

## ***The Connecticut Public Health Policy Institute***

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### **Overweight and Obesity in Connecticut: Precursors, Policies and Possibilities**

#### **Executive Summary**

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### Executive Summary

**The Extent of Overweight and Obesity:** According to the Centers for Disease Control and Prevention (CDC), there has been a “dramatic” increase in overweight and obesity in Connecticut and around the nation over the past 20 years.<sup>1</sup> Associated health care and other costs are staggering: in the billions of dollars each year.<sup>2</sup> But unlike other public health challenges such as tobacco use and seatbelts, there is no single solution to which policymakers can turn.

Currently adult overweight and obesity are calculated based on a scale called *Body Mass Index*, or BMI. Those with a BMI of 25-29.9 are considered overweight, and those with a BMI of 30 or more are considered obese. BMI is the most accessible assessment tool, as it can be used in a number of settings in a relatively inexpensive way.<sup>3</sup> The BMI indicator has been modified for children and teenagers to account for yearly growth patterns.<sup>4</sup>

Based on the yearly Behavioral Risk Factor Surveillance System (BRFSS) obesity rates around the nation are high: in 2007, each state, with the exception of Colorado, reported that one-fifth to one-third of state residents were obese.<sup>1</sup> Overall, nearly two-thirds of adults in the United States were obese or overweight in 2006.<sup>5</sup> Childhood obesity rates also continue to increase. For example, 2-5 year old obesity rates have shown an alarming increase from five percent to nearly 12.5 percent in 2006.<sup>6</sup>

The Connecticut BRFSS data from 2005-2007 shows the rate of overweight and obesity combined (BMI  $\geq$  25) for adults is an estimated 58.7 percent.<sup>7</sup> Although an adult obesity rate of nearly 22 percent means Connecticut is the second leanest state in the nation, overweight and obesity rates among adults are still rising and more than 3,000 residents die each year from obesity-related complications.<sup>8(p9)</sup>

Among Connecticut adults, there exists a positive relationship between aging and increasing rates of overweight and obesity although there is a slight decline in rates of overweight and obesity among those over age 65 years, to 61 percent.<sup>7</sup> For the most recent data reported in 2007, Blacks and Hispanics have higher rates of overweight or obesity (64.5 percent and 64.6 percent, respectively) than whites (58.9 percent).<sup>7</sup> The highest rates of obesity are found among Blacks (30.9 percent) but overall rates of overweight or obesity have been declining for this group. If this trend continues, we project that Blacks in Connecticut will have the lowest rates of overweight and obesity among all racial groups by 2016.

In general as education and income increase obesity levels decrease, with the lowest rates of obesity among those with college education and annual incomes of \$50,000 or more.<sup>77</sup> The *2009 Connecticut Health Disparities Report* shows that rates of obesity among those with incomes of less than \$25,000 per year are approximately 25 percent, compared to obesity rates of 17 percent among households with incomes of \$75,000 or more.<sup>9</sup> These

disparities are particularly striking in Connecticut's cities, where access to competitively priced grocery outlets that stock fresh produce and other healthy staples impacts obesity rates. "Food deserts," or lack of healthy food choices because of transportation, access and other barriers,<sup>10</sup> exist in Hartford and other major Connecticut cities and appear to contribute to rising obesity rates.<sup>11</sup>

**Consequences of Overweight and Obesity:** Some of the chronic conditions associated with overweight and obesity are among the nation's leading causes of morbidity and mortality: breast, endometrial, and colon cancers; heart disease; stroke; and type 2 diabetes. Obesity increases the risk of high blood pressure and elevated cholesterol, respiratory disorders, liver and gallbladder disease, and osteoarthritis. Women are more likely to experience complications in pregnancy, infertility and other gynecological disorders.<sup>12 13 14</sup> Recently, obesity has been implicated as a risk factor for Alzheimer's disease and dementia.<sup>15</sup>

Poor self image and social isolation, promiscuity, suicide, an increased incidence of smoking, eating disorders (bulimia, binge eating disorder), and drug and alcohol abuse are also associated with obesity.<sup>16 17</sup> Overweight and obese children and adolescents are now developing the associated heart, lung, bone and endocrine diseases and disorders that were once primarily relegated to adults. Some estimate the current pediatric population will be the first generation in the history of the United States that will not live longer (in years of life) than their parents. The implication of this is that future national and economic security could be jeopardized.<sup>18</sup>

