epidemic of childhood obesity is one of the most challenging issues facing America today. Rates of obesity in children have tripled since 1980; as of 2008 nearly 17% of children aged two to nineteen years in the United States were obese, with low-income children impacted more severely than other socio-economic groups. Both the physical and financial impacts of childhood obesity are considerable. Research has shown that overweight and obese children typically become obese adults, with serious health risks to the children both in their youth and in adulthood, which result in significantly higher medical costs for obese individuals. In recent years, this issue has drawn the attention of both policy makers and the public at large, yet despite the marginal declines observed recently in certain regions of the country, the overall rate of childhood obesity remains troubling. The following analysis explores the causes for and potential policy solutions to the growing public health concern of childhood obesity in America. We consider three potential federal-level policy solutions in addition to maintaining the status quo, including:

1. Banning **food advertisements** from children’s television
2. Implementing a multi-state pilot of the **5-2-1-0 behavior change** education program
3. Placing new restrictions on the **Federal Supplemental Nutrition Assistance Program** (SNAP benefits)

Upon review, we recommend our third option, the adoption of tighter restrictions on food that can be purchased with federal SNAP benefits. SNAP program modification is not only a cost-effective and politically feasible policy solution, it is likely to have a considerable impact in reversing current trends of childhood obesity for socio-economic groups that are most at risk. However, to broaden the range of populations affected and to have a greater impact on this considerable issue, we also advise implementation of the 5-2-1-0 program pilot as a second step. Finally, while we recommend pursuing a ban on food advertisements from children’s television as the lowest priority, we suggest that the White House Task Force consider the issue publicly in order to bring attention and industry pressure to ultimately reduce children’s exposure to food advertisements. A problem as pervasive as childhood obesity likely requires more than one policy approach to create meaningful change.

**BACKGROUND**

Over the past four decades the United States has seen a rapidly increasing prevalence of childhood and adolescent obesity. Childhood obesity is medically defined as describing children and adolescents, between the ages of two and nineteen years of age, whose body mass index (BMI) is at or exceeds the official definition for children of the same age and sex. From 1976 to 1980 the prevalence of childhood obesity was 5.5%: over three times lower than it was from 2007 to 2008, when it was measured at 16.9%.

The complexity of childhood obesity as a public health issue is compounded by both the multiple aspects of the problem: behavioral and environmental factors contributing to obesity, differences among socio-economic groups, and the varying state and federal level approaches to a solution. In order to fully understand which policy alternatives hold the greatest potential to reverse this disturbing trend in American children, we must first explore the scope of the problem and its political context.
The issue of childhood obesity has gained a place on the national agenda over the last several years. While one Duke University study showed that as of 2005 most Americans were not seriously worried about the economic or health consequences of obesity, more recent data suggests that 80% of Americans now recognize obesity as a serious public health problem for the United States.

Causes of Childhood Obesity
Directly speaking, childhood obesity is caused by the intake of too many calories in combination with too little physical activity. However, a preponderance of evidence suggests that a variety of environmental and social factors have played a role in youths’ increasing weight over the last thirty years. Among factors that are believed to contribute to childhood obesity are the aggressive marketing and constant availability of low-cost, high-calorie foods, decreased physical activity and increased television and media use, and increased portion sizes in American meals. The increased consumption of sugar sweetened beverages as a proportion of daily caloric intake has also been identified as a significant contributor to the rise in rates of obesity. By 1996, over 30% of carbohydrates consumed by people older than 2 years old in the United States came from added-sugar caloric sweeteners.

In addition to a changing American diet, increase in television viewership and cuts to physical education programs in public schools have contributed to lower levels of activity among kids, providing them fewer opportunities to burn off excess calories consumed. The impact of increased screen time may go beyond just the encouragement of sedentary activity: a 2007 study concluded that increased hours of TV time was correlated with increased calorie intake, with children tending to eat foods of a higher energy density while watching television as well.

Socio-Economic Trends in the Early Onset of Obesity
Although a nation-wide problem, rates of childhood obesity vary widely across states as well as among different socio-economic groups. Poverty has been linked to diets that are higher in sugars and fats, and low-income Americans also suffer higher rates of obesity, diabetes, and heart disease. Low-income socio-economic groups consume fewer fruits and vegetables than higher income groups. Among pre-school aged children, almost one-third of low-income kids between age 2 and 4 were overweight or obese in 2009, and 14.8% of low income children aged 2 to 5 years old were obese as compared with 12.4% of all 2 to 5 year olds in the US.

