ISSUE REPORT

# F as in Fat:

HOW OBESITY POLICIES ARE FAILING IN AMERICA







OCTOBER 2004

PREVENTING EPIDEMICS.

PROTECTING PEOPLE.

# TRUST FOR AMERICA'S HEALTH IS A NON-PROFIT,

NON-PARTISAN ORGANIZATION DEDICATED TO SAVING
LIVES BY PROTECTING THE HEALTH OF EVERY COMMUNITY
AND WORKING TO MAKE DISEASE PREVENTION A
NATIONAL PRIORITY.

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## **REPORT AUTHORS**

# Shelley A. Hearne, DrPH

Executive Director
Trust for America's Health

# Laura M. Segal, MA

Director of Public Affairs
Trust for America's Health

#### Patti J. Unruh

Senior Public Affairs Associate
Trust for America's Health

# Michael J. Earls

Public Affairs Associate
Trust for America's Health

#### Paul Smolarcik

Consultant

# **CONTRIBUTORS**

# Michael Scarpa

Intern
Trust for America's Health

# Kim Elliott, MA

Deputy Director
Trust for America's Health

#### Mark Mioduski

Vice President
Cornerstone Government Affairs

## Lee Dixon, M.A.

Vice President NETSCAN, iPublishing Director, Health Policy Tracking Service

# Carla I. Plaza, MPH

Manager, Policy Research NETSCAN, iPublishing

#### **PEER REVIEWERS**

The opinions expressed in this report do not necessarily reflect the views of these individuals or organizations. TFAH would like to thank the reviewers for their time and insights.

# Georges Benjamin, MD, FACP

Executive Director

American Public Health Association

#### Debra Lightsey, MSW

Division Director

Public Health Policy and Marketing Strategies Health Services Research and Management Group BearingPoint, Inc.

## John B. Lowe Dr.PH, FAHPA, FAAHB

Professor and Head Director

Iowa Prevention Research Center

Department of Community and Behavioral Health

College of Public Health

The University of Iowa

## Donna C. Nichols, MSEd, CHES

Senior Prevention Policy Analyst
Center for Policy and Innovation

Texas Department of State Health Services

# Joseph W. Thompson, MD, MPH

Director

Arkansas Center for Health Improvement, and

Assistant Professor

University of Arkansas for Medical Sciences

College of Medicine and College of Public Health

# Introduction

besity has become an epidemic in America, and is poised to become the nation's leading health problem and No. 1 killer. Already the cause of 400,000 deaths a year<sup>1</sup> – or 45 per hour – obesity will soon overtake tobacco use as the leading cause of preventable death, if current trends continue.<sup>2</sup>

A shocking 119 million, 64.5 percent, of American adults are overweight or obese.<sup>3</sup> The percentage of overweight children has more than doubled and adolescents has tripled since 1980, leading many experts to predict that the nation's younger generation may be the first in American history to live sicker and shorter lives than their parents.<sup>4</sup> Overweight and obese individuals are at increased risk for more than 30 major diseases, ranging from coronary disease to some types of cancer.<sup>5</sup>



— Dr. Julie Gerberding, director of the Centers for Disease Control and Prevention (CDC), in a speech delivered on Feb. 20, 2004.6

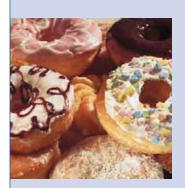
Every segment of society has a role to play in fighting the epidemic, especially such stakeholders as the food industry, consumer groups, the medical community, and government.

From school lunches to sidewalks, government involvement is crucially important in combating obesity. The federal government, through its position of national leadership, can put obesity at the top of the country's public health agenda, and each state, through its health department, can identify goals and strategies to improve the health of its citizens.

Trust for America's Health (TFAH) conducted this study to determine the effectiveness of government action against obesity. The results are disturbing.

- Every state is on track to fail to meet obesity rate goals for children and adults, as defined by the U.S. Department of Health and Human Services.
- Despite widespread consensus that action must be taken, there is no aggressive, coordinated national strategy to address obesity, threatening to make the epidemic even worse.

This report focuses on setting a baseline of current national and state policies and programs, and offers a comprehensive look at their range and quality. TFAH hopes it will serve as the first step toward an integrated, effective strategy to improve the health of all Americans.



# The failed policies of the past

Traditionally, obesity has been viewed as a cosmetic and health problem for individuals rather than a national public health crisis. Individual responsibility with respect to nutrition and physical activity must be an important part of the solution. But focusing almost exclusively on this part of the equation has encouraged the view that obesity is a problem only for the obese, rather than a problem that affects us all. Obesity impacts families, communities, the health care system, and the economy -- the direct and indirect costs of obesity amount to more than \$117 billion per year.<sup>7</sup>

An exclusive focus on individual action also ignores the range of other factors that contribute to the obesity problem and must be addressed by all of America. Societal trends encourage physical inactivity and an overreliance on high-calorie food, and communities have not provided enough accessible public recreational space. In schools, physical education is sometimes viewed as peripheral to the educational mission, and as taking time away from the core academic curriculum.

Under these circumstances, simply educating individuals about the need to "eat less and

federal obesity grant program......39

exercise more" -- the usual approach to the problem -- by itself will have only limited success. Health promotion has found that the best way to achieve real, sustainable behavior change is through a combination of education plus community, state, and federal policies and programs that support individual action. In the case of obesity, these may include creating active living communities, where opportunities for physical activity are literally right outside the door, making it more likely they will be used. They may also include legislative initiatives, such as taxing foods with low nutritional content to discourage consumption, especially among young people who do not have much money. There is also a need to provide low-income communities with increased access to affordable, healthy food.

These are just a few of the strategies available; there are many others. We must identify and adopt the most effective strategies and avoid a return to the ineffective default approach – treating obesity-related illness and trying to manage the skyrocketing costs associated with them.

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# SNAPSHOT OF OBESITY IN AMERICA

#### **OBESITY RATES**

- Nearly 65 percent of American adults are currently overweight or obese.8
- Obesity rates have doubled in the last two decades, from 15 percent in 1980 to 31 percent in 2000.9
- The number of overweight children aged 6-11 has more than doubled since 1980, from 7 percent to 15 percent in 2000. More than nine million children -- one in every seven -- are either overweight or obese.
- The probability that overweight preschool-aged children will become obese adults is over 30 percent.<sup>10</sup> For overweight adolescents, the likelihood is 80 percent.<sup>11</sup>
- Some experts predict that the overall obesity rate for the U.S. is likely to increase from 31 percent currently to 39 percent by 2008.<sup>12</sup>



- Obese individuals are more likely to live shorter lives. They have a 50-100 percent greater risk of premature death from all causes than do people at a healthy weight.<sup>13</sup>
- Obesity may soon overtake tobacco use as the leading cause of preventable death among Americans. 14
- Poor diet and physical inactivity, the leading factors contributing to obesity, are estimated to cause 400,000 deaths each year. <sup>15</sup>
- There are more than 30 major diseases associated with obesity, 16 including:
  - ▲ Diabetes
  - ▲ High blood pressure
  - ▲ Coronary heart disease
  - ▲ Stroke
  - ▲ Some types of cancer (such as endometrial, breast, prostrate, and colon)<sup>17</sup>
- Over the past 10 years, the prevalence of diabetes has increased more than 50 percent, and over the next 50 years, it is projected to increase by another 165 percent.<sup>18</sup>
  - ▲ Eighteen million people in the U.S. are living with diabetes, and another 41 million people are pre-diabetic.<sup>19</sup>
  - ▲ Diabetes is the leading cause of kidney failure, adult blindness and amputations.
- Pediatricians are diagnosing a growing number of children with type 2 diabetes, previously known as "adult-onset" diabetes. Developing type 2 diabetes as children or adolescents leads to greater risk of developing chronic diseases such as heart disease, stroke, kidney disease and blindness much earlier in life than others who develop type 2 diabetes as adults.<sup>20</sup>



#### **OBESITY-RELATED COSTS**

- The direct and indirect costs of obesity, including medical costs and lost productivity, amount to more than \$117 billion each year, according to U. S. Department of Health and Human Services (HHS) estimates.<sup>21</sup>
- Obesity has become one of the costliest epidemics in America, with annual obesity-attributable medical expenses totaling \$75 billion in 2003.
  - ▲ Medicare and Medicaid financed almost half of these costs, which constituted 6 percent of the entire HHS budget in 2003.
  - ▲ Under Medicare, the 2003 cost of obesity-related medical expenditures for the 50 states and the District of Columbia are estimated at \$17.7 billion.
  - ▲ For Medicaid, the obesity-related costs are estimated to be \$21.3 billion.<sup>22</sup>
- A 2002 study published in *Health Affairs* suggests obesity increases health costs for inpatient and ambulatory care by 36 percent and medication costs by 77 percent, compared to people in a normal weight range.<sup>23</sup>
- Employers and businesses bear a sizable portion of costs associated with treating obesity-related conditions.<sup>24</sup> These costs are primarily for lost productivity, paid sick leave, and the increased cost of health, life, and disability insurance. Obese employees take more sick leave than non-obese employees and are twice as likely to have high-level absenteeism --seven or more absences due to illness during a six month period.<sup>25</sup>
  - ▲ In 1994, obesity led to 39.2 million days of lost work, 239 million restricted-activity days, and 89.5 million bed-days.<sup>26</sup>

## **OBESITY AFFECTS CERTAIN COMMUNITIES MORE THAN OTHERS**

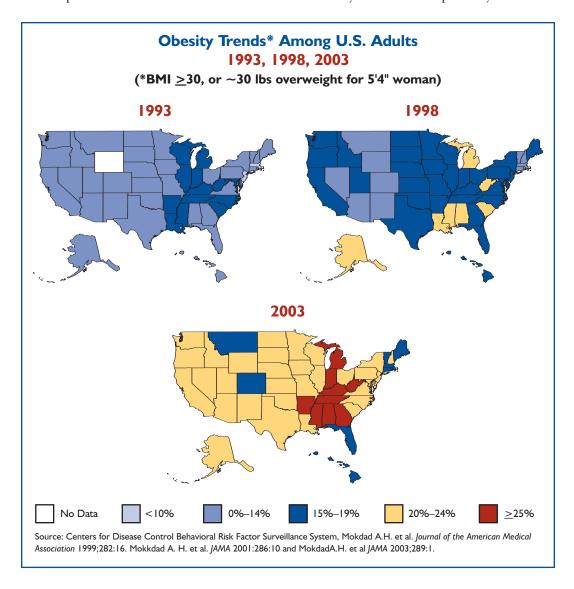
- Obesity rates are approximately twice as high in low-income groups as they are in higher-income groups.<sup>27</sup>
- Thirty-four percent of women are obese, compared to 28 percent of men.<sup>28</sup> Over 38 percent of African American women are obese, 27.5 percent of Latino women are obese, and 21.1 percent of Caucasian women are obese. In the African American and Latino communities, obesity is more prevalent among women than men; among Caucasians, the prevalence is higher for men.<sup>29</sup>
- Rates of obesity are highest in the Midwestern and Southern states. 30

# SOME FACTORS CONTRIBUTING TO OBESITY

- Eating habits
- Not getting enough physical activity
- Neighborhood design that limits physical activity
- Culture
- Limited availability or higher costs of healthy foods in many areas
- Genetics

# **OBESITY IN AMERICA: A HEALTH CRISIS**

The maps below demonstrate the dramatic rise in obesity rates over the past 15 years.<sup>31</sup>



# **OBESITY AND QUALITY OF LIFE**

- Obese people reported significantly greater disability due to body pain than did patients with other chronic medical conditions, with the exception of migraine sufferers.<sup>32</sup>
- Researchers have found discrimination against the obese in several areas, including hiring and promotion opportunities, acceptance to college, and opportunities to serve in the military or become commercial flight attendants (official guidelines limit the weight of personnel in these two groups).<sup>33</sup>
- One study found that obese children were 5.5 times more likely to have a poor quality of life than their healthy counterparts. Severely obese children even had a slightly lower quality of life than children undergoing chemotherapy; social stigma is believed to be the chief reason.<sup>34</sup>

# **ENERGY IMBALANCE: Obesity and Overweight Background**

Overweight and obesity result from an energy imbalance over time. Energy balance involves eating too many calories and engaging in too little physical activity. When calories consumed are greater than calories used (physical activity), weight gain results.

Humans evolved in an environment that demanded vigorous physical activity, included nutritious but mostly low-calorie foods, and was characterized by cyclical feast and famine. To survive, humans developed an innate preference for sweet foods and a strong pleasure response to dietary fat. These natural defenses against nutritional deficiency and starvation backfire in a modern environment where food is plentiful and technology reduces the need for daily physical activity.<sup>35</sup>

Obesity is defined as an excessively high amount of body fat or adipose tissue in relation to lean body mass.<sup>36</sup> Overweight refers to increased body weight in relation to height, which is then compared to a standard of acceptable weight.<sup>37</sup> Body mass index, or BMI, is a common measure expressing the relationship (or ratio) of weight-to-height. It is a mathematical formula:

Individuals with a BMI of 25 to 29.9 are considered overweight, while individuals with a BMI of 30 or more are considered obese. There are problems with BMI; it does not distinguish between fat and muscle. Therefore, individuals with a significant amount of lean muscle will have large BMI's, which do not indicate an unhealthy level of fat.

The National Institutes of Health adopted a lower optimal weight threshold in June 1998.

Previously, the federal government defined overweight as a BMI of 28 for men and 27 for women.

# Obesity in the States

In this section, TFAH examines the current status of each state's obesity and related health profile, and reviews its legislative and administrative actions aimed at obesity reduction.

tate governments have responsibility for the health of their citizens. Each state, through its health department, identifies health goals and strategies.<sup>38</sup>

Examples of some specific state health department programs: restaurant inspections, disease prevention, educational campaigns about the risks of overweight and obesity, and school health education.

Obesity is a complex issue, involving many contributing factors. While many states have recently started to initiate policies and programs aimed at obesity prevention and reduction, there is little research in place to help states determine the best approaches to take at the community and state levels for long-term results.

- Without this research, most states' policies are limited to encouraging individuals to eat less, exercise more, and to make changes in the schools where there are pre-existing structures related to nutrition and physical education.
- Most obesity-related initiatives have only been in place for short timeframes, and their definitive impact is unknown, particularly since there are few systems in place to evaluate the effectiveness of these programs.
- Additionally, these efforts are typically implemented in isolation from one other or in a piecemeal fashion, making it difficult to get a full and accurate picture of how each state is trying to manage the obesity crisis.

TFAH examined the efforts that states are making to begin to evaluate which obesity reduction initiatives are having the most positive impact and how the various programs interrelate. This information is important not only to help determine the impact of policies, but also to give states important information about how to cost-effectively invest in the most successful obesity control and reduction programs. Many states face budget difficulties, which resulted in 32 states cutting their public health budgets from fiscal year 2002 to 2003. By reducing obesity rates, the states may be able to save funds they currently spend on obesity-related health costs in programs such as Medicaid.

# **Section I is divided into three parts:**

**Part A:** State-by-state adult obesity levels; related disease levels; high school and child overweight levels; and obesity-related costs.

**Part B:** An examination of policies in the schools, including nutrition, health education, and physical education requirements.

**Part C:** A review of a range of community-focused actions taken by the states related to the obesity problem, including limiting obesity-related lawsuits; imposing taxes on foods with low nutritional content; health coverage issues; CDC-related grants; efforts to promote active living and more physical activity; and the impact of cost and access to healthy food in different communities.



# PART A: State-by-state adult obesity levels; related diseases levels; high school and child overweight levels; and obesity-related costs.