Weight 'bias' or the social stigma of being overweight and obese has an affect on employment opportunities and performance compensation, as well as the quality of health care and education. Doctors are more likely to assume, incorrectly, that symptoms of an obese individual are the result of "non-compliance," ignorance, or indolence. Teachers are more likely to view an obese student's academic performance negatively, resulting in lower expectations.<sup>18</sup>

**Costs of Overweight and Obesity:** The cost of overweight- and obesity-related illness is enormous: as much as nine percent of the nation's 1998 total medical expenditures were spent on complications from overweight and obesity or roughly \$78.5 billion a decade ago, half of which was paid by Medicaid and Medicare.<sup>2</sup> The combined direct and indirect costs for diabetes and heart disease, considered to be obesity-related diseases, are estimated at around \$620 billion annually.<sup>19</sup> Overall, obesity has been linked to a 36 percent increase in healthcare spending, more than costs associated with smoking or drinking.<sup>20</sup>

In Connecticut, it is estimated that 4.3 percent of the state's health care costs for adults were associated with obesity in 2004, a total of \$856 million. Obesity-attributable costs for the Medicare population in Connecticut were estimated at \$246 million dollars, and for the Medicaid population \$419 million, based on 1998 -2000 BRFSS data, projected to 2004.<sup>21</sup> Based on over 5,000 records from Connecticut in the BRFSS survey, it is estimated that nearly 22 percent of the state's adult population was obese in 2007.<sup>22</sup> Our

implied estimate of the 2007 Connecticut total medical costs associated with obesity is approximately \$3 billion while comparable costs for overweight individuals is over \$4 billion. The 2007 medical costs in Connecticut of obese individuals with diabetes are estimated to be nearly \$28.5 million, according to calculations based on the BRFSS data.

**Causes of Overweight and Obesity:** In the simplest terms, obesity is the result of energy imbalance: more calories are consumed than are used by the body. While this approach has long been the framework for overweight and obesity prevention, it does not take into account how difficult behavior changes can be. Genetics can predispose some individuals to gain weight more readily than others. For example body shape and abdominal fat have been shown to be inherited traits.<sup>23 24 25</sup> Aging may also contribute to an individual becoming obese. In general, the proportion of lean body tissue and fat tissue shifts with age when body fat increases, especially in the abdominal or visceral area.<sup>26</sup>

Sleep deprivation, which disrupts the body's natural ability to govern appetite regulation and fat metabolism,<sup>27</sup> is a risk factor for weight gain and obesity.<sup>28</sup> Those who suffer from sleep apnea, a common complication of obesity, are at an even greater risk of sleep deprivation.<sup>29 30</sup> Chronic stress combined with insufficient physical activity is another risk factor,<sup>31</sup> which may result in increased desire for high caloric foods and subsequent weight gain.<sup>32</sup> Comfort food (packaged cakes, cookies, pastries, candy, chips, fast foods, and ready-to-eat meals)<sup>33</sup> is ubiquitous, found in supermarkets, restaurants, vending machines, snack bars, and even public schools.<sup>34</sup> Foods high in saturated and trans fats, which have been linked to abdominal obesity and a predisposition to diabetes in animals,<sup>35</sup> have been implicated in weight gain.<sup>36</sup>

Plant-based foods, on the other hand, are used more efficiently by the body and help to keep obesity and heart disease in check.<sup>37</sup> But whole grain consumption per capita has dropped since the early 1970's<sup>38</sup> and fruit and vegetable consumption is "woefully low." Fruit and vegetable consumption is often used as a marker for overall healthy eating habits. The national recommendation is to consume five servings a day. Only 31 percent of Connecticut adult females reported meeting the 5-a-day goal, placing Connecticut slightly higher than the national average of 28 percent.<sup>18</sup>

High fructose corn syrup, ubiquitous in processed foods and soft drinks, suppresses appetite regulatory hormones and can lead to over-consumption and obesity.<sup>39 40</sup> Soft-drinks may be a major contributor to obesity. The human digestive system, built primarily for solid foods, does not adequately detect calories from liquids so that liquid calories are easily over-consumed. An excess of only 30 calories per day can result in more than 200 pounds of weight gain in the span of an adult life.<sup>30 41</sup> The biological drink of choice is water.