Health Consequences and the Financial Cost of the Epidemic
The predictions of future obesity rates are staggering – of children born in the year 2000, one in three will become a diabetic over his or her lifetime. Obesity also increases the risk for a host of other serious conditions including heart and liver disease, arthritis, sleep apnea, and various types of cancer. Even today, health care practitioners are seeing more children with conditions like high blood pressure typically found in adults.

Along with the health risks associated with childhood obesity, the financial burden to families living with the disease and to the public at large is tremendous. Covered by their parents’ insurance, the average
claims for obese children cost nearly twice as much non-obese children, financially impacting both families and employers. The indirect costs of childhood obesity are also substantial, as the productivity of parents with obese children may be lower due to absenteeism as a result of the medical needs of their child. And since over 80% of overweight or obese children remain overweight or obese in adulthood, the costs of childhood obesity only increase over time. In 2006 medical costs to obese individuals were estimated as being $1,429 more per capita – roughly 42% higher – than for non-obese persons. The total estimated medical spending on obesity at that time was calculated by one study to be approximately $147 billion per year, implying that public sector spending would be 8.5% lower for Medicare 11.8% lower for Medicaid without obesity related spending.

Policy Efforts to Combat Childhood Obesity
In recent years, several efforts to combat high obesity rates have been made at the national policy level. In 2001, the Surgeon General issued a Call to Action to “Prevent and Decrease Overweight and Obesity” which, although not focusing specifically on childhood obesity, was intended to stimulate action in all sectors to address this major health problem. The CDC has continued to track the prevalence of childhood obesity through the National Health and Nutrition Examination Survey (NHANES), as well as issuing policy briefs and funding programs in every state which range from vending machine policies to recommending guidelines for school physical education programs. Additionally, the CDC’s “Childhood Obesity Demonstration Project”, launched in 2011, will examine which strategies are most effective to reduce obesity in children by building on existing community projects over a four-year grant cycle.

Since 2010, Obama administration has used the White House to make childhood obesity a top priority. First Lady Michelle Obama’s Let’s Move! Campaign has aimed to create a national action plan to “maximize federal resources and set concrete benchmarks” toward achieving obesity reduction among kids. This program builds on the Healthier US School Challenge (2004), offering incentive awards to schools that have successfully promoted nutrition and physical activity.

In 2010, the President also signed the Healthy, Hunger-Free Kids Act, which directed USDA to update all the core child focused meal programs including the National School Lunch Program, the School Breakfast Program, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), the Summer Food Service Program and the Child and Adult Care Food Program with specific meal guidance under the most recent nutritional guidelines. This legislation requires meal enhancements including increased availability of fruits, vegetables, and whole grains, as well as reductions in sodium content.

To accompany these efforts, President Obama created a White House Task Force on Childhood Obesity, which seeks to develop a comprehensive inter-agency plan to reduce obesity among children to 5% nationwide by 2030. The Task Force intends to evaluate the effects of current efforts to reduce childhood obesity and to ensure plans are implemented, sustainable, and effective – an important role now that rates of childhood obesity seem to be leveling off, especially in some major metropolitan areas. In the future, this body could play an even larger part in coordinating messaging and efforts
across agencies, and to experiment and test different pilot programs throughout the country to ensure implementation of the most promising approaches.

**PROBLEM STATEMENT**
Due to overconsumption of high-calorie foods and increasingly sedentary lifestyles, the incidence of childhood obesity for children in America is far too high. In addition, America’s poorest children are those most at risk of becoming obese – those children whose families have the fewest resources to address the problem. If current trends continue, this epidemic of obesity will continue to cause chronic health conditions throughout the populace and lead to increasingly disparate health and economic outcomes between socioeconomic classes. These trends lead to lowered life expectancy and quality of life for future generations as well as a financial burden of increased health care costs and lowered productivity.

**OBJECTIVES & CRITERIA**
When considering the determinants of a successful federal policy to address childhood obesity, we use the following objectives and criteria:

- Efficacy of the policy option: the potential to **decrease childhood obesity**
- Predicted **political feasibility** of the option
- Projected **public support** of the option
- Expected **costs** of the option, both in terms of policy implementation and potential cost savings

**POLICY OPTION #1: Ban advertising of all food products on children’s television**
Flashy advertising campaigns marketing processed, unhealthy foods get the attention of young children across the county. The average child in America watches three to four hours of television a day, and during that time is subjected to countless commercials for processed foods high in sugar and fat. Worse, the children exposed to these ads are often unable to distinguish between advertising and programming. For this option, we propose banning television advertisements of all food and beverage products when 75% of the viewing population is under the age of 18 – an action only the federal government has the authority to implement through legislation.