# TFAH examined the prevalence of obesity, diabetes, and hypertension among adults; overweight levels among children; and obesity-related health costs. TFAH found that:

- Every state is on track to fail to meet the national goal of reducing the proportion of adults who are obese to 15 percent or lower by the year 2010.
  - ▲ Forty-one states and the District of Columbia (D.C.) have adult obesity levels that exceed 20 percent.
  - ▲ Forty states and D.C. have diabetes levels of six percent or higher, far exceeding the national goal of two and a half percent by 2010.
  - ▲ Forty-eight states and D.C. have hypertension levels of 20 percent or higher, exceeding the national goal of 16 percent by 2010.
- Every state is on track to fail to meet the national goal of reducing the proportion of adolescents, including high school students, who are overweight or obese to five percent or lower by 2010.
  - ▲ Twenty-two states reported overweight levels above 10 percent for high school students.
  - ▲ Nineteen states and D.C. failed to track and report information about the weight of high school students.
- Every state failed to report information about overweight levels for children of young children (ages 2-5).
  - ▲ Thirty-three states and D.C. reported overweight levels of over 10 percent for low-income, young children (ages 2-5). Six states have levels over 15 percent.
- States spent \$75 billion on obesity-attributable medical costs in 2003.40

			TAB	LE I:	OBESIT	TY RA	TES AN	ND CO	STS			
	Percentage	Adult	Percentage	Adult	Percentage	Adult	Percentage of	High School	Percentage of	Low-Income	Medical Costs	Ranking for
	of Obesity	Obesity	of Diabetes	Diabetes	of	Hypertension	Overweight	Overweight	Overweight	Children 2-5	Related to	Medical Costs
	Adults	Ranking	Adults 2003	Ranking	Hypertension	Ranking	High School	Ranking	Low-Income	Overweight	Obesity	Related to
	2003	(I = highest		(I = highest	Adults 2003	(I = highest	2003	(I = highest	Children Ages	Ranking	(per person)	Obesity per
		percent)		percent)		percent)		percent)	2-5 2002	(I = highest percent)	2003	person (I = highest
										percent)		percent)
Alabama	28.4	I	8.7	6	33.1	3	13.5	7	NA	NA	\$293	9
Alaska	23.5	22	5	50	20.8	49	- 11	18	NA	NA	\$301	8
Arizona	20.1	40	6.3	34	22.7	44	10.8	19	11.4	30	\$135	51
Arkansas	25.2	6	7.4	19	30.5	4	NA	NA	11.6	28	\$243	32
California	23.2	23	7.2	22	23.4	38	NA	NA	17.3	2	\$216	43
Colorado Connecticut	16 19.1	51 46	4.7 5.9	51 42	19.8 24.2	50 31	NA NA	NA NA	8.7 NA	37 NA	\$192 \$246	44 30
Delaware	24	15	7.7	17	27.7	14	13.5	7	NA NA	NA	\$253	29
DC	20.3	37	8.2	10	25.2	23	NA	NA NA	12.8	16	\$660	1
Florida	19.9	43	8.5	7	29.3	7	12.4	12	13.3	12	\$234	37
Georgia	25.2	6	7.8	15	28	12	.	16	11.9	25	\$246	31
Hawaii	16.4	50	7.6	18	23.2	40	NA	NA	10.3	34	\$231	38
Idaho	21.8	29	6.3	34	23.1	41	7.4	29	11.6	28	\$166	49
Illinois	23.2	23	6.5	32	24.4	28	NA	NA	14	7	\$272	18
Indiana	26	4	7.8	15	27	16	11.5	15	12.7	17	\$264	22
Iowa	23.9	17	6.7	30	25.1	24	NA	NA	13.6	10	\$266	21
Kansas	22.6	27	6	40	23.3	39	NA	NA	12	24	\$241	35
Kentucky	25.6	5	8.5	7	29.8	6	14.6	3	16.8	3	\$282	15
Louisiana Maine	24.8 19.9	43	8.5 7.4	7 19	29 26	8 20	NA 12.8	NA I0	13.5 15.6	5	\$305 \$273	7 17
Maryland	21.9	28	7.4	27	25	25	NA	NA	13.6	7	\$278	16
Massachusetts	16.8	49	6.2	38	23.1	41	9.9	23	NA NA	NA	\$283	14
Michigan	25.2	6	7.9	14	26.8	17	12.4	12	12.4	20	\$291	10
Minnesota	23	25	5.5	47	22.2	46	NA	NA	13.2	13	\$258	25
Mississippi	28.1	2	- 11	I	33.4	2	15.7	I	NA	NA	\$263	23
Missouri	23.6	21	6.9	28	27.5	15	12.1	14	12.5	18	\$287	12
Montana	18.8	47	5.5	47	21.3	47	8.1	28	NA	NA	\$191	45
Nebraska	23.9	17	6.4	33	23.5	37	10.4	21	13.1	14	\$261	24
Nevada	21.2	33	6.3	34	23.6	36	NA	NA	12.4	20	\$150	50
New Hampshire	20.2 20.1	38 40	5.6 7.1	46 25	22.5 25.6	45 21	9.9	23 NA	15.1	6	\$235 \$271	36
New Jersey New Mexico	20.1	38	5.7	45	21.1	48	NA NA	NA NA	17.5 9.3	35	\$173	20 47
New York	20.2	34	7.4	19	25.3	22	12.9	9	16.8	3	\$317	5
North Carolina	24	15	8.1	11	28.6	11	12.5	11	NA	NA	\$254	28
North Dakota	23.7	20	6.2	38	24	32	9.3	27	11.2	32	\$330	3
Ohio	24.9	10	8.9	5	26.3	19	13.9	4	11.1	33	\$289	- 11
Oklahoma	24.4	14	7.2	22	28	12	11.1	16	NA	NA	\$243	33
Oregon	21.5	32	6.3	34	24	32	NA	NA	14	7	\$219	41
Pennsylvania	23.8	19	8	13	26.5	18	NA	NA	12.4	20	\$335	2
Rhode Island	18.4	48	6.8	29	28.9	9	9.8	25	NA 12.1	NA 22	\$283	13
South Carolina	24.5	13 26	9.3 7.1	4 25	28.8 24.8	10 26	NA 9.4	NA 26	12.1	23 18	\$256 \$255	26 27
South Dakota Tennessee	25	9	9.4	3	30.3	5	15.2	26	11.3	31	\$255	6
Texas	24.6	12	8.1	11	24.6	27	13.2	4	NA	NA	\$241	34
Utah	20.8	36	5.5	47	18.8	51	7	31	8.8	36	\$167	48
Vermont	19.6	45	5.8	43	23.1	41	10.8	19	13.1	14	\$228	39
Virginia	21.7	30	7.2	22	24.4	28	NA	NA	NA	NA	\$222	40
Washington	21.7	30	6.6	31	23.8	34	NA	NA	NA	NA	\$217	42
West Virginia	27.7	3	9.8	2	33.6	I	13.7	6	11.9	25	\$325	4
Wisconsin	20.9	34	6	40	24.3	30	10.4	21	11.8	27	\$272	19
Wyoming	20.1	40	5.8	43	23.8	34	7.2	30	8.6	38	\$174	46
TOTAL	22.8		7.1		24.8		11.1	_	14.3		\$258	_

Source: Adult Obesity, Diabetes and Hypertension Rates: CDC's Behavioral Risk Factor Surveillance Survey (BRFSS), 2003.

Source: Overweight Rate Among High School Students: CDC's Youth Risk Behavior Surveillance (YRBS), 2003, Overweight Rate Among Low-Income Children, Ages 2-5: CDC's Pediatric Nutrition Surveillance (PedNSS) 2002 Report, 2004.

Note: State Medical Costs Per Person are TFAH Calculations

# Healthy People Sets the Nation's Health Target Goals

Healthy People is the nation's agenda for health promotion and disease prevention. The goals are updated routinely by the Surgeon General. The current version is Healthy People 2010.

## **I: ADULT OBESITY AND DISEASE RATES**

Every state is on track to fail to meet the national goal of reducing the proportion of adults who are obese to 15 percent or lower by the year 2010.

Adult obesity in 41 states and D.C. exceeds 20 percent.

Forty states and D.C. have diabetes levels of six percent or higher.

Forty-eight states and D.C. have hypertension levels of 20 percent or greater.<sup>41</sup>

Forty-one states and D.C. have adult obesity levels above 20 percent; nine have levels of 25 percent or above. No state currently meets the national goal of 15 percent or lower, which was established by the U.S. Department of Health and Human Services (HHS) in its Healthy People 2010 report, which set health targets for the nation. In recent years, the percentages have been increasing, rather than getting closer to the national goals.

In 2003, obesity levels ranged from a high of 28.4 percent in Alabama to a low of 16 percent in Colorado. Although Colorado is the "thinnest" state, its obesity level has increased from 14.4 percent back in 2001.

Because obesity is associated with some medical conditions, including diabetes and hypertension, the levels for these conditions tend to correlate. Forty states and D.C. have diabetes levels of 6 percent or higher, and 48 states and D.C. have hypertension levels of

20 percent or higher. The most recent national-level data from CDC show a 33 percent increase in the national level of diabetes from 1990 to1998, with another six percent rise in 1999. Hypertension rates also have increased by 30 percent from the period 1988-1994 to the period 1999-2000.<sup>42</sup>

The analysis demonstrates that many states with relatively high obesity levels generally have high levels of diabetes. Mississippi, for example, has the second highest obesity level, 28.1 percent, and the highest level of diabetes, 11 percent. In contrast, Colorado, with the lowest obesity level, also has the lowest diabetes level, 4.7 percent.

The data show less correlation between obesity and hypertension, but there is a noticeable link in some states. West Virginia has the third highest level of obesity at 27.7 percent, and the highest level of hypertension at 33.6 percent. Mississippi, ranked second in obesity prevalence, also has the second highest level of hypertension at 33.4 percent. Colorado has the second lowest hypertension level at 19.8 percent.

The correlation among obesity, diabetes and hypertension levels does not hold for every state. Other demographic factors play significant roles in the prevalence of these medical conditions, such as age and race. For example, Florida ranks 43rd in obesity but ranks 7th in both diabetes and hypertension.

## 2: HIGH SCHOOL AND CHILD OVERWEIGHT LEVELS

Every state is on track to fail to meet the national goal of reducing the proportion of high school students who are overweight or obese to five percent or lower by the year 2010.

In 22 out of 31 reporting states, 10 percent or more of high school students were overweight. Nineteen states and D.C. failed to track and report information about high school students' weight.

Every state failed to report information about overweight information for all young children (ages 2-5) children.

In 33 states and D.C. out of 38 reporting states, 10 percent or more of low-income, young children (ages 2-5) were overweight. Six states had levels over 15 percent.

The CDC does not measure obesity in children or adolescents; that is left to the states.

While Healthy People 2010 sets national overweight and obesity goals for children and adolescents, states are not required to provide their information to the CDC.

Of the 31 state health departments that reported data for high school students' overweight levels in 2003, 22 of these states had rates above 10 percent.<sup>43</sup> The highest overweight levels were in Mississippi at 15.7 percent and Tennessee at 15.2 percent. The lowest were Utah at 7 percent, Wyoming at 7.2 percent, and Idaho at 7.4 percent. Nineteen states and D.C. did not report overweight data. <sup>44</sup>

The median overweight levels for high school students across the states is 11.1 percent. Another 14.5 percent of high school

students are categorized as at-risk of becoming overweight.<sup>45</sup> The percentages described here may be lower than the actual rates. The data are based on height and weight information reported by high school students which is not independently verified.

No goal is set in *Healthy People 2010* for overweight or obesity for young children.

Thirty-three states and D.C. out of the 38 health departments reporting information on overweight levels for low-income children, ages 2-5, had rates over 10 percent. 46 Six of these states — California, Kentucky, Maine, New Hampshire, New Jersey, and New York — had levels over 15 percent. The average across states was 14.3 percent.



# MISSING INFORMATION MISINFORMS POLICY

Nineteen states and D.C. failed to report overweight levels high school students.

No states report overweight levels for preschool children.

Thirteen states failed to report overweight levels for low-income children in federally funded maternal and child health programs.

Despite the importance of the obesity crisis, 19 states and D.C. failed to report information about numbers of overweight high school students to the CDC in 2003. Each year, CDC conducts a Youth Risk Behavior Surveillance System (YRBSS). YRBSS includes a national school-based survey conducted by the CDC and state/local school-based surveys conducted by education and health agencies. The survey monitors six health categories.

The non-reporting states were: Arkansas\*, California, Colorado, Connecticut, D.C., Hawaii, Illinois, Iowa, Kansas, Louisiana, Maryland, Minnesota, Nevada, New Jersey, New Mexico, Oregon, Pennsylvania, South Carolina, Virginia, and Washington.

The CDC and states do not survey information about the general population of preschool-aged children. Instead, trends about health information about children younger than age 5 is often derived from CDC's Pediatric Nutrition Surveillance System (PedNSS). This is a child-

based health surveillance system that monitors the nutritional status of low-income children in federally funded maternal and child health programs, such as the Special Supplemental Nutrition Program for Women, Infants and Children. Thirteen states did not report data about overweight information for children aged 2-5 in these programs for this survey in 2002.

The non-reporting states were: Alabama, Alaska, Connecticut, Delaware, Massachusetts, Mississippi, Montana, North Carolina, Oklahoma, Rhode Island, Texas, Virginia, and Washington.

Without this information, determining the scope of the problem and determining policies are virtually impossible. It is also not possible, therefore, to measure the effectiveness of overweight control and reduction programs aimed at children and youth in these states.<sup>47</sup>

\* Arkansas has since started a program to measure the Body Mass Index of all students.

# **ARKANSAS SETTING A NATIONAL EXAMPLE:**

# **Measuring Students' Body Mass Index**

In 2003, as part of a statewide multifaceted legislative initiative, Arkansas required every public school student to have an annual Body Mass Index (BMI) assessment performed and reported confidentially to parents. The legislation also required schools to provide parents with an explanation of the possible health effects of BMI, nutrition, and physical inactivity. The goal is to provide parents with information regarding the health risks their child could develop as a result of being overweight or underweight. In a 2003 policy statement, the American Academy of Pediatrics recommended BMI testing for children and adolescents to diagnose overweight and obesity.

During the 2003-2004 school year, approximately 440,000 public school students had their height and weight measured to assess BMI.<sup>50</sup> The results were mailed to parents, in the form of a letter, from June through July 2004. The Arkansas BMI project also includes a published statewide analysis, <u>The Arkansas Assessment of Childhood and Adolescent Obesity</u>. This report includes BMI data by gender, by race, and by grade. In addition, analyses are available at the individual school level, and by school district. With these reports, Arkansas can identify schools, school districts, and student populations that may need interventions to help reduce the prevalence of overweight. The Arkansas BMI project is following-up on the letter to parents in some cases because some very athletic students have tested as obese -- a problem with BMI testing which does not distinguish between fat and lean muscle.

The Arkansas Center for Health Improvement (ACHI) developed and implemented the BMI program at the request of the Arkansas Departments of Health and Education. ACHI is a nonpartisan organization seeking to improve the health of state residents and is sponsored by the University of Arkansas for Medical Sciences and the Arkansas Department of Health. For more information, see www.achi.net.

## **OVERWEIGHT DEFINED IN CHILDREN**

In children and teens, body mass index is used to assess underweight, overweight, and risk for overweight. Girls and boys differ in their body fat as they age. To determine whether children are overweight or at risk for being overweight, their BMI is compared to other children of the same age and gender, referred to as BMI-for-age.

At risk of overweight: BMI-for-age 85th percentile to < 95th percentile

Overweight: BMI-for-age > 95th percentile

The 95th percentile means that compared to children of the same gender and age, 95 percent have a lower BMI.<sup>51</sup>

#### 3. OBESITY-RELATED COSTS

## States spent \$75 billion on obesity-attributable medical costs in 2003.52

A 2004 study conducted by RTI International and the CDC's Division of Nutrition and Physical Activity examined the economic impact of obesity at the state level. Obesity-related costs in the states totaled \$75 billion in 2003. Of this amount, the researchers note that the government and ultimately the taxpayer are responsible for financing about half, or \$39 billion.<sup>53</sup>

The total costs include spending by the major federal health insurance programs, Medicare and Medicaid, and private health insurance spending. California was the state with the highest obesity-related expenditures at \$7.7

billion, and Wyoming had the lowest at \$87 million. Various factors contribute to these spending levels including the size of a state's population and differences in the prices of health services across the states.