The many powerful environmental influences like larger plate size, serving bowls and serving and eating utensils, food packaging size and labeling, can override the natural signal to stop eating when the body is biologically full. Increase in sugar, fat, meat ingredients, and bigger portion sizes all contribute to overweight and obesity.<sup>42</sup> In addition, fewer opportunities exist during the school day to participate in physical

activity<sup>18</sup> and children spend more time indoors in front of televisions, computers or video games.<sup>23</sup> Sedentary lifestyles for adults are also the norm, and productivity is in large part measured by technological rather than physical output. Workdays are long, commutes can be lengthy and many people travel by car, perhaps due to limited access to bike paths and adequate mass transit.<sup>18</sup>

In Connecticut, physical activity levels for adults are slightly higher than the national average, but still fall well short of national goals. Connecticut ranks among the top ten states for physical activity, with thirty-one percent of Connecticut adults reportedly engaging in vigorous physical activity<sup>1</sup> three times per week. Twenty-one percent of adults reported no leisure time physical activity and 51 percent reported moderate levels of physical activity.<sup>2</sup> Fifty-five percent of high school students in Connecticut did not meet the recommended level for daily physical activity.<sup>18</sup>

National food policies, driven by the Farm Bill, may also contribute to overweight and obesity.<sup>43</sup> At the core of the Farm Bill are commodity programs that affect other farm bill programs such as Food Stamp and Nutrition programs.<sup>44</sup> Over 80 percent of commodity subsidies support five crops: corn, cotton, wheat, rice, and soybeans, which are not grown for direct human consumption but rather serve as cheap raw materials for food processing (e.g., high fructose corn syrup and soy based trans fats) and animal feed. The majority of farmers growing the nation's food are not supported.<sup>44 45 46</sup> If Farm Bill subsidies were given to farmers who actually grow food, Connecticut would benefit greatly.<sup>44</sup>

In addition to federal policies, mass media and ubiquitous advertising for unhealthy, high-fat, high-caloric foods likely contribute significantly to the obesity epidemic. It is estimated that about 40,000 food advertisements are viewed by children every year, most of them for nonnutritive "junk food." Advertising can significantly increase consumption, by shaping eating and purchasing patterns, especially for children. Regulatory action limiting advertising is supported by the majority of Americans, because children are vulnerable to manipulation and it is the responsibility of the state to protect them.<sup>47</sup>

Another newly emerging and disturbing potential contributor to the obesity epidemic comes from a class of man-made environmental chemicals classified as Endocrine Disruptors (ED).<sup>48</sup> It is believed that about 1,000 chemicals ubiquitous in modern life and found in plastics, food containers, electronics, pesticides, personal care products and more, can disrupt this delicate system during fetal development.<sup>49</sup> More research is needed to determine which chemicals elicit which biological response, but this area is gaining increased attention in the realm of obesity, particularly childhood obesity.<sup>50</sup>

Multiple internal and external factors contribute to an individual's propensity to become obese. Genetics, developmental stages, sleep deprivation, stress, diet, lack of physical

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<sup>1</sup> Defined as activity that causes large increases in breathing and heart rate for at least 20 minutes.

<sup>2</sup> Defined as engaging in activity that causes a slight increase in heart rate /breathing for approximately 30 minutes a day for 5 days of the week.

activity, current food policies and conceivably pollutants have cultivated an obesity epidemic.