A ban on the advertising of food and drink products on television would be similar in nature to the limitations that have been placed on the advertising and marketing of tobacco and alcohol in the US and many other countries. Although alcohol and tobacco are hard to compare with food as they are not necessary for life, consumption of unhealthy foods and excess weight negatively impact an even greater proportion of the population. Encouragingly, in the US the rate of tobacco usage has dropped steadily since cigarette advertising was banned from television in 1971. Although the drop in use of tobacco could also be attributed to a suite of other policy changes - including taxation, restrictions on use, and warning labels - we believe that the advertising ban could work similarly in conjunction with current programs such as Let’s Move and the Healthy Hunger Free Kids Act.
Importantly, the decrease in usage of tobacco products has indeed led to lower rates of smoking-related illness and decreased medical costs for the country.

Studies on alcohol advertising have shown a direct link between advertising and consumption patterns.\(^{37}\) By changing the standards of food advertising we can limit the interest in food products that are known to cause obesity. Bans on alcohol and tobacco advertising in other countries have caused a reduction in sales,\(^{38}\) which we can assume means a reduction in consumption. It is hoped that results from a ban on advertising of consumable food and drink products would have a similar effect to the alcohol and tobacco advertising bans. While the advertising industry publicly states that advertising to children is of questionable effectiveness as adults are ultimately the food purchasing decision makers, the industry currently spends $11 billion dollars each year to advertise to children.\(^{39}\)

**Analysis of Policy Option #1, Ban advertising of all food products on children’s television**

**Efficacy:**
Moderate. Canada has had a similar ban of advertising on children’s television since 1980 resulted in a 1.5 lb. reduction in kids’ average weights over 15 years\(^{40}\) - impressive given rising average weights in other countries during that time period and potentially resulting in significant reduction in weight gain from what may have otherwise occurred. We predict a more conservative impact in the US in part because of today’s increase in non-traditional media versus television viewing. Additionally, cultural differences around food consumption in the region may have led to lower rates. However, advertising restrictions enacted today may have even more of an effect given the increase in media exposure through the use of multiple mediums – one study showed that multitasking has increased kids’ overall screen time by 2 \(\frac{3}{4}\) hours over the last five years.\(^{41}\) Taking these trends into account, we estimate that such a ban would still reduce childhood obesity in the US by 2-4% over the next 20 years.

**Political Feasibility:**
Low. Though similar legislation to limit television advertising of food in some form has been passed in several other countries, including Ireland, Sweden, Norway, Canada, and France; policy efforts in the United States have generated overwhelming opposition and shown little political potential. In 2010, the FTC, CDC, FDA, and USDA put together an interagency committee to research and create legislative proposals for regulations of advertising to children. However, Congress requested a cost-benefit analysis of the recommendations in 2011, effectively bringing the committee’s work to a halt.\(^{42}\)

**Public Support:**
Low. From a social perspective, public support for restricting advertising is relatively low.\(^{43}\) Support for this legislation may increase as education campaigns like Let’s Move drive home the effects of advertising can be linked to food consumption and obesity.

**Expected Cost:**
Low. The most significant implementation cost to the federal government of implementing such a ban would be the opportunity cost to enact the legislation. It would require significant political capital to overcome food industry concerns and media conglomerates who stand to lose large amounts of advertising revenue with such a scheme. Currently fast food companies alone spend $3 billion dollars on television ads. However, if advertising restrictions led to even a small drop in obesity rates, potential savings to obesity-related health costs are significant because of the ban’s potential to impact nearly the entire American childhood population. A 2-4% drop in the rate of childhood obesity would reduce obesity-related health care costs by at least $3-6 billion per year.

**POLICY OPTION #2: Pilot of the 5-2-1-0 Behavioral Change Program**

The 5-2-1-0 behavioral change program provides a promising way to expand health care providers’ capacity to treat and prevent childhood obesity. The program encourages the adoption of healthy habits by combining nutrition education with journaling, asking kids that participate to track four things: the number of fruits and vegetables per day they eat (5), their hours of “screen time” (2), hours of exercise (1), and the number of sweetened beverages drank per day (0), and is typically offered in a bounded time period as short as one month.