Given that taxpayers are responsible for a large portion of obesity-related expenditures, these researchers argue the increased need for government interventions to reduce obesity rates. This is especially true among Medicaid beneficiaries because of the higher rate of obesity among these individuals and the high cost this passes along to states.<sup>54</sup>

TABLE 2: Total State Obesity-Related Medical Costs, Percent of Total State Medical Costs Related to Obesity, and Obesity-Related Medicaid Costs, 2003

		edicaid Costs,		
	Total State Medical Costs Related to	State Medical Costs Related to	State Ranking for Medical Costs Related	State Medicaid Costs Related
	<b>Obesity</b> (in millions)	<b>Obesity Per Person</b>	to Obesity Per Person	to Obesity
			(I = highest cost)	(in millions)
Alabama	\$1,320	\$293	9	\$269
Alaska	\$195	\$301	8	\$29
Arizona	\$752	\$135	51	\$242
Arkansas	\$663	\$243	32	\$180
California	\$7,675	\$216	43	\$1,713
Colorado	\$874	\$192	44	\$158
Connecticut	\$856	\$246	30	\$419
Delaware	\$207	\$253	29	\$66
D.C.	\$372	\$660	I	\$114
Florida	\$3,987	\$234	37	\$900
Georgia	\$2,133	\$246	31	\$385
Hawaii	\$290	\$231	38	\$90
Idaho	\$227	\$166	49	\$69
Illinois	\$3,439	\$272	18	\$1,045
Indiana	\$1,637	\$264	22	\$522
lowa	\$783	\$266	21	\$198
Kansas	\$657	\$241	35	\$143
Kentucky	\$1,163	\$282	15	\$340
Louisiana	\$1,373	\$305	7	\$525
Maine	\$357	\$273	17	\$137
Maryland	\$1,533	\$278	16	\$391
Massachusetts	\$1,822	\$283	14	\$618
Michigan	\$2,931	\$291	10	\$882
Minnesota	\$1,307	\$258	25	\$325
Mississippi	\$757	\$263	23	\$221
Missouri	\$1,636	\$287	12	\$454
Montana	\$175	\$191	45	\$48
Nebraska	\$454	\$261	24	\$114
Nevada	\$337	\$150	50	\$56
New Hampshire	\$302	\$235	36	\$79
New Jersey	\$2,342	\$271	20	\$630
New Mexico	\$324	\$173	47	\$84
New York	\$6,080	\$317	5	\$3,539
North Carolina	\$2,138	\$254	28	\$662
North Dakota	\$209	\$330	3	\$55
Ohio	\$3,304	\$289	II	\$914
Oklahoma	\$854	\$243	33	\$163
Oregon	\$781	\$21	41	\$180
Pennsylvania	\$4,138	\$335	2	\$1,219
Rhode Island	\$305	\$283	13	\$89
South Carolina	\$1,060	\$256	26	\$285
South Dakota	\$195	\$255	27	\$45
Tennessee	\$1,840	\$315	6	\$488
Texas	\$5,340	\$24	34	\$1,177
Utah	\$393	\$167	48	\$71
Vermont	\$141	\$228	39	\$40
Virginia	\$1,641	\$222	40	\$374
Washington	\$1,330	\$21	42	\$365
West Virginia	\$588	\$325	4	\$187
Wisconsin	\$1,486	\$272	19	\$320
Wyoming	\$87	\$174	46	\$23
Total	\$75,051	\$258		\$21,329
			in Eric A Fighalkern Ian C	

Source, Total State and Total Medicaid Costs Related to Obesity: Finkelstein, Eric A., Fiebelkorn, Ian C., Wang, Guijing, "State-Level Estimates of Annual Medical Expenditures Attributable to Obesity." Obesity Research Vol. 12. No. 1. January 2004. State Medical Costs Related to Obesity Per Person and State Ranking: TFAH calculation based on data from Finkelstein, et. Al.

# PART B: Food, Physical Education, and Health Education in the Schools

In a "Call to Action" issued by the U.S. Surgeon General in 2001, school-based programs were identified as a key way to address overweight and obesity in children and youth. As a result, health experts and policymakers have been increasingly focusing their efforts on school-based approaches to the problem.

Since almost all children and adolescents are enrolled in schools, and because over half of students eat one major meal in school, schools provide opportunities to practice healthy eating.<sup>55</sup> Additionally, according to the CDC, individuals begin to acquire and establish patterns of health-related behaviors during childhood and adolescence.<sup>56</sup>

TFAH and the Health Policy Tracking Service (HPTS) at Netscan iPublishing, Inc., (formerly of the National Council of State Legislatures) conducted a survey and review of key aspects of school programs related to nutrition and physical activity and found<sup>57</sup>:

- Only two states -- South Dakota and Texas -- set nutritional standards for school lunches, breakfasts, and snacks that go beyond existing U. S. Department of Agriculture (USDA) requirements.
- Only four states California, Hawaii, Texas, and West Virginia -- have nutritional standards for "competitive foods" in schools. These are foods not sold through formal school meal programs.
- Thirty-three states and D.C. do not limit the availability of competitive foods beyond federal requirements.
- Only two states -- Oklahoma and South Dakota -- do not require some form of physical education in elementary and secondary school.
- Only six states -- Alaska, Colorado, Kansas, New Mexico, Oklahoma, and South Dakota - do not require schools to provide health education.

While schools must follow federal standards when serving lunch and breakfast, increasing financial pressures and limited resources often make nutrition a low priority.<sup>58</sup> In addition, although most states require physical and health education, these requirements are often not enforced and many of these programs are inadequate. For example, according to a CDC survey of students, only 55.7 percent went to physical education classes on one or more days during an average week.59 Implementing and enforcing nutritional standards, combined with concerns about costs, impact the quality of nutrition programs and physical and health education in schools. Major complicating issues include:

- The capacity to enforce federal nutritional standards is absent in most states. <sup>60</sup>
- Almost all school districts rely on some level of revenue from vending machines that often sell popular but less healthy foods.<sup>61</sup>
- State education agencies point out that physical education policies are often not enforced because there are too many other mandated curriculum requirements.<sup>62</sup>
- Given tight school budgets, physical education is often viewed as less essential, especially when compared to math, science, and reading.<sup>63</sup>

TABL	E 3: OBESIT	Y RELATED	STANDAR	DS IN SCHO	OOLS
	Standards for School Meals Above USDA Requirements	Nutritional Standards for Competitive Foods	Limits Access to Competitive Foods	Physical Education Requirements	Health Education Requirements
Al-h				/	/
Alabama				1	1
Alaska				1	
Arizona				1	1
Arkansas			<b>√</b>	<b>√</b>	1
California		✓	<b>√</b>	✓	1
Colorado			<b>√</b>	✓	
Connecticut			<b>√</b>	✓	<b>√</b>
Delaware				✓	✓
DC				✓	✓
Florida			✓	✓	✓
Georgia			<b>√</b>	✓	1
Hawaii		1	1	1	1
Idaho				1	✓
Illinois			1	1	1
Indiana				1	1
lowa				1	1
Kansas				1	
Kentucky			1	1	1
Louisiana			1	1	1
Maine			1	<b>√</b>	1
			<b>V</b>	√ -	√ √
Maryland					<i>J</i>
Massachusetts				1	
Michigan				√	1
Minnesota				√	1
Mississippi			✓	√	1
Missouri				✓	1
Montana				<b>√</b>	1
Nebraska			✓	✓	✓
Nevada				✓	✓
New Hampshire				✓	✓
New Jersey				✓	1
New Mexico				✓	
New York			1	1	✓
North Carolina			✓	✓	✓
North Dakota				1	1
Ohio				1	1
Oklahoma					
Oregon				<b>√</b>	1
Pennsylvania				1	1
Rhode Island				1	1
South Carolina				<b>√</b>	1
South Dakota	1			V	•
Tennessee	<b>V</b>			<b>√</b>	1
	1	,	/	√ √	1
Texas	<b>V</b>	1	<b>√</b>	√ √	·
Utah					1
Vermont				1	1
Virginia				√	1
Washington				<b>√</b>	<b>√</b>
West Virginia		1	✓	✓	1
Wisconsin				1	1
Wyoming				✓	✓
Number of States	2	4	17	49	45



#### I. FOOD IN SCHOOLS

Food is typically available for sale in most schools in two ways:

- 1. The formal school lunch, breakfast, and after-school snack programs that are offered by state school systems in coordination with USDA's Food and Nutrition Service. USDA provides subsidies for states if the programs follow established national nutrition guidelines and offer "free or reduced-cost" meals to children from low-income households. In FY 2002, 28 million children participated in the National School Lunch Program<sup>64</sup> and another eight million participated in the School Breakfast Program.<sup>65</sup>
- **2.** "Competitive foods," which include food sold from snack shops, school stores, vending machines, and through à la carte lines in the cafeteria. Food from bake sales, fundraisers and other school activities are also considered "competitive foods." The nutrition of these foods is largely unregulated by the federal government; regulation is primarily left to the states and local school systems. <sup>66</sup>

# STUDYING SCHOOL LUNCH PROGRAMS

In 1993, the U.S. Department of Agriculture, the federal agency responsible for the School Lunch Program, determined that the nutritional content of school lunches was substandard and in need of reform. Subsequent changes sought to lower fat content and provide more access to fruits and vegetables.<sup>67</sup> Despite the modifications, many nutritionists and health advocates still criticize the nutritional content of school lunch offerings.

A 2003 U.S. Government Accounting Office (GAO) report on the School Lunch Program indicated that calories from fat still accounted for 34 percent of lunches served under the program in the 1998-99 school year. This figure represented a 4 percent decline from the 1991-92 level, but was still above the target ceiling of 30 percent.<sup>68</sup>

Dr. Walter Willett, the head of the Department of Nutrition at Harvard University's School of Public Health, says that School Lunch Program foods "tend to be at the bottom of the barrel in terms of healthy nutrition." Fruits and vegetables account for only one-quarter of the money USDA spends on School Lunch Program food commodities.

USDA states that while it has moved towards healthier menu options, these

healthy choices often compete for students' attention with unhealthy, higher-fat options in the lunchroom. For many students, the unhealthy varieties win out.<sup>71</sup>

As a result of the court ruling in *National Soft Drink Ass'n. v. Block*, USDA is only allowed to regulate food service areas/cafeterias during mealtime, and unhealthy foods with "minimal nutritional content" can be sold elsewhere on school property.

"In National Soft Drink Ass'n. v. Block, 721 F.2d I348 (D.C. Cir. 1983), the Court of Appeals for the District of Columbia overturned the federal regulation in effect at the time prohibiting the sale of foods of minimal nutritional value anywhere in the school from the beginning of the school day until the last meal period. The court construed a 1977 amendment to the Child Nutrition Act as allowing USDA to regulate the sale of competitive foods only in food service areas during meal periods. Following this decision, USDA amended its regulation to limit the prohibition of these foods to food service areas during meal periods."<sup>72</sup>

From "School Lunch Program: Efforts
 Needed to Improve Nutrition and
 Encourage Healthy Eating," U.S. General
 Accounting Office. May 2003.

# **FORMAL SCHOOL MEAL PROGRAMS**

Only two states -- South Dakota and Texas -- have set nutritional standards for school lunches, breakfasts, and snacks that go beyond existing USDA requirements.

Under the National School Lunch Program, schools must serve meals that meet the Dietary Guidelines for Americans. The Guidelines recommend that no more than 30 percent of a student's calories should come from fat and less than 10 percent should come from saturated fat. USDA requires school

lunches to provide one-third of the Recommended Dietary Allowances of total calories, protein, vitamins A and C, iron and calcium. School lunches are intended to provide students with one-third of their daily nutritional requirements and provide an example of a proper diet. While school lunches must meet the federal nutritional requirements, decisions about which foods to serve are made by local school boards.

STATE	ADDITIONAL NUTRITIONAL REQUIREMENTS FOR SCHOOL MEALS
South Dakota	The state sets additional standards for sodium, 73 cholesterol and fiber.  1. For breakfast (all grades), the following standards apply: Sodium=800 mg, cholesterol=75 mg, fiber=4.5 mg.  2. For lunch (all grades), the following standards apply: Sodium=1300 mg, cholesterol=75 mg. Fiber standards are followed for the given grade levels: K-3=3.8 mg, 4-12=5.9 mg, K-6=4.3 mg, 7-12=6.5 mg.  3. Standards for fat, saturated fat, and weight follow federal guidelines.
Texas	The Texas Public School Nutrition Policy sets nutrition and portion size standards for food and beverage items sold as school meals, à la carte, and those offered as a nutritious classroom snack. Portion restrictions are not placed on federal school meals offered to students.  Schools and other vendors may not serve food items containing more than 28 grams of fat per serving size more than twice per week.  French fries and other fried potato products must not exceed three ounces per serving and may not be offered more than once per week in elementary schools and three times per week in middle and junior high schools. Students may only purchase one serving at a time.  State policy requires that fruit and vegetables be offered daily on all points of service.

<sup>\*</sup> Tennessee enacted new legislation in May 2004 (HB 2783) requiring the State Board of Education to develop rules that establish minimum nutritional standards for individual food items sold or offered for sale to pupils in grades pre-K-8 through vending machines or other sources, including school nutrition programs.

# **COMPETITIVE FOODS**

Only four states -- California, Hawaii, Texas, and West Virginia -- have set nutritional standards for competitive foods. Since competitive foods are not part of the federally sponsored school meal programs, state and local school systems have primary responsibility for overseeing practices and regulations concerning competitive food standards.

STATE	NUTRITIONAL STANDARDS FOR COMPETITIVE FOODS
California	The following nutritional standards apply in elementary schools for those individual food items sold during morning or afternoon breaks (These nutritional standards for elementary schools have not been implemented because funding has not been allocated):  Maximum calories from fat: 35 percent for each individual food item.  Does not include the sale of nuts or seeds.  Maximum calories from saturated fat: 10 percent for each individual food item's total calories.  Maximum percent of sugar: 35 percent of total weight for each individual food item. Does not include the sale of fruits or vegetables.  The only beverages that may be sold in school vending machines are water, milk and 100 percent fruit juices or fruit-based drinks that are at least 50 percent fruit juice with no added sweeteners.  In middle schools, only beverages are restricted throughout the state.  From 30 minutes before the start of the school day to 30 minutes after the end of the school day, only the following may be sold: Fruit-based drinks composed of 50 percent fruit juice with no added sweeteners; water; milk, including, but not limited to, chocolate milk, soy milk, rice milk, and other similar dairy or nondairy milk; and an electrolyte replacement beverage that
	contains no more than 42 grams of added sweetener per 20-ounce serving.  Middle and high schools may also elect to participate in a pilot program that implements nutritional standards for all foods and beverages sold outside the federal meal program.
Hawaii	In secondary schools, the state places the following nutritional requirements on supplementary food and beverage items that can be sold during the meal periods.  Maximum calories from fat: 25 percent of total calories.  Maximum calories from saturated fat: 10 percent of total calories.  Maximum percent of sugar: 25 percent of total calories with the exception of fruit and vegetables.  Eighty percent of beverage selections from each vending machine at the schools shall be "healthy beverages," defined as milk, flavored milk, water, and fruit juice containing at least 50 percent juice, or other choices deemed appropriate by the Department of Education. The School Community Council and principal will determine the combination of beverages to be sold, including the remaining 20 percent of beverage selections, and shall have the discretion to ban caffeinated products. No alcoholic beverages, coffee, or coffee-based beverages may be dispensed.

STATE	NUTRITIONAL STANDARDS FOR COMPETITIVE FOODS
Texas	At elementary, middle, and secondary schools, portion size restrictions are placed on certain food and beverage items served or made available to students, with the exception of school meals. State policy places restrictions on portion size for the following items: Chips, baked chips, crackers, popcorn, cereal, trail mix, nuts, seeds, dried fruit, jerky, pretzels, cookies/cereal bars, bakery items, frozen desserts, yogurt, ice cream, pudding, gelatin desserts, and beverage items.
	Maximum calories from fat: Schools and other vendors may not serve food items containing more than 28 grams of fat per serving size more than twice per week. French fries and other fried potato products must not exceed three ounces per serving and may not be offered more than once per week and students may only purchase one serving at a time. Schools serving potato chips should use reduced fat, no more than five grams per ounce, or baked varieties when possible.
	Flavored or unflavored milks and other beverages may contain no more than 30 grams total sugar per eight-ounce serving. Frozen fruit slushes must contain a minimum of 50 percent fruit juice. In high school, the sale of sugared, carbonated beverages in containers larger than 12 ounces is prohibited. There are also portion restrictions for candy bars and packaged candies for secondary schools.
	Elementary school classrooms may allow one nutritious snack per day, but not at the same time as the regular meal period for that class. The snack must comply with the fat and sugar limits of the Public School Nutrition Policy and may not contain any minimal nutritional value foods or consist of candy or dessert-type items.
West Virginia	Only meal components may be sold as à la carte items for breakfast, and only fluid milk, milkshakes, and bottled water may be sold as à la carte items for lunch. All "other foods" (including those sold in vending machines, at fundraisers during the school day, and at school functions) will reflect the Dietary Guidelines or meet the USDA standard for a lunch component.
	<ul> <li>Maximum calories from fat: Limited to not more than eight fat grams per one-ounce serving or meet USDA standards for a lunch component.</li> <li>Maximum percent from sugar: 40 percent.</li> </ul>
	Any juice or juice product sold or served must contain a minimum of 20 percent fruit juice.