**National, state-wide and Connecticut policies, programs and initiatives:** In 1999 when it was estimated that 61 percent of US adults and 13 percent of children were overweight or obese, the issue began to get attention as an important public health concern. In 2001, the Surgeon General established five general principles for addressing this complex epidemic: promote overweight and obesity as a major public health problem; assist Americans in balancing healthful eating with regular physical activity to achieve and maintain a healthy body weight; identify effective and culturally appropriate interventions to prevent and treat overweight and obesity; encourage environmental changes to prevent overweight and obesity; and develop and strengthen public-private partnerships to help implement this vision.<sup>51</sup>

**Table 1: National policies, programs and initiatives**

<i>Program</i>	<i>Objective</i>	<i>Website</i>
Nutrition, Physical Activity and Obesity Program: <i>NPAO</i>	To prevent and control obesity by promoting healthy eating and exercise, advocating social, behavioral and policy changes, and improved access to healthy foods and safe exercise spaces	<a href="http://www.cdc.gov/nccdphp/dnpa/obesity/state_programs/resources.htm">http://www.cdc.gov/nccdphp/dnpa/obesity/state_programs/resources.htm</a> and <a href="http://www.cdc.gov/nccdphp/dnpa/obesity/state_programs/about_us.html">http://www.cdc.gov/nccdphp/dnpa/obesity/state_programs/about_us.html</a>
Ways to Enhance Children's Activity and Nutrition: <i>We Can!</i>	An educational outreach program targeting parents and caregivers of 8-13 year old children. It provides resources and guidelines to help prevent or treat obesity in this age group from participating centers across the United States and internationally	<a href="http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/whats-we-can/index.htm">http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/whats-we-can/index.htm</a>
Child Nutrition and WIC Reauthorization Act (S. 2507)	Section 204 of the law requires school districts participating in meal programs establish local school wellness policies.	<a href="http://www.fns.usda.gov/tn/healthy/wellness_policyrequirements.html">http://www.fns.usda.gov/tn/healthy/wellness_policyrequirements.html</a>
<i>Exercise as Medicine™</i>	A national outreach initiative for obesity prevention and treatment that focuses on health care providers, to make exercise and nutrition an integral part of medical recommendations and treatments	<a href="http://www.exerciseismedicine.org/fitpros.htm">http://www.exerciseismedicine.org/fitpros.htm</a>
Healthy People 2010	National agenda with specific goals and objectives intended to increase length of healthy life and decrease health disparities	<a href="http://www.healthypeople.gov">http://www.healthypeople.gov</a>
Dietary Guidelines for Americans	Provide guidance on healthy eating aimed at reducing chronic illness	<a href="http://www.health.gov/DietaryGuidelines">http://www.health.gov/DietaryGuidelines</a>

National, state-wide and Connecticut-specific programs reflect a growing understanding of the complexities surrounding the obesity epidemic and the collaborative efforts required to successfully halt the progression of obesity and even reverse current national trends. Both population-based approaches focusing on environmental and policy changes with broad societal impact, and individual treatment-centered methods are needed.

Over the past 10 years, all 50 states and Washington D.C. have placed greater emphasis on obesity-related programs, policies and initiatives, recognizing that this public health crisis urgently requires attention. It is generally understood that collaborations, partnerships and coalitions at all levels, from the individual and interpersonal to the organizational, community and societal, are required.<sup>18</sup>

Most states have specific strategies aimed at reducing overweight and obesity, and many states have comprehensive obesity plans in place. Clearly defined funding sources appear to be the biggest hurdle for effective program implementation in most states, followed by appropriate leadership and staffing resources, suitable public awareness, and sufficient data and evidence-based research to drive policies, including policies that target the built environment.<sup>18</sup>