The 5-2-1-0 program originally developed in 1998 as part of a health initiative of Blue Cross Blue Shield of Massachusetts, then further refined as the 5-2-1-0 campaign used by the Maine Youth Overweight Collaborative in 2007. As of 2012, the program had spread through voluntary adoption to twenty-two states. To date, 5-2-1-0 program implementation has typically been at the state or county level, where local leaders have obtained grant money (often from the CDC or non-profits such as the Robert Wood Johnson Foundation) to launch a program and offer facilitator trainings for teachers and community leaders led by hospital dietitians. Using the existing messaging and supporting curriculum, the 5-2-1-0 program could have an even greater impact if it was coordinated and funded at the national level.

The establishment of Affordable Care Organizations (ACOs), a new type of organization that will be part of states’ Health Exchanges created by the 2012 Affordable Care Act, provide a timely opportunity to promulgate the program. ACOs, established so far in many states, are organizations that will be responsible for delivering health care and health coverage for Medicaid-eligible populations. Since ACOs will be accountable health outcomes for the populations they serve, the organizations will have an incentive to offer programs that will reduce obesity-related health care costs. We propose a pilot for ten states to offer the program primarily in its traditional fashion – through schools on a voluntary basis – but also utilizing ACOs as an additional platform to disseminate 5-2-1-0 curriculum and program facilitation through health-care providers (clinics and hospitals) in each state.

5-2-1-0 programs today have evolved in two simple ways that are likely to dramatically increase its efficacy with youth: a shift in target audience and an increased emphasis on behavior tracking. Program experts in Marion County, Oregon realized that targeting at-risk (i.e., overweight and obese) individuals, the traditional clinical approach for treating obesity in children, was both unnecessary and counterproductive. Leaders there changed strategy after realizing that from a clinical perspective, treatment and prevention of childhood obesity are similar. The revised program encourages all children
to participate, focusing on promoting health and reducing risk of diabetes rather than weight control. Program leaders found that addressing a broader audience has led to astounding program adoption. The 5-2-1-0 program in Marion County has reached 23,600 people with its message over fourteen months for less than $50,000 through a collaborative task force involving health departments, hospitals, medical providers, non-profits, and medical volunteers.

Additionally, while Marion County’s 5-2-1-0 program has incorporated the idea of behavior tracking since its inception, other recent 5-2-1-0 implementations are following the trend to emphasize journaling as a central component of the program. These programs provide age-appropriate measurement tools: for example, a weekly card with icons that kids can fill in with crayon. Journaling is an evidence-based recommendation per the American Dietetic Association and a behavior that supports the continuation of healthy eating habits, so we can expect that adding journaling to education will increase the program’s efficacy.

Additionally, 5-2-1-0’s program design creates an ingenious opportunity to gather data to evaluate the program’s efficacy. Each pilot state could provide an engagement website for participants or schools to track behavior and even self-report weight. This data can be used to determine which groups benefit most from the intervention, and whether or not the program should be expanded nationwide.

We have only to look at our own country’s history for a recent example of the power of community-based education programs to create new social norms. The wildly successful “Keep America Beautiful” campaign was launched in 1971 to address the problem of littering, which seemed at the time an inevitable consequence of the expansion of the interstate highway system and increasingly American mobile lifestyles. The campaign relied largely on public service advertising campaigns and community education. With Let’s Move! already in place, the addition of the 5-2-1-0 program could unify messaging from health providers, who are in a position to provide clear action steps to help kids reduce their risk of diabetes and other obesity-related chronic illness.

**Analysis of Policy Option #2, Pilot of 5-2-1-0 Behavior Change Program**

**Efficacy:**
Moderate. Program impacts tracked in the 2007 Maine implementation resulted in a 1.5% reduction in obesity rates in participating regions. More recent results with new program design (as noted above) show even greater initial promise. Initial 5-2-1-0 results from 2012 in Kitsap County, Washington, shows dramatic reductions in tracked sugared beverage consumption. Adoption of the program in local clinics has also been encouraging. Marion County, Oregon signed on 27 out of 41 clinics for the program: a 65% engagement rate with no supporting marketing funds. Based on this data and the expected popularity of the program, we predict a 2-3% reduction in rates in obesity over 20 years for participating states.