 $<sup>\</sup>ensuremath{^{*}}$  See note on page 19 for information on 2003 Tennessee nutrition standards legislation.

# Thirty-three states and D.C. do not limit the availability of competitive foods beyond federal requirements.

According to a March 2004 Government Accounting Office (GAO) report, federal regulations restrict only a small subset of competitive foods from being sold during meal times in cafeterias.<sup>74</sup> These include "foods of minimal nutritional value (FMNV)," such as candy, water ices, chewing gum, and soft drinks. Other competitive foods which are not regulated by the federal government include fruit, vegetables,

hamburgers, potato chips, French fries, pizza, and pretzels.

However, these federal regulations do not prohibit selling these minimal nutritional value foods *outside of the cafeteria* areas at any time during the day. States may set additional policies to limit the availability of competitive foods. The analysis below, based on a survey conducted by TFAH and HPTS, found that **17 states have adopted additional restrictions.** It includes state policies that limit the availability of competitive foods sold in vending machines as well as items sold in cafeterias or snack bars.

STATE	RESTRICTION ON COMPETITIVE FOOD AVAILABILITY
Arkansas	"In-school access" to vending machines is prohibited in elementary schools.
California	In elementary schools, the only food that may be sold to a pupil during breakfast and lunch periods is food that is sold as a full meal. This does not prohibit the sale of fruit, non-fried vegetables, legumes, beverages, dairy products, or grain products, if they meet the state's nutritional standards. Individual items that meet the state's nutritional standards may be sold during morning or afternoon breaks. Middle and high schools may participate in pilot programs that may place limits on competitive food availability.
Colorado	Competitive food service must be closed for a period beginning 30 minutes prior to and remain closed until 30 minutes after the last regular scheduled school lunch and/or school breakfast period on campus where these are served. During the 2004 state legislative session, new legislation (SB 103) was enacted requesting school districts to work with contractors to increase the nutritional value of foods in vending machines. By 2006-07, district school boards are required to adopt policies implementing a 50 percent threshold for healthy vending machine offerings.
Connecticut	No school food authority shall permit the sale or dispensing to students of extra food items (defined as tea, coffee, soft drinks, and candy) anywhere on the school premises from 30 minutes prior to the start of any state or federally subsidized milk or food service program until 30 minutes after such program. During the 2004 state legislative session, new legislation (HB 5344) was enacted requiring each local and regional board of education to make available nutritious, low-fat foods and drinks for purchase. Beverages should include, but are not limited to, low-fat milk, 100 percent natural fruit juices, and water when drinks are available for purchase. Low-fat dairy products and fresh or dried fruits should be made available for purchase at all times when food is available for purchase.
Florida	Foods of Minimal Nutritional Value may be sold in secondary school stores only one hour following the close of the last lunch period. The State Board of Education also requires school district food service programs to adopt policies that control the sale of FMNV.

STATE	RESTRICTION ON COMPETITIVE FOOD AVAILABILITY
Georgia	Prohibits the sale of Foods of Minimal Nutritional Value in elementary schools from the beginning of the day until the time when the last class/group of students eating lunch is scheduled to return to class.
Hawaii	The sale of food in all elementary and secondary schools shall be limited to the School Breakfast Program, School Lunch Program, milk, water, fruit, and vegetable juice containing at least 50 percent fruit and/or vegetable juice.
Illinois	Local school authorities for junior and senior high schools shall establish such instructions as are desired to regulate the sale of competitive foods to students during the time period designated by local school authorities as the regular breakfast and lunch periods.
Kentucky	The sale or serving of any food or beverage item to students in competition with the School Breakfast Program or the National School Lunch Program is to be prohibited on the school campus during the school day until 30 minutes after the close of the last lunch serving period.
Louisiana	A la carte meal service is prohibited. Some food items can be sold as extra sale items to those who completed a meal. Extra sale items must be an item from the menu that day. Exceptions to the extra sale items include milk-shakes, yogurt, frozen yogurt, ice cream, ice milk, and unflavored non-carbonated water. Reimbursement for lunch, special milk, and/or breakfast may be withheld from schools if concessions, canteens, snack bars, or vending machines are operated on a profit basis before the end of the last lunch period. Concessions/canteens may be open at the end of lunch for grades 7-12.
Maine	Any food or beverage sold during the school day of a school participating in the National School Lunch or Breakfast Programs must be a planned part of the total food service program. Only items that contribute to both the nutritional needs of children and the development of desired food habits will be sold.
Mississippi	School food services may only sell those foods that are components of the approved federal meal pattern being served, with the exception of milk. A student may only purchase individual components of a meal if a full meal was also purchased. The state policy is a minimum requirement. Local school boards may adopt more restrictive policies. State policy also indicates that no foods is to be sold on campus for one hour before breakfast or one hour before lunch and until the end of either serving period.
Nebraska	The sale of any foods in competition with the National School Lunch and School Breakfast Program is prohibited anywhere on school/institution premises during the period beginning 30 minutes prior to the serving period for breakfast and/or lunch and lasting until 30 minutes after the serving of breakfast and/or lunch.
New York	From the beginning of the school day until the end of the last scheduled meal period, no sweetened soda water, no chewing gum, no candy including hard candy, jellies, gum, marshmallow candies, fondant, licorice, spun candy and candy coated popcorn, and no water ices except those which contain fruit or fruit juices, shall be sold in any public school within the state.

STATE	RESTRICTION ON COMPETITIVE FOOD AVAILABILITY
North Carolina	Schools may not sell soft drinks to students at elementary schools. In middle and high schools, soft drinks may not be sold until after the last lunch period with the approval of the local school board. The State Department of Public Instruction also developed Eat Smart School Standard recommendations.
Texas	State policy prohibits an elementary school campus from serving competitive foods or Foods of Minimal Nutritional Value to students anywhere on school premises until the end of the last scheduled class (does not pertain to food items made available by the school food service program.) Middle schools are prohibited from serving or providing access to Foods of Minimal Nutritional Value and all other forms of candy at any time, anywhere on school premises until after the last lunch period.
West Virginia	No candy, soft drinks (exception for high school), chewing gum, or flavored ice bars will be sold or served during the school day. If soft drinks are sold in high school they may not be offered during the breakfast or lunch periods.

Some other states have taken recent actions that have not yet been implemented or have more limited scope than statewide policies or restrictions and, therefore, were not included with the 17 states discussed above. Some of these initiatives include:

STATE	OTHER COMPETITIVE FOOD INITIATIVES
Alaska	The state agency "encourages" districts to have policies that discourage competitive foods during federal child nutrition program times. "Team Nutrition" grants have been provided to nine Alaska communities to develop school nutrition policies.
Arizona	A pilot program, "Healthy School Environment Model Policy," is being tested in eight schools. The model policy provides guidance on restricting competitive foods during the school day.
Idaho	The Department of Education guidelines sent to districts "urge" schools to limit student access to unhealthy snacks and beverages.
Michigan	The State Board of Education "recommends" that each school building offer and promote certain food and beverages offered outside of the federal school meal program.
New Hampshire	Within the parameters of federal law, schools create their own policies around foods sold and eaten within a school day.
Ohio	State law requires public school districts to pass and enforce a local Food For Sale Policy through board resolution.
Oregon	If approved by a local school board, Foods of Minimal Nutritional Value may be sold outside the food service area during breakfast or lunch periods and may be offered outside a service program
Rhode Island	The state partners with community-based agencies through Team Nutrition Grants to promote more nutritious foods, including more nutritious vending machine offerings.

STATE	OTHER COMPETITIVE FOOD INITIATIVES
Vermont	During the 2004 session, new legislation (HB 272) was enacted requiring the Department of Education to develop a model school fitness and nutrition policy, which includes a definition of nutritious foods, nutritional guidelines regarding foods sold or served by the food service program, vending machines, snack bars, and school stores. Schools are not required to adopt the model policy.
Washington	Legislation enacted in 2004 requires the Washington State School Directors Association to develop a model school nutrition policy, but does not require schools to adopt this model policy. However, schools will be required to have a nutrition policy by the beginning of the 2005-06 school year.

# **USDA CONCERNS ABOUT "COMPETITIVE FOODS" IN SCHOOLS**

Many schools receive revenue from the sale of competitive foods. For instance, the Seattle School district earns about \$330,000 a year from vending machine contracts. In addition, an increasing number of school districts are entering into "pouring rights," contracts with soft drink companies. Under these contracts, the school agrees to promote one brand of soft drink exclusively in exchange for payments, with bonus incentives tied to sales. According to the American Academy of Pediatrics, such contracts already have provided schools with more than \$200 million in revenue.

Funds from competitive food sales are often used to pay for special activities or items not covered by the school's budget. In fact, to help manage budgets, some school food authorities have chosen to sell less healthful items in the cafeteria, in competition with USDA reimbursable meals.<sup>79</sup>

In 2001, USDA issued a report to Congress highlighting concerns about competitive foods80:

- **Diet-related health risks --** These foods are typically relatively low in nutrients and relatively high in fat, sugars, and calories, increasing the likelihood of over- consumption and unhealthy weight gain.
- Stigmatization of school meal programs -- The USDA report expressed concerns that the National School Lunch Program is often viewed as just for low-income children rather than available for all children.
- Impact on school meal programs -- The increase in competitive food sales and accompanying decrease in student participation in the National School Lunch Program has implications for the overall viability of the program. Declining participation results in decreased cash and commodity support from USDA for school meals. The reduction in federal funds may also contribute to less interest on the part of schools in maintaining quality school meal programs that meet set nutritional standards, undermining the substantial federal investment in the programs to provide healthy meals to children.
- A mixed message -- When children are taught in the in the classroom about good nutrition but are surrounded by vending machines, snack bars, school stores, and à la carte foods with low nutrients, they receive the message that good nutrition does not actually matter and is therefore not important.<sup>81</sup>

## LOCAL SCHOOL DISTRICT NUTRITION POLICY ACTIONS

There are over 14,000 school districts in the U.S., and many actions are being taken at the local level. Some examples of local school district actions include:

# **Opelika City School System, Alabama**

Officials have been working to improve nutrition policies a number of years. Some policy initiatives include:

- A prohibition on vending machines has been in place for 16 years.
- School cafeterias stopped frying foods in the early 1990s.
- Menus are analyzed to ensure nutritional appropriateness for the age and grade served. 82

# **Los Angeles Unified School District**

The school district passed a policy that effectively bans sodas during school hours as of January 2004. Sodas may, however, be sold on campus starting 30 minutes after the school day is over and at events such as football games. The policy restricts the types of beverages that can be served during the school day. Allowed beverages are water, milk, low-sugar electrolyte replacement beverages and vitamin waters, and fruit drinks that are at least 50 percent fruit juice with no added sweetener.<sup>83</sup>

# Washington, D.C., Schools

The D.C. Board of Education passed a resolution in July 2004 mandating the substitution of "junk food" and sodas with healthier snacks and beverages in school vending machines at seven schools beginning in October 2004. Pending the success of this pilot effort, the initiative will be adopted at all public schools by February 2005. Under the new policy, school vending machines will be restricted to selling only water, low- and fat-free milk, and fruit drinks that contain at least 50 percent fruit juice, and to stocking snacks that have no more than seven grams of fat and 15 grams of sugar. Dried fruit and nut and seed mixtures will be exempt from the restrictions. The resolution also sets maximum portion sizes for snacks such as chips, cookies, beverages, and frozen desserts and tasks the school district with introducing a marketing campaign by January 2005 to encourage healthy eating among students.<sup>84</sup>

## 2. PHYSICAL EDUCATION

Oklahoma and South Dakota are the only states that do not require some form of physical education in elementary and secondary school. However, the requirements in the other 48 states and D.C. are often ineffective because they are not enforced and numerous exemptions are permitted.

Illinois is the only state that requires daily physical education in every grade. However, TFAH and HPTS's analysis found that Illinois permits students to be excused from physical education requirements for various reasons, and a study by The Robert Wood Johnson Foundation (RWJF) notes that the state policy is not strongly enforced.<sup>85</sup>

While physical education standards may be required by the state, they are not necessarily enforced. Many state education agencies argue that physical education policies are often not enforced because there are already too many other mandated curriculum requirements. Some education experts point out that the Elementary and Secondary Education Act (ESEA), known as the No Child Left Behind Act, which emphasizes student achievement on standardized tests, is forcing school districts to divert limited resources away from programs that are not tested, like physical education and extracurricular sports. The state of the state of

In addition, states often allow schools exemptions from physical education standards.<sup>88</sup> Therefore, having requirements in place does not necessarily mean all students are receiving physical education.

Additional reasons cited for ineffective physical education requirements are:

- Physical education and extracurricular physical activities rarely have sufficient resources to be successful.<sup>89</sup>
- Physical education is often viewed as a less essential use of limited funds and time during the school day, compared with many core curriculum requirements, such as math, science and reading.<sup>90</sup>

The CDC, together with partners in other federal agencies and health organizations, developed "Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People," issued in 1997. The guidelines recommend comprehensive, daily physical education for students beginning in kindergarten through grade 12.91 Schools and communities have the potential to improve the health of young people by providing instruction and programs in physical education because they reach most children and adolescents.

Some research has shown that physical fitness levels affect student performance. An analysis by the California Department of Education found that higher student fitness levels were associated with higher performance on standardized achievement measures.<sup>92</sup>



STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
Alabama	30 minutes daily required in elementary and middle schools (50 minutes recommended for middle school).  One credit is required for high school graduation.	No exceptions in elementary or middle school, unless student attends a church school as defined by law. No exceptions for high school.
Arizona	Required for elementary and middle school. Duration and frequency are not specified. There is no requirement for high school.	Parents can withdraw a child if they object to any activity or learning material.
Arkansas	One hour per week required for elementary and middle schools. Physical education is required in high school, although frequency and duration are not specified. One-half credit is required for high school graduation.	Student may be excused for medical or religious reasons. The local school board must then "encourage" a student who has been granted a waiver to have appropriate instruction in health education or other lifestyle modification, as an alternative to physical education.
California	Elementary school requirement is 200 minutes every 10 days; requirement for grades seven and eight is 400 minutes every 10 days. For high school graduation, two physical education courses are required, unless exempted.	School district may grant temporary exemption if a student (1) is ill or injured and a modified program cannot be provided, or (2) is enrolled for one-half, or less, of the coursework normally required of full-time pupils. Students can be exempt for two years, if they passed the physical performance test administered in ninth grade. Permanent exemption from physical education is available for students 16 or older who are enrolled as a postgraduate pupil, or enrolled in a juvenile home, ranch, camp or forestry camp.
Colorado	Did not respond to survey.	
Connecticut	Required in elementary, middle and high school, although duration and frequency are not specified. One credit is required for high school graduation.	Student may be excused for medical reasons. Credit for physical education may be fulfilled by an elective.
Delaware	Required in elementary, middle and high school, although duration and frequency are not specified. One credit is required for high school graduation.	Student may be excused for medical or religious reasons.

STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
D.C.	One-and-one-half credits required for high school graduation. No response on elementary and middle school requirements.	The high school graduation requirement is waived for students participating in an evening high school diploma program.
Florida	No current physical education requirement for elementary and middle school. One credit is required for high school graduation. By Dec. 1, 2004, each district school board must adopt a physical education policy. Any district that does not adopt an education policy by Dec. 1, 2005, must at minimum provide 30 minutes of physical education three days a week for grades K-five. Statutes require each district school board to provide courses designed to ensure that students meet the Sunshine State Standards for Health and Physical Fitness.	Students may be excused if they participate in an interscholastic sport at the junior varsity or varsity level. Two full seasons satisfy the one-credit high school graduation requirement if the student passes a competency test on personal fitness with a score of C or better.  One-half credit is satisfied if a student completes one semester with a grade of C or better in:  I) a marching band class or in a physical activity class that requires participation in marching band activities or 2) Reserve Officer Training Corps class.
Georgia	Ninety hours required at each grade level in elementary school. One unit (140 hours) is required for high school graduation.	Not identified through statute or code.
Hawaii	One-and-one-half credits required for high school graduation. No response on elementary and middle school.	Did not provide an answer to survey question.
Idaho	Required in elementary, middle and high school, although duration and frequency are not specified.  One credit is required for high school graduation.	Not identified through statute or code.

STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
Illinois	Required daily in grades K-12.  Duration is not specified.	Student may be excused for medical reasons. School board is authorized to excuse students enrolled in grades 11-12 if they: 1) participate in an interscholastic athletic program; 2) are required to take an academic class necessary to enroll in college; 3) are required to enroll in an academic class needed to graduate from high school. Students in grades nine-12 may be excused if they enroll in a marching band or ROTC program. A vocational or technical course may be substituted for physical education in grades nine-12.
Indiana	Required in elementary, middle and high school. Recommended duration and frequency are: 105 minutes of motor skills development for grades one to three, 75 minutes of weekly physical education for grades four to six, and 100 minutes of physical education weekly for middle school. Two semesters are recommended in high school, and one credit is required for graduation.	Not identified through statute or code.
lowa	Required in elementary, middle and high school. Duration and frequency are only specified for high school at 50 minutes per week.	I 2th graders may be excused from the physical education requirement by the school principal if: I) the student is enrolled in work-study or other educational programs that requires the student to be off school premises during the day; 2) the student is enrolled in an academic class not otherwise available; 3) the student participates in an athletic program that requires at least as much time as the physical education requirement. Students in grades nine-I2 may be excused if requested by a parent or guardian. These students must then participate in an athletic program that requires at least as much time as the physical education requirement.

STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
Kansas	Required in elementary, middle and high school, although duration and frequency are not specified. One unit of physical education, of which 1/2 unit may include health education, is required for high school graduation.	High school graduation requirement may be waived for medical or religious reasons.
Kentucky	Required in elementary, middle and high school, although duration and frequency is not specified. One-half credit (60 hours) is required for high school graduation.	Students may be excused with a physician's note.
Louisiana	30 minutes required daily in elementary school, 150 minutes weekly required in middle school. One-and-one-half credits are required for high school graduation.	For elementary school, adapted physical activity shall be provided for students with special needs that prevent them from participating in regular physical education classes. No exception identified through statute or code for middle or high school.
Maine	Required in elementary, middle and high school, although duration and frequency are not specified. One unit is required for high school graduation.	Not identified through statute or code.
Maryland	Required in elementary, middle and high school, although duration and frequency are not specified. One-half credit is required for high school graduation.	Not identified through statute or code.
Massachusetts	Required in elementary, middle and high school, although duration and frequency are not specified.	Student may be excused for medical or religious reasons.
Michigan	Required in elementary, middle and high school, although duration and frequency are not specified.	School districts may credit a student's participation in extracurricular athletics or other extracurricular activities involving physical activity as meeting the physical education requirement.
Minnesota	Required in elementary, middle and high school, although duration and frequency are not specified.	Students may be excused for medical or religious reasons. Local school districts are given the authority to exempt students for athletic purposes.

STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
Mississippi	Required in elementary and middle school, although duration and frequency are not specified. Not required in high school.	Not identified through statute or code.
Missouri	Fifty minutes required per week in elementary school, with 25 minutes required weekly for half-day kindergarten students. Three thousand minutes are required per year in middle school. No requirements for frequency or duration are specified in high school; however, one unit is required for graduation.	Students may be excused for medical or religious reasons.
Montana	Required in elementary and middle school, although duration and frequency are not specified. One-half unit each year is required in middle school. In high school, one unit total (135 hours) is required for graduation, in increments of half units for two year	Not identified through statute or code.
Nebraska	Required in elementary and middle school, although duration and frequency are not specified. Daily physical education is required for two years in high school.	Not identified through statute or code.
Nevada	The state developed performance standards for physical education that are benchmarked for grades two, three, five, eight, and 12. Standards are designed to help districts develop and implement their own curriculum. Two credits are required for high school graduation.	Not identified through statute or code.
New Hampshire	Required in elementary, middle and high school, although duration and frequency are not specified. One unit is required for high school graduation.	Not identified through statute or code.

STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
New Jersey	150 minutes of health, safety and physical education required each week in elementary (except kindergarten), middle and high school. Three-and-three-quarters credits are required in health, safety and physical education for each year of attendance in high school.	Determined by local school boards. Schools are required to provide alternatives in order for students to meet the physical education core standards.
New Mexico	Required in elementary, middle and high school, although duration and frequency are not specified. One unit is required for high school graduation.	The high school graduation requirement may be waived because of a medical condition.
New York	120 minutes per week required in elementary school. Frequency requirements are daily for grades K to three and three times a week for grades four to six. In middle and high school, 120 minutes weekly are required, with frequency of three times per week in one semester and at least two times a week in the other semester. Two credits are required for high school graduation.	Not identified through statute or code.
North Carolina	Required in elementary, middle and high school, although duration and frequency are not specified. One unit is required for high school graduation.	Not identified through statute or code.
North Dakota	Required in elementary, middle and high school, although duration and frequency are not specified.	Not identified through statute or code.
Ohio	Required in elementary, middle and high school, although duration and frequency are not specified. One-half credit (60 hours) is required for graduation from high school.	Not identified through statute or code.
Oklahoma	No requirements at the state level.	
Oregon	Required in elementary, middle and high school, although duration and frequency are not specified.	Not identified through statute or code.
Pennsylvania	Required in elementary, middle and high school, although duration and frequency are not specified.	Not identified through statute or code.

STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
Rhode Island	An average of 20 minutes of daily health and physical education required in elementary, middle and high school.	Not identified through statute or code.
South Carolina	Required in elementary, middle and high school, although duration and frequency are not specified. One unit is required for high school graduation.	One Junior ROTC credit may be taken instead of physical education. Students who are physically or mentally unable to take physical education must take a suitable modified course.
South Dakota	No requirements at the state level.	
Tennessee	Required in elementary, middle and high school, although duration and frequency are not specified. One unit is required for high school graduation.	Credit earned in two years of Junior ROTC may be substituted; participation in marching band or interscholastic athletics may not be substituted.
Texas	I 35 minutes per week required in elementary school. Physical education is required in middle and high school, although duration and frequency is not specified. One-and-one-half units are required for high school graduation.	School districts may allow a student to substitute certain physical activities towards the high school graduation requirement. Waivers may be granted for credit to individual students for private or commercially sponsored programs in Olympic-level physical training.
Utah	Required in elementary, middle and high school, although duration and frequency are not specified. One-and-one-half units are required for high school graduation.	Not identified through statute or code.
Vermont	Required in elementary, middle and high school, although duration and frequency are not specified. One-and-one-half years of physical education are required for high school graduation.	Not identified through statute or code.
Virginia	Required in elementary, middle and high school, although duration and frequency are not specified. Two credits of health and physical education are required for high school graduation.	Not identified through statute or code.

STATE	PHYSICAL EDUCATION REQUIREMENT SET AT STATE LEVEL	POLICY FOR BEING EXCUSED FROM PHYSICAL EDUCATION
Washington	Required in elementary, middle and high school, although duration and frequency are not specified. Two credits (300 hours) of health and fitness education are required for high school graduation.	Student may be excused on account of physical disability, employment or religious beliefs, or because of participation in athletics or military science and tactics, or for other good cause.
West Virginia	Required in elementary, middle, and high school, although duration and frequency are not specified. One credit is required for high school graduation.	Not identified through statute or code.
Wisconsin	Required in elementary, middle and high school. Frequency is only specified for elementary school, three times per week. Duration and frequency are not specified for middle and high school. One-and-one-half credits are required for high school graduation.	Not identified through statute or code.
Wyoming	Required in elementary, middle, and high school, although duration and frequency are not specified.	Not identified through statute or code.

<sup>\*</sup> The data in this chart do not distinguish between what schools are required to offer and what students are required to take.

# 3. HEALTH EDUCATION.

Only six states -- Alaska, Colorado, Kansas, New Mexico, Oklahoma, and South Dakota -- do not require schools to provide health education.

Healthy People 2010 states that health education should include information about the consequences of unhealthy diets and inadequate physical activity. Health education seeks to teach students about maintaining good health, including the proper nutrition and the value of physical activity, which are key to controlling obesity. The CDC notes that health education can effectively pro-

mote students' health-related knowledge, attitudes, and behaviors.<sup>93</sup> The education programs are intended to help students set a foundation for maintaining good nutritional habits and a physically active lifestyle.

Forty-four states and D.C. require schools to provide some health education to students in elementary, middle, or senior high school. However, there are indications that some states are beginning to reduce classroom time devoted to health education to focus on areas considered core academic requirements, such as reading, writing, and math.<sup>94</sup>

STATE	STATE HEALTH EDUCATION REQUIREMENTS
Alabama	Required each year in elementary and middle school. Requirements for frequency and duration: 60 minutes per week in elementary school; in grades seven and eight, schools can choose 60 minutes per week or the high school amount, 70 hours total. One-half credit (70 hours) is required for high school graduation.
Alaska	Not required in elementary, middle, or high school. In high school, one credit (two semesters) of health or physical education is required for high school graduation.
Arizona	Required in elementary and middle school, but not in high school. For schools offering health education, the courses must comply with standards set by the state board of education.
Arkansas	Required each year in elementary and middle school. One-half credit of health and safety classes is required for high school graduation.
California	Required in grades K-six, but not in grades seven or eight or high school. For schools offering health education, the courses must comply with standards set by the state board of education.
Colorado	No state requirement. A voluntary health education program exists.
Connecticut	Required in elementary, middle and high school.
Delaware	In grades one to four, required 30 hours per year; 35 hours per year are required in grades five and six. Grades seven and eight must have 60 hours per year. In high school, one-half credit is required for graduation
D.C.	One-and-a-half credits of health education are required for high school graduation. Did not provide response to survey question about elementary and secondary school requirements.
Florida	Not required in elementary and middle school. In high school, one-half credit is required for graduation.
Georgia	Ninety hours of health and physical education are required in elementary school. There are no health education requirements for middle school; schools must offer health education. One unit (140 hours) of health education is required for high school graduation.
Hawaii	Required in elementary school. One semester is required in middle school. One-half credit is required for high school graduation.
Idaho	Required in elementary and middle school. One credit is required for high school graduation. The state board of education developed health education content standards that are a minimum requirement for schools.
Illinois	In elementary school, health instruction must be provided for each grade level. One semester must be taught both in middle and high school.
Indiana	Required each year in elementary and middle school. One credit is required for high school graduation.

STATE	STATE HEALTH EDUCATION REQUIREMENTS		
lowa	Elementary and middle schools must teach health education at each grade level to receive accreditation. One unit must be taught in high school for school to receive accreditation.		
Kansas	No state requirement. School districts are responsible for determining whether health education should be offered.		
Kentucky	Required in elementary and middle school. One-half credit (60 hours) is required for high school graduation.		
Louisiana	A minimum of 150 minutes of health education is required in elementary and middle school. One-half credit is required for high school graduation. The state developed the Louisiana Health Education Content Standards, which schools are required to follow.		
Maine	Required in elementary and middle school. One-half unit is required for high school graduation.		
Maryland	Required in elementary and middle schools. One-half credit is required for high school graduation.		
Massachusetts	Required in elementary, middle, and high schools.		
Michigan	Required in elementary, middle, and high schools.		
Minnesota	Required in elementary and middle schools. In high school, health education must be taught at least once.		
Mississippi	Required in elementary and middle school. One-half credit (70 hours) is required for high school graduation. Mississippi developed the Comprehensive Health Framework, and the competencies contained in the Framework are required for all grade levels.		
Missouri	Required in elementary, middle, and high school. The Missouri School Improvement Program sets requirements for health education at all grade levels.		
Montana	Required in elementary and middle school. One unit (135 hours) is required for high school graduation.		
Nebraska	Required in elementary and middle school. In high school, required daily for two years.		
Nevada	Required in elementary and middle school. One-half credit (60 hours) is required for high school graduation.		
New Hampshire	Required in elementary and middle school. One-quarter credit is required for high school graduation.		
New Jersey	I 50 minutes of health and safety education are required each week in elementary and middle school. Three-and-three-quarters credits of health, safety and physical education are required for each year of high school attendance.		
New Mexico	Not required.		

STATE	STATE HEALTH EDUCATION REQUIREMENTS		
New York	Required in elementary school. In middle school, a half-year course is required. One-half credit is required for high school graduation.		
North Carolina	Required in elementary and middle school. One credit is required for high school graduation.		
North Dakota	Under school accreditation requirements, 40 minutes of health education weekly are required for grades one to three, 80 minutes are required weekly for grades four to six, and 60 hours per year are required for grades seven and eight. One unit of health and physical education is required for high school graduation.		
Ohio	Required in elementary and middle school. One-half credit (60 hours) is required for high school graduation.		
Oklahoma	Not required. The Priority Academic Student Skills for (PASS) Health and Safety has been adopted describing what students should know about health and safety by grade level.		
Oregon	Required in elementary and middle school. One credit of health education is required for high school graduation.		
Pennsylvania	Required each year in elementary school. Health education is also required in middle and high school, although frequency and duration are not mandated by the state.		
Rhode Island	An average of 20 minutes of daily health and physical education required each year in elementary, middle, and high school.		
South Carolina	Required in elementary school 75 minutes per week and must be taught each year. Health education must be taught each year in middle school. In high school, each student must receive a comprehensive health education course for 36 weeks.		
South Dakota	Not required. The state developed the South Dakota Health Education Standards, but schools are not required to follow these.		
Tennessee	Required in elementary and middle school each year. One unit is required for high school graduation.		
Texas	Required in elementary and middle school each year. One-half credit is required for high school graduation.		
Utah	Required in grades three to six. One-half credit is required to advance to high school. In high school, one-half credit is required for graduation.		
Vermont	Required in elementary, middle, and high school.		
Virginia	Required in elementary and middle school. Two credits (140 hours) of health and physical education are required for high school graduation.		
Washington	Required in elementary and middle school. Two credits (300 hours) of health and fitness education are required for graduation.		

STATE	STATE HEALTH EDUCATION REQUIREMENTS
West Virginia	Required in grades K-four. Health education must be taught as a separate subject in grades five to eight. One credit is required for high school graduation.
Wisconsin	Required in elementary school. For grades seven-12, students must complete one-half credit for high school graduation.
Wyoming	Required in elementary and middle school. While not listed as a high school graduation requirement, students must demonstrate proficient performance in core knowledge and skills, including health education.

## PART C: State Policies and Actions Aimed at Obesity Prevention, Control, and Reduction

TFAH examined a number of state obesityrelated policies and actions that aren't schoolbased. These include tax policies; litigation restrictions; efforts to bolster active living programs and improve recreational areas and facilities; and programs addressing food cost and accessibility issues, including supermarket access in urban and rural areas. TFAH found:

- Eleven states have enacted laws that limit liability for obesity.
- Seventeen states and D.C. have enacted a "snack" or soda tax.
- Most states have councils on physical fitness and health, and 18 state legislatures or governors established newer commissions on obesity, nutrition, or physical activity from January 2002 to September 2004.
- Most medical care for obesity centers on treatment rather than prevention, but still only four states require health insurance plans to offer coverage for obesity surgery.
- Due to limited resources, only 28 states have received funds from the CDC for state-based nutrition and physical activity programs aimed at reducing prevalence of obesity and other chronic diseases.
- Due to limited resources, only 23 states have received funds from CDC for school health programs aimed at encouraging behaviors that reduce students' risk of obesity.
- Food costs and availability have been shown to have a strong impact on obesity rates in communities.
- Programs and initiatives to promote active living are in initial phases, but more research is needed to further understand and develop these programs.