**Table 2: State-wide policies, programs and initiatives**

<b>Program or Policy</b>	<b>Objective</b>	<b>Website</b>
Taxes on “junk foods”	Taxes intended to decrease consumption of low nutrient foods and to use these taxes for obesity-prevention activities	<a href="http://www.yaleruddcenter.org/resources/upload/docs/what/reports/RuddReportSoftDrinkTaxFeb2009.pdf">http://www.yaleruddcenter.org/resources/upload/docs/what/reports/RuddReportSoftDrinkTaxFeb2009.pdf</a> .
Healthy Schools	Targeting childhood obesity with policies and programs aimed at improving food and physical activity in the school environment	<a href="http://www.fns.usda.gov/tn/healthy/wellnesspolicy_examples.html">http://www.fns.usda.gov/tn/healthy/wellnesspolicy_examples.html</a>
Physical education in schools	The National Association for Sport and Physical Education (NASPE) recommends elementary school age children receive at least 30 minutes of physical education per day, or 150 minutes per week	<a href="http://www.aahperd.org/naspe/pdf_files/pos_papers/ClassLength_ElemPEducation.pdf">http://www.aahperd.org/naspe/pdf_files/pos_papers/ClassLength_ElemPEducation.pdf</a>
School Wellness Policies	These policies differ between states and school districts. A quantitative assessment tool for school districts’ wellness policies as required under Child Nutrition and WIC Reauthorization Act - S. 2507 (above) can be accessed through the Rudd Center	<a href="http://yaleruddcenter.org/resources/upload/docs/what/communities/SchoolWellnessPolicyEvaluationTool.pdf">http://yaleruddcenter.org/resources/upload/docs/what/communities/SchoolWellnessPolicyEvaluationTool.pdf</a>
Safe Route to School initiatives	Intended to increase the number of students who walk or bike to school	Robert Wood Johnson Foundation: <i>Fas in Fat</i> . pp. 260-263 Available at <a href="http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf">http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf</a>
Shape Up Somerville	A community based program aimed at preventing obesity in overweight or at risk school children	<a href="http://nutrition.tufts.edu/1174562918285/Nutrition-Page-nl2w_1179115086248.html">http://nutrition.tufts.edu/1174562918285/Nutrition-Page-nl2w_1179115086248.html</a>

Connecticut has a comprehensive strategic plan in place to address obesity.<sup>52</sup> The *Trust for America’s Health* has tracked state obesity legislation since 2003 in the following categories: school nutrition, physical education, physical activity, height and weight measurement, tax policies and litigation.<sup>53</sup> *Table 3: Overweight/obesity plans and policies in Connecticut* summarizes relevant legislative and other activities in Connecticut.

**Table 3: Overweight/Obesity-related programs, plans and policies in Connecticut<sup>18</sup>**

Criteria	Yes	No
Is there a strategic plan to address obesity?	√	
Does the plan include:		
Multiple agencies?	√	
Specific roles and responsibilities assigned to agencies?	√	
Clear and measurable objectives?	√	
Funding linked to objectives?		√
Private sector and community groups?	√	
Provisions addressing the state workforce?	√	
Evaluation and review?	√	
In schools:		
Are there nutritional standards for meals?	√	
Are there nutritional standards for competitive foods?	√	
Is access to competitive foods limited?	√	
Are there requirements for physical education?	√	
Are BMI data collected?		√
Are children screened for diabetes?		√
Are there health education requirements?		√
Do schools receive CDC health grants?		√
State policies and laws:		
Taxes on “junk food”		√
Nutrition and physical activity program (CDC)		√
STEPS grant		√
Limited liability laws		√***
Enforceable physical activity laws		√
Enforceable nutrition laws	√*	
Medicaid and insurance regulations:		
State has treatment guidance for adult obesity	√	
State coverage for obesity-related nutritional assessment/consultation		√
State coverage for drug treatment for obesity		√
State coverage for bariatric surgery	√	
EPSDT reimbursement based upon nutritional assessment/counseling	√	
EPSDT standards for providers treating childhood overweight/obesity		√
State requires that insurers cover obesity-related treatments		√
State prohibits insurers from obesity-related exclusions	√**	

*Note: \* information is collected on performance.  
\*\* only for groups with 8+ beneficiaries  
\*\*\*limited liability laws protect the food industry, not individuals*

*Table 4 summarizes some specific programs that currently exist in Connecticut. In addition to these programs, a number of preventive health and health services block-grant funded programs around the state address such issues as healthy eating and physical activity, farm markets, after school programs, and a number of child and adult initiatives that specifically address overweight and obesity. In total \$501,432 has been awarded for 24 programs, primarily to local health districts partnering with local businesses and organizations (written communication, Mario Garcia, CDPH, December 17, 2008).*