**Political Feasibility & Public Support:**
High. Recent polls on the relative popularity of various policy options showed 80% of respondents supported increased provision of nutritional guidelines to help people make better choices. The 5-2-1-0 framework provides an attractive middle ground for the majority of Americans that consider obesity an individual problem and the one-third that consider it an issue that government, schools, AND health
care providers should be involved in solving as a community.\textsuperscript{55} Essentially, 5-2-1-0 provides a way for health care providers to issue a clear call to action – but one that relies on the effort of the individual for success. Additionally, since 5-2-1-0 has already been adopted in small pockets across the nation, we can expect relatively rapid program dissemination based not only on outcome incentives, but also the existing network of awareness amongst health and nutrition practitioners. However, there may be some pushback on use of teacher time to incorporate the program since it is not explicitly academic – offering the program to schools on a voluntary basis will increase local political feasibility but potentially reduce the program’s reach.

\textit{Expected Cost:}

Moderate. Program costs vary, but many 5-2-1-0 programs have achieved wide adoption with very little funding by relying on volunteer support from health practitioners and educators. Maine’s 2007 program was funded with a $3.7 million grant from the CDC.\textsuperscript{56} Utilizing ACOs to disseminate program information would allow the government to reach a significant number of children utilizing existing administrative infrastructure. However, even a voluntary statewide offering in schools would clearly need significant funding for facilitator trainings, materials, administration, and evaluation. A statewide implementation for schools would require at least double the support of the Maine initiative for most states, as we anticipate more demand with the new inclusive approach. Thus total cost for 10 states at $7.5 million each would likely approach $75 million for the first year, and as more schools participate costs would increase as well.

\textbf{POLICY OPTION #3: Restrictions on the Supplemental Nutrition Assistance Program (SNAP)}

The Food Stamp Act of 1964 was implemented at a time when hunger and malnutrition was one of the most pressing public health and dietary issues facing the U.S. Fast forward nearly 60 years and what was once known as Food Stamps became SNAP – the Supplemental Nutrition Assistance Program. Authorized by Congress under the Food and Nutrition Act of 2008, SNAP provides food assistance to 46.6 million Americans, nearly half of who are children.\textsuperscript{57} However, the picture of food insecurity looks different than it did 60 years ago. The program has adapted to a changed nutritional environment where young children now consume a poor quality diet and the prevalence of overweight and obesity among low-income children exceeds underweight children by seven to one.\textsuperscript{58}

Administered by the USDA, SNAP is meant to “put healthy meals within reach”.\textsuperscript{59} But this is not necessarily the case as evidenced by the growing rate of obesity among women and children receiving SNAP benefits.\textsuperscript{60} SNAP allows participants to purchase foods, of which there are minimal restrictions and excludes only the purchase of cigarettes, alcohol, vitamins and hot foods. Healthier foods, namely whole grains, fruits, vegetables and lean meats, tend to be more expensive than highly processed and frozen foods. The higher cost of healthy foods, combined with lack of accessibility and possibly preference, may lead to SNAP families substituting their meals with less nutritious choices.\textsuperscript{61} SNAP allows for flexibility in purchase power and choice, which is arguably eroding diet quality and promoting obesity and chronic obesity related illness among the low-income population.

In an effort to align federal programs with anti-obesity efforts, Congress should mandate beverage restrictions under SNAP. Research has shown that each additional sweetened beverage consumed per
day has been found to increase a child’s odds of becoming obese by 60%, leading to numerous health conditions and negatively impacting these children’s quality of life. As the public sector bears the cost of medical care for many SNAP recipients, this program is a logical site for federal intervention. Restricting soda purchases provides an opportunity to realign the SNAP with healthier choices. This will ultimately reduce the magnitude of medical conditions associated with obesity, and immediately impact a significant number of at-risk children.

The diet for SNAP participants paints an unhealthy picture:
- Consumption of more soft drinks than non-SNAP participants.
- A larger proportion of total calories from fats and added sugars are consumed as compared to non-participants;
- Fewer nutrient-rich foods are consumed such as fruits, vegetables, and whole-grain products;

In a recent study of a large supermarket chain, soft drinks accounted for 6.9% of the grocery bill for SNAP users, compared with 4.38% for the average shopper. In fact, SNAP pays for an estimated $4 billion in soft drinks per year (20 million servings per day). For the purpose of this policy analysis, we suggest that soda and drinks not naturally sweetened be excluded from SNAP.

The concept of excluding foods from food assistance programs is not new. The special Supplemental Nutrition Program for Women, Infants and Children (WIC) was revised in 2009 to provide a defined food package, deemed most nutritious and beneficial for participants and is aligned with the Dietary Guidelines for Americans. WIC restricts the purchase of soda and juices containing added sugar. Evidence shows that overweight and obese children affected by the WIC changes, which included food and beverage restrictions, changed their overall diet and subsequently lost up to 4% body fat.