	TABL	E 4: STATE	INITIATIVES F	OR ALL RESIDI	ENTS	
	Laws Limiting Liability in Obesity Lawsuits (Cheeseburger Laws)	Junk Food Tax	Recent* Commissions on Obesity, Nutrition, Physical Activity	Mandated Benefits Coverage Requirements for Morbid Obesity in the States	CDC State-Based Nutrition & Physical Activity Program	CDC Funds to Improve School Health Programs
Alabama						
Alaska						
Arizona Arkansas		<b>√</b>	<b>√</b>		√ √	1
California		√ √	√ √		<b>√</b>	√ √
Colorado	<b>√</b>	<b>V</b>	<b>V</b>		<b>√</b>	<b>J</b>
Connecticut	V				<u> </u>	•
Delaware						
DC		1				
Florida	<b>√</b>		1		<b>√</b>	1
Georgia	✓		1	<b>√</b>	✓	
Hawaii			<b>√</b>			1
Idaho	✓					
Illinois	✓	1	1		✓	
Indiana		1		✓		✓
Iowa					✓	
Kansas						<b>√</b>
Kentucky		✓	√		<b>√</b>	✓
Louisiana	✓		1			,
Maine		✓	J		√	<b>√</b>
Maryland				<b>√</b>	1	,
Massachusetts					1	1
Michigan		/			<b>√</b>	✓
Minnesota Mississippi		✓	<b>√</b>			
Missouri	<b>√</b>	<b>√</b>	<b>V</b>		<b>√</b>	
Montana	V	<b>V</b>			J	
Nebraska					<b>V</b>	
Nevada			<b>√</b>			
New Hampshire						
New Jersey		1	1			
New Mexico			1		✓	
New York		1	<b>√</b>		✓	1
North Carolina					✓	1
North Dakota		1				<b>√</b>
Ohio						
Oklahoma			✓		✓	
Oregon					1	✓
Pennsylvania					1	,
Rhode Island		✓			1	1
South Carolina	,				√ /	1
South Dakota	√ 	,	,		<b>√</b>	1
Tennessee	✓	√ √	√ √		<b>√</b>	<b>√</b>
Texas Utah	<b>√</b>	7	<b>V</b>		<b>√</b>	
Vermont	<b>V</b>				<b>√</b>	<b>√</b>
Virginia		<b>√</b>		<b>√</b>		V
Washington	<b>√</b>	<b>√</b>	1		✓	1
West Virginia		1	· ·		<b>√</b>	1
Wisconsin					1	1
Wyoming						
Number of States	П	18	18	4	28	23

<sup>\*</sup> Recent Defined as from January 2002 to September 2004

#### 1. Eleven states have enacted laws that limit liability for obesity.

Eleven states have passed "limited liability" laws that prevent individuals from suing restaurants, food manufacturers, and marketers for contributing to unhealthy weight and related health problems, according to the survey conducted by TFAH and the HPTS. On the federal level, the U.S. House of Representatives passed limited liability legislation in March 2004. "The Personal Responsibility in Food Consumption Act" (H.R. 339) passed the House 276-139. The bill is now pending before the U.S. Senate.

Limited liability laws are fairly controversial. Proponents argue a position similar to the one the National Restaurant Association took when the House passed H.R. 339. The Association called it a "day when common sense and personal responsibility prevailed." Passage of the bill indicates a level of support for the view the obesity is an individual health issue. Bill supporters also endorsed the White House's statement that "food manufacturers and sellers should not be held liable for injury because of a person's consumption of legal, unadulterated food and a person's weight gain or obesity."

Opponents of limited liability laws support a position similar to the following one taken by the Center for Science in the Public Interest (CSPI) in regard to H.R. 339: "If lawmakers really wanted to encourage personal responsibility, they should require restaurants to list calories and other nutrition information on menus and menu boards. It's impossible for consumers to exercise personal responsibility when businesses are concealing important information about their products."

The Association of Trial Lawyers of America (ATLA), another opponent of the federal law, contested the claim that lawsuits were progressing through the justice system. According to ATLA President David S. Casey, Jr., "the few that have been filed have been dismissed in the early stages, proving, once again, that the civil justice system works. It is not the role of Congress to do what the courts themselves are already doing."98

The 11 states with laws limiting liability are:

STATE	LIABILITY LIMITATION LAW	
Colorado	May 2004. Protects a manufacturer, packer, distributor, carrier, holder, or seller of any food or beverage from civil liability for any claim arising from weight gain, obesity, a health condition associated with weight gain or obesity, or other injury caused by or resulting from the long-term consumption of food. The limitation of civil liability shall not bar a claim based on material violation of a composition, branding or labeling standard set by state or federal law.	
Florida	May 2004. Protects a manufacturer, distributor, or seller of any food or nonalcoholic beverage from civil liability for personal injury or wrongful death associated with weight gain, obesity, or a health condition associated with weight gain or obesity resulting from the long-term consumption of food. The limitation of civil liability shall not bar a claim if the aforementioned entities failed to provide nutritional content information as required by state or federal law or has provided materially false or misleading information.	

STATE	LIABILITY LIMITATION LAW
Georgia	May 2004. Protects a manufacturer, packer, distributor, carrier, holder, seller, marketer, or advertiser of any food or beverage, or an association of those entities, from civil liability for any claim arising from weight gain, obesity, a health condition associated with weight gain or obesity, or other generally known condition allegedly caused or likely to result from the long-term consumption of food. The limitation of civil liability shall not bar a claim based on material violation of adulteration or misbranding or any other violation of federal or state law.
Idaho	April 2004. Same as Georgia (see above).
Illinois	July 2004. Protects a seller of a food from civil liability resulting from weight gain, obesity, or a health condition associated with weight gain or obesity. The limitation of civil liability shall not bar a claim if the seller violated federal or state statute applicable to marketing, distribution, advertisement, labeling, or sale of the product. The limitation shall also not bar a claim for breach of contract or express warranty in connection with the product, or an action of adulteration.
Louisiana	June 2003. Protects a manufacturer, distributor, or seller of any food or nonalcoholic beverage from civil liability for any claim arising from weight gain, obesity, or a health condition associated with weight gain or obesity resulting from the long-term consumption of food.
Missouri	June 2004. Protects a manufacturer, packer, distributor, carrier, holder, seller, marketer, retailer, or advertiser of any food or beverage, or an association of those entities, from civil liability for any claim arising from weight gain, obesity, or a health condition associated with weight gain or obesity resulting from the long-term consumption of food. The limitation of civil liability shall not bar a claim based on material violation of adulteration or misbranding or any other violation of federal or state law.
South Dakota	March 2004. Protects a manufacturer, seller, trade association, livestock producer, or retailer of any food or beverage from civil liability for any claim arising from weight gain, obesity, or a health condition associated with weight gain or obesity resulting from the long-term consumption of food.
Tennessee	April 2004. Same as Georgia (see above).
Utah	March 2004. Protects a manufacturer, packer, distributor, carrier, holder, seller, marketer, or advertiser of any food or beverage, or an association of those entities, from civil liability for any claim arising from weight gain or obesity resulting from the long-term consumption of food. The limitation of civil liability shall not bar a claim based on material violation of adulteration or misbranding or any other violation of federal or state law.
Washington	March 2004. Protects a manufacturer, packer, distributor, carrier, holder, marketer, seller, or an association of those entities, from civil liability for any claim arising from weight gain, obesity, or a health condition associated with weight gain or obesity, resulting from the long-term consumption of food.

<sup>\*</sup> When defining food, states usually refer to Section 201(f) of the Federal Food Drug and Cosmetic Act [21 U.S.C. 321(f)].

#### 2. Seventeen states and D.C. have enacted a "snack" or soda tax.

Taxing products is one way legislatures try to influence consumers' buying practices. The federal and state governments have imposed taxes on items such as alcohol and tobacco to raise revenue, but also to promote public health and discourage consumption. The National Governors Association's Center for Best Practices and the World Health Organization (WHO) have noted that taxes on "junk foods" are possible tools governments can use to influence consumer choices. <sup>99,100</sup> One reason for imposing such taxes is to raise the price of high-calorie foods with few nutrients and encourage consumers to switch to healthier foods.

TFAH's analysis found that nearly all the states administering soda and snack food taxes use the funds for general revenue purposes. Arkansas and West Virginia are the only two states that designate tax receipt funds for health-related spending. Arkansas's tax on soft drinks raises over \$40 million annually to help finance its portion of Medicaid expenses. West Virginia uses the funds for medical, dental, and nursing schools at West Virginia University.

These taxes are very controversial. Proponents of the taxes argue that a tax on junk food could be used to fund a healthy eating and nutritional information campaign, allowing anti-obesity crusaders to compete with the massive advertising budget of the food industry. CSPI, a leading proponent of the junk food tax, has stated: "The government needs to do more than just cross its fingers and hope that the obesity epidemic goes away. It needs to mount campaigns and implement policies that will make it easier for people to eat well and be active."102 WHO suggests taxing unhealthy foods and lowering the cost of healthier options in an effort to combat obesity and overweight prevalence throughout the world.103

Opponents argue that junk food taxes are:

- Regressive. Individuals with lower incomes spend a greater proportion of their incomes on food, including junk foods, and therefore the tax is primarily a tax on low-income people. Additionally, since the tax is the same for the poor as it is for the rich, the tax eats up a bigger percentage of the poor consumer's income.
- Unlikely to encourage many people to substitute healthier foods for junk food. The British Heart Foundation, responding to a similar U.K. proposal, stated that "few people would seriously consider avoiding these foods altogether." <sup>104</sup>
- Difficult to administer, burdensome, and leads to consumer confusion. <sup>105</sup>
- Penalize the wrong target. If manufacturers are to blame for the prevalence and damage of unhealthy food, they should be burdened by taxes, rather than their consumers.<sup>106</sup>

Public opinion is somewhat divided on the issue of a junk food tax. "Forums on Health" at Harvard University sponsored a national poll of 1,002 Americans in 2003 and found that 41 percent "somewhat supported" or "strongly supported" a special tax on junk food.<sup>107</sup>

A Minnesota poll of over 800 state residents found similar percentages – 42 percent supported a potential junk food tax, of whom 25 percent "strongly supported" such an initiative. Forty percent of state residents strongly opposed a tax.<sup>108</sup>

Seventeen states and D.C. currently have laws that permit foods of low nutritional value to be taxed (see below). This assessment does not include a comprehensive review of all food tax policies in all states. Some states with a general food tax that covers "junk food" may not be included in this evaluation.

STATE	SODA TAX	SNACK TAX	REVENUE PURPOSE
Arkansas	\$0.21 per gallon of soft drink; \$2 per gallon of soft drink syrup.		Arkansas Medicaid Program Trust Fund
California	7.25 percent		General Funds
D.C.	9 percent	9 percent	General Funds
Illinois	6.25 percent	I percent	General Funds
Indiana	6 percent	6 percent	General Funds
Kentucky	6 percent	6 percent	General Funds
Maine	7 percent	7 percent	General Funds
Minnesota	6.5 percent	6.5 percent; bakery products exempt	General Funds
Missouri	\$0.003 per gallon of soft drinks produced (excise).		General Funds
New Jersey	6 percent	6 percent	General Funds
New York	4.25 percent	4.25 percent	General Funds
North Dakota	5 percent	5 percent	General Funds
Rhode Island	\$0.04 per case of soft drinks (excise).		General Funds (excise), local government (sales)
Tennessee	1.9 percent of gross receipts from soft drinks and soft drink ingredients paid by manufacturers and bottlers.	6 percent	General Funds. Soft drink tax for highway litter control. Sales tax expires June 1, 2005
Texas	6.25 percent 6.25 percent 0		General Funds
Virginia	Small excise tax on wholesalers and distributors based on total sales of carbonated soft drinks.		Litter control and recycling
Washington	\$1 per gallon of syrup		Violence prevention and drug enforcement
West Virginia	carbonated and non-		West Virginia University medical, dental, and nursing schools

<sup>\*</sup> In South Dakota there is an initiative on the November 2004 ballot that would exempt food from sales tax, but would not include soft drinks or candy/confections

The research for this chart is based on a study conducted by Yale University and published in the June 2000 issue of the American Journal of Public Health. The study contained a detailed listing of states that at that time incurred sales and/or excise taxes on soft drinks and/or snack foods. Using the Yale study as base data, HTPS then used the 2001, 2002, and 2003 editions of the National Conference of State Legislatures' State Tax Actions publications to see if any of the listed states had changed their food tax laws or if any other state enacted new food tax laws that would affect snack and soda tax policies. It would be advised that the chart compiled by HPTS not be used as a definitive source of information for a topic as complex as food tax requirements. HPTS did not research how states define "food" under their respective tax policies, which may or may not include snack items.

# 3. Eighteen state legislatures or governors established a commission on obesity, nutrition, or physical activity from January 2002 to September 2004.

TFAH's analysis does not include a review of existing councils on physical fitness and sports. Most of these were created in the 1960s and 1970s after the President's Council on Physical Fitness and Sports encouraged states to develop councils of their own. An estimated 29 states currently have these councils; it is difficult to deter-

mine the exact number because of changes in state administrations and the priorities of new governors. These councils largely serve in an advisory capacity and consist of volunteers with expertise in physical activity and health. While some states provide funding, many councils rely on private donations or operate without budgets.<sup>109</sup>

STATE	LEGISLATIVE AND GUBENTORIAL COMMISSIONS ON OBESITY OR NUTRITION
Arkansas	Legislation enacted in 2003 established the Child Health Advisory Committee which has offered these policy recommendations to the Boards of Education and Health:  1) Half of beverages in vending machines should be 100 percent fruit juice.  2) Elementary school students should be provided a minimum of 150 minutes of P.E. per week, middle and high school students should receive a minimum of 225 minutes week.  3) Child Nutrition Programs should adopt the Healthy Practices outlined in USDA's Schools Meals Initiatives Recommendations, which include more fruits and vegetables, reduced-fat chips, not using food as classroom rewards, and oven-baking whenever possible.  4) Long-term recommendations also include longer meal times, more physical activity and development of a school evaluation plan.  Legislation in 1999 created the Obesity Task Force at the Arkansas Department of Health. The Task Force provides recommendations for strategies for prevention and treatment of childhood, adult, and geriatric obesity. Recommendations included creation of a statewide Obesity Council; legislation for increased P.E. and activity in schools; an adult obesity program focusing on economic incen-
	tives; and a geriatric obesity program stressing education and awareness.
California	<ul> <li>A 2002 law established the California Task Force on Youth and Workplace Wellness, which recommends:</li> <li>I) Creation of physical education, nutrition, and activity standards and requirements for after-school snack programs.</li> <li>2) Integration of nutrition and P.E. into the standard K-12 curriculum.</li> <li>The Task Force is publishing the California Workplace Wellness Handbook that businesses can use as a guide to promote a healthier work environment. The Handbook will offer information on nutrition, fitness, smoking, and health care access.</li> </ul>

STATE	LEGISLATIVE AND GUBENTORIAL COMMISSIONS ON OBESITY OR NUTRITION
Florida	The Governor's Task Force on the Obesity Epidemic was created by Executive Order in October 2003. The Task Force recommends:  1) Reducing dietary fat intake to less than or equal to 30 percent.  2) Adopting a coordinated school nutrition policy that promotes healthy eating through classroom lessons and a supportive school environment.  3) Implementing school nutrition education from preschool through secondary school.
Georgia	Legislation in 2001 created the Joint Study Committee on Physical Activity in Georgia Schools. Recommendations included:  1) Requiring health and fitness to be a focus area for schools councils throughout the state, which are groups of parents and private sector representatives who advise local boards of education and school leaders. Cereation of a School Health Advisory Committee.  3) Providing financial incentives to schools to help address top health or fitness priorities identified by the Health Advisory Committee.  4) Funding a state-level position in the Department of Education with the responsibility for coordinating P.E. and health curriculum in public schools.  5) Conducting a Youth Risk Behavior Survey in high schools to allow assessment of the greatest areas of need and to successfully apply for federal funds earmarked for addressing student health problems.  6) Implementing strategies to increase and enhance physical activity in schools. Legislation in 2004 established the House Study Committee on Adult and Childhood Obesity and Prevention. Recommendations are under development.
Hawaii	A 2001 law called for the Department of Education (DOE) and Department of Health (DOH) to develop the Joint Childhood Obesity Study. DOH and DOE established goals within the Coordinated School Health Programs (CSHP) and provided the program with \$1.85 million to:  1) Increase the amount of physical activity among school-aged youth.  2) Decrease the prevalence of smoking among school-aged youth, including those at the elementary level.  3) Increase the number of school-aged children consuming the recommended servings of fruits and vegetables.  4) Reduce obesity among school-aged children.
Illinois	Legislation in 2003 established the Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases in the Department of Public Health.
Kentucky	In July 2004, an Executive Order created a commission, Get Healthy Kentucky! The primary mission of Get Healthy Kentucky! is to assess health problems, such as obesity, and create an action plan for improvement.