**Table 4: Connecticut policies, programs and initiatives**

<b>Program</b>	<b>Objective</b>	<b>Website</b>
Farm to school program	This program facilitates and promotes the sale of Connecticut-grown farm products to school districts, individual schools and other educational institutions.	<a href="http://nasbe.org/index.php/file-repository?func=finishdown&amp;id=841">http://nasbe.org/index.php/file-repository?func=finishdown&amp;id=841</a>
<i>Action Guide for School Nutrition and Physical Activity Policies</i>	To help school districts develop and implement required wellness policies (discussed above)	<a href="http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&amp;q=322168">http://www.sde.ct.gov/sde/cwp/view.asp?a=2626&amp;q=322168</a>
<i>Expanded Food and Nutrition Education Program</i>	Intended to improve nutrition among low-income families and young children	<a href="http://www.cag.uconn.edu/nutsci/nutsci/outrch/EFNEP.html">http://www.cag.uconn.edu/nutsci/nutsci/outrch/EFNEP.html</a>
<i>ConnectiFIT</i>	A worksite program developed for Connecticut state employees, to foster healthy behaviors using a three-tiered approach	<a href="http://www.connectifit.uconn.edu">www.connectifit.uconn.edu</a>
<i>Healthy Hartford wellness campaign</i>	To increase access to health-related information, city-wide health fairs, physical activity promotion collaborations with health care institutions, and increased awareness and education on health and wellness	<a href="http://www.hartford.gov/government/mayor/healthy_hartford.asp">http://www.hartford.gov/government/mayor/healthy_hartford.asp</a>
<i>Health Food Retailer Initiative</i>	A program implemented in 2006 by the Hartford Food System to encourage small markets to sell healthier items	<a href="http://publichealth.uconn.edu/ch_hfri.php">http://publichealth.uconn.edu/ch_hfri.php</a>
<i>Rails to Trails</i>	A program addressing issues of access, cost, and recreational appeal, supporting families' and individuals' ability to engage in regular physical activity	<a href="http://www.railstotrails.org/index.html">http://www.railstotrails.org/index.html</a>
<i>NorWALKER</i>	A model example of municipalities partnering with other established stakeholders to improve physical activity through a well-orchestrated walking program	<a href="http://www.norwalkct.org/parksrec/NorWalker.htm">http://www.norwalkct.org/parksrec/NorWalker.htm</a>
<i>Connecticut Action for Healthy Kids</i>	A public-private partnership to address obesity in children through increased participation in physical education and activity	<a href="http://www.ActionForHealthyKids.org">www.ActionForHealthyKids.org</a> < <a href="http://www.actionforhealthykids.org/">http://www.actionforhealthykids.org/</a> >
<i>Take Off Program</i>	This program at the Hospital of Central Connecticut is an example of an out-patient program for obese adults that includes diet modification, exercise and intensive behavior change, delivered by a multidisciplinary team	<a href="http://thocc.org/services/outpatient/diet.aspx">http://thocc.org/services/outpatient/diet.aspx</a>
<i>Bright Bodies</i>	A family-based, intensive lifestyle intervention developed specifically for the needs of inner-city minority children	<a href="http://www.brightbodies.org/">http://www.brightbodies.org/</a>
<i>Fit for Kids</i>	addresses the critical need for alternative approaches to reducing obesity, treating a child's weight problem by focusing on parents as the target audience for producing behavior change	<a href="http://www.middlesexhospital.org/go/midProgramsAndGroups/progid/3EB529B9-96D9-1AE0-D89C356D0F573CFD">http://www.middlesexhospital.org/go/midProgramsAndGroups/progid/3EB529B9-96D9-1AE0-D89C356D0F573CFD</a>

Connecticut has a wide range of policies, programs and initiatives across a variety of settings to address the overweight and obesity epidemic in the state. But rates of overweight and obesity, left unchecked, will continue to rise. It is therefore imperative to consider new possibilities, particularly in the area of state policy.

### **Possibilities**

Options available to policymakers, public health officials, stakeholders and others for reducing overweight and obesity are broad, if not clear cut. While programs are an important component for reducing overweight and obesity, changing behavior is difficult without supportive, healthy policy.<sup>54</sup> Reversing overweight and obesity trends will likely require both. In this section we offer possibilities ranging from specific to general, first in the area of programs and then in the area of healthy policy. In addition to the possibilities listed below, *Figure 1: Legislation possibilities grid*<sup>55</sup> further illustrates the leadership needed to effectively reduce overweight and obesity in Connecticut.