Additionally, the Healthy Hunger Free Kids Act of 2010 mandated specific healthier changes and outlined what should be served in the National School Lunch Program, the School Breakfast Program, and the Child and Adult Care Food Program, which significantly improved the nutritional quality of provided meals. Presently, SNAP benefits are not limited to the purchase of any food or beverage, except as described earlier.

Analysis of Policy Option #3, Restrictions on the Supplemental Nutrition Assistance Program (SNAP)

Efficacy:
Low to moderate. WIC food and beverage restrictions have had a positive impact on low-income children; evidence demonstrates decreased BMI by up to 4% in overweight and obese children due to changes in their WIC diets. Restricting soda under SNAP will impact 1.3% to 2.2% currently overweight and obese children on SNAP, which may lead to decreases in BMI in this population as well. We also believe restricting soda under SNAP will curb the rising trend of overweight and obese children in this demographic, in addition to encouraging overall diet changes and attitudes towards soda.

Political Feasibility:
Moderate. Our recommendation to restrict soda under SNAP should be run as a pilot program in politically willing states, of which there are at least nine. Nine states had already requested modification to SNAP to restrict soda and other dessert foods, but were denied by the USDA. USDA rejected such
changes for reasons due to the belief of minimal implementation feasibility and evaluation concerns. However, we believe that the treatment of this program as a pilot managed independently state to state may address these issues.

Public Support:
Moderate. There is a current tide of national interest to manage the obesity crisis smartly. The Administration has made it a national priority as evidenced the First Lady’s Let’s Move! campaign, but also due to the growing concern in rising health care costs for obesity related diseases. However, as with changes to any social program, there will be opposition. Restrictions to SNAP will invite resistance from anti-hunger food groups and food security advocates which lobby for increased subsidies, not restrictions. Finally, there is significant potential for backlash from lobbyists and conservatives against restricting the freedom of choice and added regulation.

Expected Cost:
Low to moderate. Since this is an existing program, government costs would remain at $78 billion annually. However, if restrictions on the purchase of soda decrease consumption, and curbs obesity rates, there is a great potential to reduce obesity-related costs of Medicaid in the affected population.

RECOMMENDATION

Based upon this review, we recommend a suite of policy options pursued in order of priority and feasibility. The federal government should begin by adopting restrictions on foods available for purchase with the SNAP program. We predict this policy change will help reverse childhood obesity trends amongst the nation’s most susceptible socioeconomic demographic. Adopting restrictions to SNAP would be less costly to implement than the 5-1-2-0 program and more politically feasible than a ban on food advertising on children’s television. Implementing SNAP changes should also result in immediate and increasing savings through reduction of obesity-related Medicaid health costs. Modifications to SNAP would be a novel and impactful supplement to current federal policies addressing childhood obesity in the broader population.

As a next step, we also recommend implementation of the ten-state pilot of the 5-2-1-0 behavior change program. This program will provide an excellent way to operationalize the White House’s nutrition education efforts in schools and clinical settings. 5-2-1-0, with its emphasis on behavior tracking, is also well-designed for program evaluation. If the program’s promising early results extrapolate amongst various regions and socioeconomic groups, 5-2-1-0 will provide an excellent basis for nutrition education to create healthier social norms in schools across the country.

Finally, while we find promise in terms of efficacy in a federal ban on food advertisements from children’s television, given other legislative priorities this policy option is best addressed as the last priority of the three options. However, we do recommend continued discussion by the White House Task Force of potential solutions in this arena. Bringing national attention to the role that media and the food and beverage industry play in the problem of childhood obesity will put needed pressure on the food industry to self-regulate. As a defining issue for the next generation and for our country, childhood obesity clearly warrants increased attention, action, and leadership from policymakers at the federal level.
REFERENCES

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4 Body Mass Index (BMI) is a measure of an individual’s height and weight, which, although not directly measuring body fat, is used by the Center for Disease Control and other health science organizations to estimate obesity. A BMI that is less than the 5th percentile is considered underweight and above the 95th percentile is considered obese for people 20 and under.
5 Center for Disease Control Website, http://www.cdc.gov/obesity/childhood/basics.html
11 Center for Disease Control Website, http://www.cdc.gov/obesity/childhood/basics.html
14 Ibid.
19 Ibid.
23 Ibid.
25 Ibid.
28 Ibid.


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Total Medicaid spending on children in 2012: $50B x .118(obesity related costs) = savings of upwards 5.9B