STATE	LEGISLATIVE AND GUBENTORIAL COMMISSIONS ON OBESITY OR NUTRITION	
Louisiana	The Obesity Prevention Task Force was created by law in 2003. In a report to the legislature, the Department of Health and Hospitals made the following recommendations:  1) Enhance opportunities for physical activity.  2) Regulate food advertising aimed at children.  3) Prohibit fast foods and soft drinks in schools.  4) Restructure school lunch programs.  5) Subsidize the sale of health foods.  6) Tax foods with poor nutritional value.  The legislature has not acted on these recommendations.  Legislation in 2001 established the Council on Obesity Prevention and Management The council was not required to submit recommendations to the legislature. However the council issued a report on its activities. These included ensuring that the policy direction on obesity issues is integrated with goals established in <i>Healthy People 2010</i> , and advising and assisting participating agencies in the development and implementation of obesity programs.	
Maine	In 2003, legislation created the Commission to Study Public Health. Final recommendations for the legislature are expected in November 2004. A working draft of preliminary recommendations addresses food advertising to children, school nutrition, statewide BMI assessments, physical activity, purchasing of healthy food, and other topics.	
Mississippi	Legislation in 2001 established the Mississippi Council on Obesity Prevention and Management in the Department of Health. The Council's charter was extended to 2006 under legislation passed in 2003.	
Nevada	A 2003 law created the Legislative Committee on Health Care. The legislation directs the committee to conduct an interim study on the medical and societal costs of obesity, as well as the impact on the state.	
New Jersey	Legislation in 2004 established the New Jersey Obesity Prevention Task Force within the Department of Health and Senior Services.	
New Mexico	A 2004 law directed the Legislative Education Study Committee Working Group to study school nutrition and physical education standards.	
New York	In 2002 legislation called for an Obesity Prevention Study by the Department of Health. Recommendations were supposed to be reported to the governor and legislature by June 2003. The study was to be funded by gifts, grants and donations; it is unclear whether the study was actually implemented.	
Oklahoma	Legislation in 2001 established the Task Force on the Promotion of Children's Health. A 2003 measure extended the task force through December 2005.	
Tennessee	A 2002 law created the Department of Health Obesity Study. Recommendations were expected in March 2003; however, none could be identified.	
Texas	Legislation in 2003 established the Interim Joint Committee on Nutrition and Health in Public Schools. Recommendations were expected in October 2004.	
Washington	In 2004, legislation created the School Nutrition Advisory Committee at the Washington State School Directors Association. The committee has met for preliminary purposes. However, a report including model policy is required by January 1, 2005.	

# 4. The medical approach for obesity focuses mainly on treatment rather than prevention. Only four states require health insurance plans to offer coverage for obesity surgery.

Instead of stressing prevention, the medical approaches to overweight and obesity typically begin when a patient is at the point of being diagnosed as overweight or obese. 111 Patients are first encouraged to adapt a healthier diet and level of activity. If these changes prove ineffective, drug interventions may be recommended. Obesity-related drugs usually focus on reducing appetite or lessening fat absorption in the body. 112 These drugs are prescribed in conjunction with ongoing efforts to maintain a healthy lifestyle.

If the previous options do not prove effective, or if the patient is morbidly obese (BMI > 40), surgery may be recommended. The most common types of obesity-related surgery involve either limiting the amount of food the stomach can hold or an invasive bypass procedure.<sup>113</sup>

Currently, only four states – Georgia, Indiana, Maryland, and Virginia – have statutory requirements for health insurance plans to either cover bariatric surgery for morbidly obese individuals, or offer coverage. This is one indication that a state recognizes the need to address obesity as a serious health risk.

From 1988 to 2000, the prevalence of extreme obesity (BMI > 40) increased from 2.9 to 4.7 percent, up from 0.8 percent in 1960.

Morbidly obese patients are generally considered by experts as a distinct group of obese patients, with special needs and challenges, who require more aggressive approaches to weight loss.<sup>114</sup>

According to the NIH, gastrointestinal, or bariatric, surgery is the best option for people who are severely obese and cannot lose weight by traditional means, such as diet and exercise. Nonsurgical approaches to losing weight seldom succeed over the long run for the morbidly obese. Bariatric surgery promotes weight loss by restricting food intake and, in some operations, interrupting the digestive process to reduce calories and nutrients absorbed. NIH guidelines recommend that surgery should be considered for patients with a BMI of 40, or greater than 35 when there is also a life-threatening condition present.

A study by the Blue Cross Blue Shield Association's Technology Evaluation Center concluded that surgery improves health outcomes for patients with morbid obesity when compared to nonsurgical treatment. Evidence from clinical trials suggests that surgery results in large amounts of weight loss compared with usual care -- 16 percent decrease in weight at six years versus an increase of 0.8 percent for usual care.<sup>116</sup>

STATE	ENACTMENT DATE	MANDATED BENEFIT COVERAGE REQUIREMENT FOR SURGICAL TREATMENT OF MORBID OBESITY
Georgia	1999	Every major health policy that provides major medical benefits must offer coverage for the treatment of morbid obesity.
Indiana	2000	Requires the state to provide coverage under group insurance plans for public employees for non-experimental, surgical treatment of morbid obesity. Requires an insurer that issues an accident and sickness insurance policy and a HMO that provides coverage for basic health care services to offer coverage for the treatment of morbid obesity.

STATE	ENACTMENT DATE	MANDATED BENEFIT COVERAGE REQUIREMENT FOR SURGICAL TREATMENT OF MORBID OBESITY
Maryland	2001	Insurers, nonprofit health service plans, HMOs and managed care organizations that provide individual and group policies must provide coverage for gastric bypass surgery or any other surgical method that is recognized or approved by the NIH for the treatment of morbid obesity.
Virginia	2000	Insurers and state health plans must offer and make available coverage under any such policy, contract, or plan for the treatment of morbid obesity through gastric bypass surgery or other methods recognized by the NIH.

## 5: Due to limited resources, only 28 states have received funds to support a CDC-funded state-based nutrition and physical activity program aimed at obesity and other chronic disease reduction.

CDC's Division of Nutrition and Physical Activity (DNPA) awarded grants to 28 states to help improve their efforts to prevent obesity and other chronic diseases in 2004. Federal funds of \$44.7 million were available for the grants, which promote good nutrition and physical activity. While the CDC received 58 applications, sufficient funding was available for only 28 grant awards -- 23 for capacity-building and five for basic implementation.

The capacity-building grants are to be used for:

- Hiring staff with expertise in public health nutrition and physical activity.
- Building broad-based coalitions.
- Developing state nutrition and physical activity plans.
- Identifying community resources and gaps.
- Implementing small-scale interventions.

■ Working to raise public awareness of systemic changes needed to help state residents achieve and maintain a healthy weight.

The five basic-implementation grants (awarded to Colorado, Massachusetts, North Carolina, Pennsylvania, and Washington) are to be used for:

- Conducting and evaluating nutrition and physical activity interventions.
- Training health care providers and public health professionals.
- Providing grants to communities for local obesity prevention initiatives.
- Making environmental changes to encourage access to healthful foods and places to be active.
- Strengthening obesity prevention programs in community settings such as preschools, childcare centers, work sites, and health care settings.

The 28 states receiving funds were:

STATE	TYPE OF GRANT	AMOUNT
Arizona	Capacity Building	\$450,001
Arkansas	Capacity Building	\$415,488
Colorado	Basic	\$804,763
Florida	Capacity Building	\$450,000
Georgia	Capacity Building	\$449,176
Illinois	Capacity Building	\$456,715
lowa	Capacity Building	\$397,136
Kentucky	Capacity Building	\$450,000
Maine	Capacity Building	\$450,000
Maryland	Capacity Building	\$449,599
Massachusetts	Basic	\$1,499,999
Michigan	Capacity Building	\$449,716
Missouri	Capacity Building	\$450,000
Montana	Capacity Building	\$499,088
New Mexico	Capacity Building	\$450,000
New York	Capacity Building	\$450,000
North Carolina	Basic	\$800,000
Oklahoma	Capacity Building	\$400,000
Oregon	Capacity Building	\$450,000
<b>P</b> ennsylvania	Basic	\$1,000,000
Rhode Island	Capacity Building	\$446,785
South Carolina	Capacity Building	\$448,524
South Dakota	Capacity Building	\$436,813
Texas	Capacity Building	\$448,624
Vermont	Capacity Building	\$437,833
Washington	Basic	\$1,000,000
West Virginia	Capacity Building	\$449,825
Wisconsin	Capacity Building	\$450,000

Source: CDC. CDC funded states at levels requested in their application. The upper budget limit for capacity building grants is \$450,000 and the upper limit for basic implementation grants is \$1.5 million.

## 6. Due to limited resources, only 23 states have received funds to support CDC's school health program that encourages behaviors to help reduce students' risk of obesity.

CDC's Division of Adolescent and School Health (DASH) awarded grants to 23 states to improve school health programs and policies designed to help young people avoid behaviors that increase their risk for obesity and chronic disease. Federal funds of \$15.7 million were devoted to the programs. While the CDC received 39 applications for funding, there were only enough funds to award grants to 23 states. The state Department of Education is the lead agency for these grants and works in partnership with the state Department of Health to strengthen school-based policies and programs that address obesity and chronic disease.

These grants are to be used to address the following activities:

- Planning and coordinating school-based programs that address all aspects of health in a school including, physical education and other physical activities, nutrition services, and health education.
- Implementing the school health guidelines that address physical activity and healthy eating.
- Supporting statewide assessments of critical health behaviors that contribute to obesity and overweight in youth.
- Supporting local-level assessment of school health policies and programs.
- Building effective partnerships among statelevel governmental and nongovernmental agencies and organizations in support of school health programs and policies.
- Establishing a state technical assistance and resource plan for school districts and schools.

The 23 states receiving funds to build capacity are:

STATE	AMOUNT
Arkansas	\$406,910
California	\$450,001
Colorado	\$405,300
Florida	\$450,000
Hawaii	\$410,000
Indiana	\$399,619
Kansas	\$407,472
Kentucky	\$410,000
Maine	\$410,000
Massachusetts	\$410,000
Michigan	\$455,000
New York	\$450,000
North Carolina	\$425,000
North Dakota	\$410,000
Oregon	\$410,000
Rhode Island	\$415,000
South Carolina	\$409,000
South Dakota	\$410,000
Tennessee	\$409,979
Vermont	\$410,000
Washington	\$408,101
West Virginia	\$402,518
Wisconsin	\$413,859

Source: CDC.

## 7. Only a few states and communities have tried to provide low-income people with greater access to supermarkets and low-cost, nutritious food.

The link between obesity and food availability and cost is documented by a growing body of research that shows:

- There is limited access to supermarkets and nutritious foods in most urban and rural areas.<sup>117</sup>
- Low-income zip codes tend to have fewer and smaller grocery stores than higher income zip codes.<sup>118</sup> Fewer supermarkets in low-income communities means less access to healthy foods.<sup>119</sup>
- People in low-income areas often pay more for nutritious foods such as fresh fruits and vegetables. 120

FOR LOWER-INCOME NEIGHBORHOODS, THE LACK OF A SUPERMARKET

NEGATIVELY IMPACTS THE PEOPLE'S ABILITY TO OBTAIN A NUTRITIONALLY ADEQUATE DIET.

AT THE SAME TIME, THE INCIDENCE OF DIET-RELATED DISEASES IS DISPROPORTIONATELY

HIGH IN LOWER-INCOME NEIGHBORHOODS. INCREASING THE AVAILABILITY OF

NUTRITIOUS AND AFFORDABLE FOOD IN NEIGHBORHOODS WITH HIGH RATES OF DIET
RELATED DISEASES DOES NOT GUARANTEE A REDUCTION IN THE INCIDENCE OF THESE

DISEASES. HOWEVER, BY REMOVING THIS AS A BARRIER TO HEALTHY EATING, WE CAN

BETTER FOCUS ON HELPING PEOPLE IMPROVE THEIR DIET AND HEALTH. 121

- From "Food for Every Child: The Need for More Supermarkets in Philadelphia"

An analysis conducted for TFAH by the HPTS found that while several studies have documented the lack of access to supermarkets and nutritious food in low-income areas, especially urban areas, there have been very few systematic or comprehensive state and municipal efforts to address the situation. There are a number of factors often cited as barriers to improving supermarket access:

- Costs associated with inner-city store operation (rent, labor, insurance) are higher than in suburban locations.
- Urban locations present problems to development due to space limitations.
- Public development agencies typically focus more on housing and retail entities other than supermarkets.<sup>122</sup>

Although far from comprehensive, some states and municipalities are examining ways to improve supermarket access in low-income areas. For example, Pennsylvania enacted legislation in May 2004 authorizing \$100 million for the establishment of supermarkets in low-income areas. In 1998, the city of Oakland, CA, provided approximately \$60,000 in construction and start-up costs for a fresh produce market in one low-income community.<sup>123</sup>

According to a study of 32 metropolitan areas in the U.S., the few successful supermarket initiatives involved high-level political leadership in collaboration with community-based organizations. Successful initiatives also included activities to assess market demand, identify multiple sites, offer incentives and other development assistance, and recruit multiple corporate supermarket chains. 124

## 8. Only a few comprehensive statewide active living initiatives and programs are in place.

Along with nutrition, physical activity is a central factor in weight management. The Surgeon General recommends 30 minutes of daily moderate physical activity for adults and 60 minutes for children. But the majority of Americans do not reach these levels of physical activity.

In addition to encouraging individual responsibility to exercise, there are community-level actions that states are beginning to explore to promote increased physical activity. But there are very few comprehensive statewide programs in place. This section reviews some initiatives that are currently underway.

Studies have demonstrated that the distance from a person's home to work and other daily destinations, community safety, the safety of roads for pedestrians and bicyclists, the availability of facilities for physical activity, and time spent commuting in cars contribute to how often a person walks, bicycles, or plays.<sup>125</sup>

A community's surroundings, known as the "built environment," include features such as street layout, existence of sidewalks, the availability of parks and recreation centers, and zoning.

A number of states and communities are examining ways to improve the physical environment of communities so that they will encourage greater physical activity. These initiatives include developing parks ("green spaces") and converting existing unused or underused buildings ("brownfields") into recreational centers.



**Green spaces** describe open, undeveloped recreational spaces that are accessible to the public and maintained by the government. Green spaces provide communities with opportunities for recreation and physical activity by providing areas for walking, biking, and other sports.<sup>126</sup>

Recent research has found that a lack of green spaces and other recreational areas may contribute to higher obesity rates. For instance, fewer parks and swimming pools are typically available in communities with high levels of poverty and greater numbers of African Americans and Latinos, who have higher rates of overweight and obesity. <sup>127</sup>

Some states are enacting programs to improve and preserve green spaces. For example, the Clean Ohio Fund, launched in 2000, is providing \$150 million for a variety of projects including development of outdoor recreation spaces in economically challenged areas.<sup>128</sup>

New Jersey's Green Acres program will start distributing \$50 million in 2005 for the development of local parks and recreational facilities in rural, suburban, and urban areas. The program also provides low-interest loans and grants to assist local governments in the acquisition and development of open space for recreation and conservation.<sup>129</sup>

**Brownfields** are abandoned former commercial and industrial sites. Often, these locations provide no usable space for the surrounding area and serve as decaying eyesores and indicators of blight.

In recent years, numerous initiatives have sought to convert brownfields into green space centers of physical activity. The U.S. Environmental Protection Agency (EPA) has a Brownfields Initiative devoted to clean-up assistance and redevelopment. The Initiative funds eligible pilot programs, engages in research and assessment tasks, and works with local partners to develop a sustainable alternative to the brownfields.<sup>130</sup>

The National Governors Association (NGA) cites several successful initiatives that have converted post-industrial sites into vibrant areas that promote a healthy lifestyle. Among the NGA-listed successes are oil refineries in Shreveport, LA, that have been turned into baseball and softball diamonds and a soccer complex; an abandoned railroad line in East Boston, MA, that has been converted into pedestrian bike paths; and Pennsylvania's "Green Opportunities for Brownfields" program.<sup>131</sup>

The transformation of brownfields has particular resonance for obesity reduction in inner cities, as abandoned commercial and industrial lots abound in urban areas.