#### **Programs**

1. *Fund primary prevention programs*: Programs focused up stream, that are targeted to populations and that do not involve treatment are likely to be the most prudent use of scarce resources. Programs should be evidence-based, with data to show that they achieve intended goals.<sup>53</sup>
2. *Link program funding to outcomes*: Tying funding to outcomes could improve program rigor, and having data generally available from around the state will help policymakers better understand the impact of programs and the policies affecting them.
3. *A clearinghouse of information on effective programs and their outcomes*: A clearinghouse detailing all public, private and mixed programs currently underway or being considered could save valuable time, energy and resources. This clearinghouse could be virtual or housed either within the state or within a private agency.
4. *Prioritize resource allocation*: Armed with good information on program outcomes and effectiveness, within a clearinghouse for all overweight and obesity related programs around the state, policymakers can more easily base decisions on data. During a time of fiscal constraint, these could be prudent allocation of limited resources.

#### **Healthy Policies:**

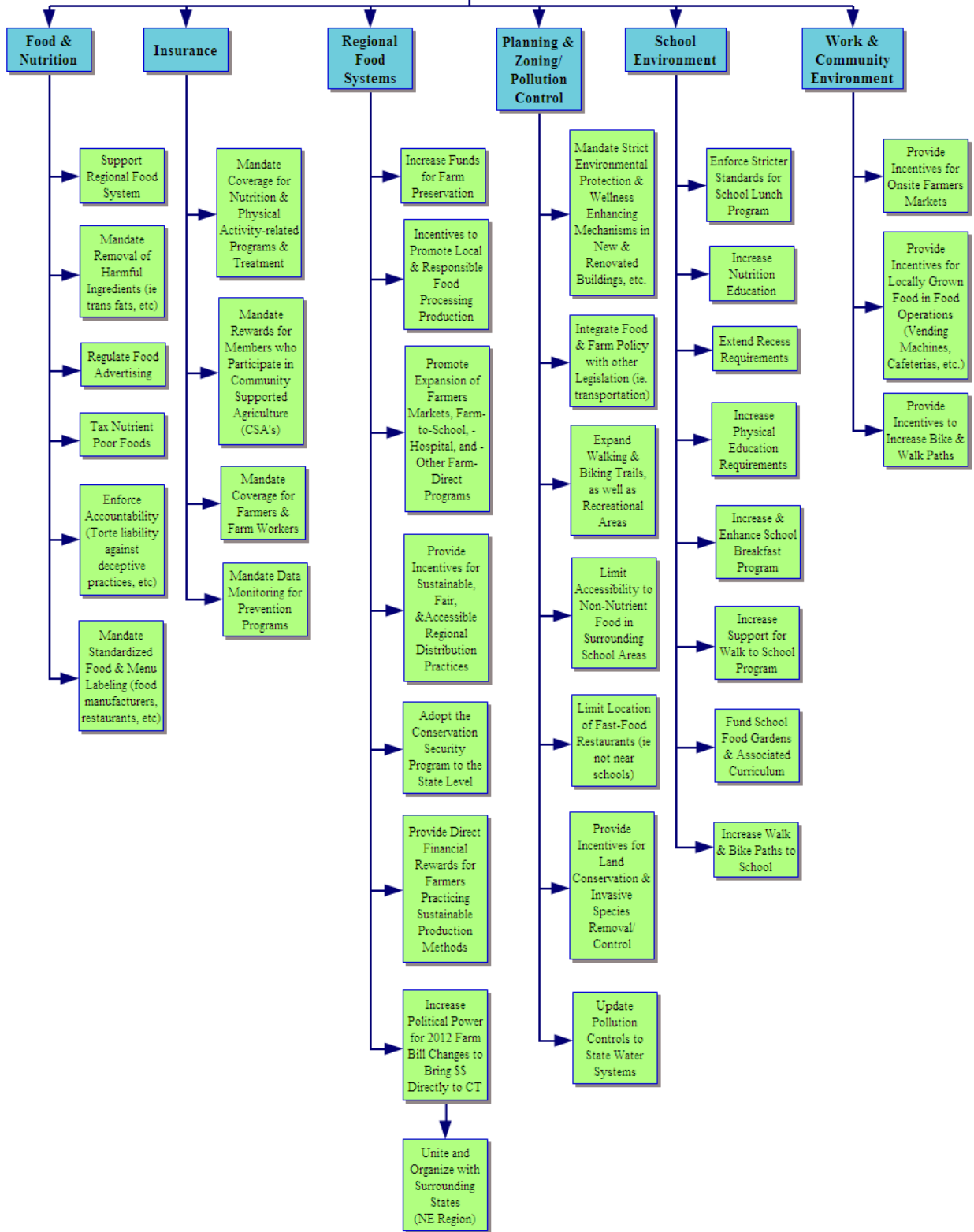
5. *Taxing beverages and foods of minimum nutritional value (FMNV)*: Basic economic "law of demand" implies that higher prices - achieved through FMNV taxes - would decrease the quantity of FMNV demanded. A FMNV tax is worthy of serious consideration in Connecticut to generate tax revenues, lower the incidence of overweight and obesity, and reduce medical and other obesity-related costs in the state.

6. *Supporting healthy meals and snacks in schools:* In the Hartford School Meals Program a complete school breakfast can be provided for \$1.00 or less.<sup>56</sup> Continued funding for school breakfast programs is critical, for a variety of reasons.
7. *Menu labeling legislation:* Laws concerning menu-labeling are being considered at local, state, and federal levels. Connecticut is one of eighteen states currently proposing such legislation. Components of the menu-labeling regulations have been compiled by Yale University's *Rudd Center for Food Policy and Obesity*.<sup>57</sup> In addition, some countries are considering food labeling in grocery stores.<sup>58 59</sup>
8. *Support a regional and sustainable clean food system that emphasizes responsible local production and distribution practices:* The advantages are far reaching, including obesity and other chronic disease prevention, enhanced educational opportunities, diminished food insecurity, improved clean air and water supplies, environmental protection, climate change mitigation, and strengthened state and local economies.
9. *Initiate partnerships with surrounding states:* Connecticut could take the lead on creating partnerships with other New England and northern-and-mid east coast states to strengthen political clout to bring about essential changes to the 2012 Farm Bill.
10. *Link obesity-related legislation with legislation across the public spectrum:* Such legislation could include, for example: mandating stricter pollution standards for cleaner air and water systems and other environmental protection standards; soil, farm, and open space conservation; enhanced planning and zoning regulations that foster increased recreational areas, walk and bike paths, and wellness-promoting architectural designs; enhanced worker protection laws that cap work-day hours (to minimize stress and enhance the family dynamic); and universal health care.
11. *Food accountability standards:* Policy makers might consider mandating strict accountability standards for food-related businesses, especially for those operating or doing business in Connecticut. These standards could include removal of potentially harmful ingredients such as trans fats and potentially addictive additives, advertising regulations, sharper food labeling mandates and "disclosure" laws. New York City could serve as a role model in this regard.<sup>60</sup>

## **Conclusion**

Overweight and obesity are on the rise in Connecticut and around the country, affecting particularly vulnerable<sup>6</sup> and minority<sup>7</sup> populations. In 2006, more than two thirds of adults were overweight or obese in the U.S., more than double the rate in 1960.<sup>5</sup> The consequences of overweight and obesity include increased rates of type II diabetes, heart disease and a host of other health problems.<sup>12 13 14</sup> A report from the *Trust for America's Health* suggests programs should be as far "up stream" as possible, targeted at communities and populations rather than individuals.<sup>53</sup> But in health care, much of what is being done is geared toward individual treatment, far down stream and long after the behavior has adversely affected health outcomes.

Figure 1:  
 Legislation Possibilities Grid



Up stream prevention programs and policies are likely to have the greatest benefit but currently prevention activities are funded at a fraction of acute health care: by some estimates, only around 2.3 percent of all health care dollars are spent on prevention.<sup>61</sup> While programmatic activities at all levels are important to reduce rates of overweight and obesity, from a public health perspective, policy changes have the greatest potential to influence behavior and outcomes, particularly if stakeholders are involved in policy development, implementation and evaluation processes.<sup>62</sup>

Obesity concerns have reached critical mass; health care and public health professionals, academics, employers, providers, government officials, the public and legislators are concerned and looking for solutions. The purpose of this report was to provide a snapshot of the crisis to inform policy and program development and implementation. Partnerships and collaborations, effective programs and healthy policies are integral to reducing overweight and obesity and improving the public's health.

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