A few states and communities are also designing "active living" programs to better integrate physical activity into daily life. Active living helps persuade people to walk or bike for transportation, exercise for

pleasure, play in a park, take the stairs, and use recreational facilities. Many of these programs are conducted or funded through public-private partnerships or through private organizations

#### **EXAMPLES OF ACTIVE LIVING INITIATIVES**

#### "Safe Routes to Schools"

This program was launched in 2000 as a pilot project with \$50,000 in U.S. Department of Transportation grants to Marin County, CA, and Arlington, MA. It promotes walking and biking to school through education and incentives. Safe Routes to School also addresses the safety concerns of parents by encouraging greater enforcement of traffic laws and exploring ways to create safer streets. Because the projects have been shown to increase the number of children who bike and walk to school, proponents are working to expand the program. The federal highway bill that has been under consideration in Congress in 2004 includes \$1 billion for distribution to the states to establish Safe Routes to School programs.<sup>133</sup>

#### America on the Move

The Partnership to Promote Healthy Eating and Active Living, a public-private nonprofit organization, has developed America on the Move (AOM). This initiative creates and supports a network of affiliates across the U.S. to build communities that support individual behavior changes. AOM also encourages public and private partnerships at the national, state, and local level to bring about community behavior change.

The state of Colorado was the first to join the initiative with the launch of its AOM affiliate, "Colorado On the Move." This statewide initiative includes programs to increase physical activity in schools, worksites, and communities. The programs use electronic step counters to help participants monitor and increase physical activity. The goal is to increase walking by 2000 steps per day (equivalent to walking about one mile), and decrease daily caloric intake by 100 calories for each person in Colorado. There are another 17 AOM affiliates in states, cities, and counties across the country that share similar goals of increasing physical activity and encouraging healthy eating.

#### The Robert Wood Johnson Foundation's (RWJF) Active Living Project

RWJF sponsors a significant active living project that has the long-range goal of helping to reverse obesity trends, particularly among youth, in states across the country. The initiative includes:

- Active Living Leadership, a program to increase the number of state and local elected and appointed leaders who understand and champion community design to promote active living.
- Active Living Research to stimulate and support research that will identify environmental factors and policies that influence physical activity. Findings are expected to inform environmental and policy changes that will promote active living among Americans.
- Active Living Resource Center, a program to improve community health through design by encouraging partnerships among planning, health, and non-traditional entities.

#### **EXAMPLES OF ACTIVE LIVING INITIATIVES**

#### The Robert Wood Johnson Foundation's (RWJF) Active Living Project (continued)

One Active Living project, Sustainable South Bronx, involves a planned urban greenway with a 4-mile waterfront stretch for walking and other recreation. Also included are street changes to slow traffic and 'parks outside the park' -- green streetscaping along routes to the greenway. In addition, the project will encompass:

- Educational and incentive programs for physical activity based in local schools
- Using the expertise and reach of trained pediatric healthcare providers to promote physical activity
- Targeted outreach to major employers promoting the physical activity benefits of the greenway

The project serves a dense district of approximately 70,000 people who face significant problems with traffic, pollution and lack of access to green space and to the waterfront. Approximately two-thirds of the population are Latino and one-third is African American. Twenty-seven percent of adults living in the project area have obesity and 14 percent have diabetes.

#### YMCA's Pioneering Healthier Communities Initiative

The YMCA has launched a 10-year "Activate America" initiative aimed at uniting the public and private sectors to strengthen the health of America's kids, families and communities as well as the YMCA's capacity to serve new populations. The four key components of this initiative are:

- Activate America Pioneering Healthy Communities Project. Twelve major cities and two states have been selected to develop replicable community-based strategies for healthy living. Participants in this project include: Dallas, TX; Des Moines, IA; Pittsburgh, PA; Boulder, CO; Tampa, FL; Jackson, MS; St. Louis, MO; Bellevue, WA; State of West Virginia; Boise, ID; State of Delaware; Palo Alto, CA; Milwaukee, WI; and Rochester, NY.
- Partnerships With Corporate and Public Leaders. YMCAs are teaming up with third parties to facilitate the adoption and penetration of these healthy living strategies.
- Increasing YMCA Capacity to Serve a New Population. YMCAs are focusing on helping individuals who have tried and failed in their quest to incorporate smart eating and regular physical activity into their lives. Twenty-one YMCAs are serving as "living laboratories" for testing new approaches to wellness.
- Strengthening Grassroots Programs to drive deeper engagement and emphasize fun forms of physical activity and education.



# The Federal Government and Obesity

#### PUBLIC HEALTH APPROACH

GIVEN THE SIZE OF THE POPULATION THAT WE ARE TRYING TO REACH,
WE OBVIOUSLY CANNOT RELY SOLELY UPON INDIVIDUAL INTERVENTIONS THAT TARGET
ONE PERSON AT A TIME. INSTEAD, THE PREVENTION OF OBESITY WILL REQUIRE
COORDINATED POLICY AND ENVIRONMENTAL CHANGES THAT AFFECT LARGE
POPULATIONS SIMULTANEOUSLY. 99

William Dietz, Director of the Division of Nutrition and Physical Activity at the Centers for
 Disease Control and Prevention. Statement before the Subcommittee on Public Health of the
 Committee on Health, Education, Labor, and Pensions, U.S. Senate, May 21, 2002.

## In this section, TFAH examines the federal government's responsibilities and policies related to obesity.

The federal government, in an effort to promote the general population's health and well-being, has developed a variety of initiatives to combat obesity and the myriad of associated health problems. These tactics fall into one of three general categories:

- I. Public education campaigns targeted at individual behavior change.
- 2. Treatment of obesity-related diseases.
- 3. Initial steps toward developing community active living incentives.

Recognizing the ineffectiveness of solely relying on the traditional "individual responsibility" approach to obesity, legislation and initiatives are beginning to address the wider range of contributing factors. Incentives to manufacturers, restrictions on children's television advertising, more accurate food labels, and planned communities heavy on green space are beginning to be discussed and represent the start of a more comprehensive and effective approach to the obesity epidemic.

However, much more needs to be done to ensure progress and success in this fight.

The federal government faces organizational issues such as a lack of designated leadership in the obesity fight and a bureaucratic tangle of involved agencies and departments. The federal government will also have to learn to balance the often competing interests of industry and public health before federal obesity strategies can be implemented efficiently.

TFAH conducted a review of information available about federal programs from interviews with officials, Web sites, and agency announcements and publications. While the following section covers the major agencies and programs related to obesity and provides an overview of federal obesity policy, it is not intended as an exhaustive and fully comprehensive list of all initiatives that have had obesity-related components. This section should instead be viewed as a guide and snapshot of the federal government's work on obesity.

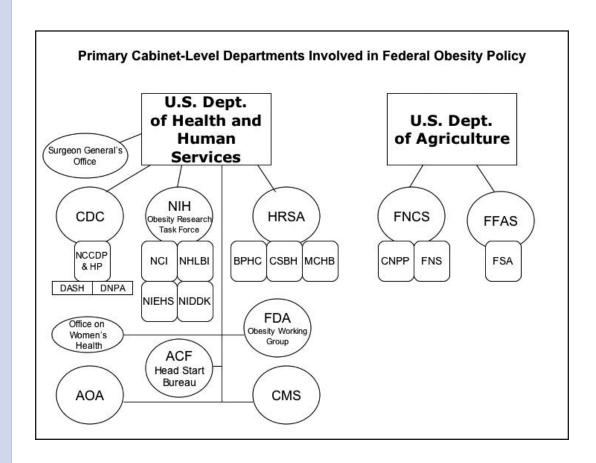


#### PRESIDENTIAL INVOLVEMENT

The President's **HealthierUS Initiative** focuses on physical activity, nutrition, preventative medical screenings, and healthy lifestyle choices.<sup>134</sup> The initiative is being implemented through several related programs, such as the Steps to a HealthierUS program, administered by the U.S. Department of Health and Human Services. A Web site, www.healthierus.gov, features the Presidential initiative and provides links to other government Web sites that provide information about fitness, nutrition and healthier lifestyles.

The President's Council on Physical Fitness and Sports (PCPFS). Assisted by elements of the U.S. Public Health Service, the PCPFS advises the President and the Secretary of HHS on ways to encourage more Americans to become physically fit and active. The PCPFS communicates with the public on the importance of exercise; increases physical activity participation and opportunities by encouraging related efforts in schools and communities; collaborates with business, industry, government and labor organizations on innovative programs to reduce the financial and health care costs associated with physical inactivity; and cooperates with medical, dental and other allied health care professional associations to encourage patient counseling on physical activity and fitness habits and practices.

The PCPFS also initiated the **President's Challenge**, which is a physical activity/fitness awards program. During the school year more than four million awards are distributed. The Challenge is for children between ages 6-17 and is designed to build strength, endurance and flexibility in children while motivating them to form healthy eating and exercise habits.



# FEDERAL AGENCY OBESITY RESPONSIBILITIES AND POLICIES

he primary cabinet level departments involved in federal obesity policy are the U.S. Department of Health and Human Services and the U.S. Department of Agriculture. The Federal Trade Commission (FTC), an independent agency, is also involved in elements of obesity prevention.

#### I. Department of Health and Human Services

HHS is involved in more than 300 obesity-related programs nationwide. Most of the agencies and offices within HHS are involved in obesity-related programs, including the Centers for Disease Control and Prevention, the Centers for Medicare and Medicaid Services (CMS), the Food and Drug Administration (FDA), the National Institutes of Health (NIH), the Health Resources and Services Administration

(HRSA), the Office of Women's Health (OWH), the Administration on Aging (AOA), the Head Start Bureau, and the Indian Health Service (IHS).

Most HHS-administered obesity programs involving health promotion and disease prevention are housed at the CDC. HHS programs focused on the treatment of obesity are largely administered by CMS, FDA, and NIH.

#### **Centers for Disease Control and Prevention**

The National Center for Chronic Disease Prevention and Health Promotion (NCCD-PHP) at the CDC has been leading the agency's obesity-related initiatives.

Major federal initiatives such as the Steps to a HealthierUS, Healthy Lifestyles and Disease Prevention, and the VERB social marketing campaign are administered by NCCDPHP. NCCDPHP also creates and distributes materials, training, and technical assistance as part of targeted campaigns aimed at obesity-reduction in specific racial and geographic populations, and school, community, and workplace settings.

NCCDPHP oversees several divisions responsible for additional obesity programs. The Division of Adolescent and School Health (DASH) and the Division of Nutrition and Physical Activity (DNPA) are responsible for implementing major federal obesity initiatives at the state level.

Below are brief descriptions of NCCDPHP initiatives

■ Steps to a HealthierUS (Steps) focuses on community-based health initiatives related to obesity. The program, which directly funds efforts at the city and community level, was launched in 2003 by HHS Secretary Tommy Thompson and is based on the goals outlined in the President's *HealthierUS Initiative*. Within Steps, obesity reduction is often tied to diabetes and asthma prevention projects.

As a condition of receiving a grant, Steps communities are required to make special efforts to reach underserved populations, share information and best practices with other communities, encourage public-private partnerships, and chart progress against a series of goals.<sup>137</sup>

In 2003, Steps funded 12 grants as part of a five-year pilot project, reaching seven states and 23 communities in both urban and rural areas. The Steps program was appropriated \$15.4 million in FY 2003, \$43.7 million in FY 2004, and was proposed for a dramatic increase to \$125 million in President Bush's FY 2005 budget.<sup>138</sup>

- Healthy Lifestyles and Disease Prevention (Small Steps) uses multimedia public service announcements, an interactive Web site, and television advertisements to try to further the goals of Steps.
- VERB is a multiethnic, multimedia campaign targeted at youths aged 9-13 (the "tween" population) to encourage more physical activity and increase awareness of the importance of exercise. VERB also targets parents to encourage promotion of physical activity. A 2003 CDC survey indicated physical activity among the U.S. youth is increasing as a result of the VERB campaign. One of the largest effects of the campaign is a 34 percent increase in weekly free-time physical activity sessions among 8.6 million children ages 9-10. 139

To further the campaign message, VERB relies on a host of targeted marketing materials ranging from an interactive Web site to public service announcements to "kid friendly" materials such as posters, stickers, and temporary tattoos. 140 VERB is a national advertising campaign supplemented by additional targeted messaging in nine "high-dose" communities. 141 These communities, which range from diverse urban areas such as Los Angeles to smaller markets such as Greenville, SC, provide valuable data used to evaluate and refine the VERB campaign and similar efforts in the future. 142

VERB began with a budget of \$125 million in FY 2001. Despite the success, the campaign's funding was reduced to \$68 million in FY 2002, \$51 million in FY 2003 and \$35.8 million in FY 2004. The President's FY 2005 budget proposed a funding level of \$5 million.<sup>143</sup>

Divisions of NCCDPHP that relate to obesity are:

■ Division of Adolescent and School Health (DASH). DASH seeks to prevent health-adverse behavior in school-aged children and young adults. The most notable obesity program administered by DASH is the Coordinated School Health Program

(CSHP), which promotes healthy behavior in school settings by focusing on an integrated model that involves eight components: Health education, physical education, health services, nutrition services, counseling and social services, healthy school environment, health promotion for staff, and family and community involvement.<sup>144</sup>

Programmatically, CSHP encourages state departments of health and education to work in unison to increase the potency and reach of related programs. In FY2004, 23 states received CSHP funds totaling \$15.7 million, an increase from the \$10.8 million appropriated in FY 2003. The President's FY 2005 budget proposed level funding at \$15.7 million. 145

Overall, DASH received \$57.8 in FY 2003, \$62.4 million in FY 2004, and the President's FY 2005 budget proposed \$62.6 million. 146

Among the materials DASH helps to distribute to schools include *The School Health Index for Physical Activity and Healthy Eating*, a self-assessment guide for schools to measure progress against a series of benchmarks and goals, and *Curriculum Analysis Tools* to help incorporate health-related lessons into classroom settings. <sup>147</sup> *The Kids Walk to School* guidebook encourages group walks to school under an adult's supervision.

■ Division of Nutrition and Physical Activity (DNPA). This agency supports a wide variety of obesity-related endeavors at the community level. Programs are divided into four categories: prevention, applied research, tracking of health behaviors, and health communication.

In addition to administering the CDC-funded state-based nutrition and physical activity program described in Section 1, DNPA oversees other programs. For example, DNPA has developed the Kids-Walk-to-School program to support the national goal of better health through physical activity. This is a community-based program that aims to increase opportunities for daily physical

activity by encouraging children to walk to and from school in groups accompanied by adults. The program also advocates for communities to build partnerships with schools, Parent Teachers Association, local police department, department of public works, civic associations, and businesses to create an environment that is supportive of walking and bicycling to school safely.

DNPA is also developing a plan to quickly deploy staff (rapid deployment teams) into communities, worksites, and schools to facilitate evaluation of promising obesity prevention strategies and effective physical activity plans. Each team would collect baseline data and provide evaluation consultation and technical assistance to these programs.

DNPA received \$34.1 million in FY 2003 and \$44.7 million in FY 2004. The President's FY 2005 budget proposed \$44.8 million. 148

- Health Protection Research Initiative. This is a new, \$30-million CDC program to produce research that can be used in outreach efforts to employers to inform them about the benefits of wellness programs and the cost-effectiveness of a healthy workplace. The initiative will establish a new Center for Excellence in Health Promotion Economics to quantify the impact and effectiveness of related programs. 149
- Prevention Research Centers. CDC funds research at 33 centers that investigates ways to prevent and control chronic diseases. Many of the centers also conduct research on obesity. Housed within schools of public health, medicine, or osteopathy, FY 2004 funding for the centers was approximately \$21 million in FY 2004. The funding is helping to support infrastructure and community-based research projects. <sup>150</sup>

#### **Centers for Medicare and Medicaid Services (CMS)**

Medicare and Medicaid pay over half of the nation's bill to treat obesity-related conditions – \$39 billion out of a total of \$75 billion in direct medical costs each year. The Medicare and Medicaid costs are signifi-

cantly higher when indirect costs are factored in.<sup>151</sup>

As the table below shows, these costs are rising in step with the rising rate of obesity. 152

Estimated Obesity-Related Disease Costs to Medicare 1992, 2000, 2004 (in billions)				
	1992	2000	2004	
Diabetes	n/a	\$10.4	\$12.7	
Heart Disease	\$21.1	\$34.9	\$42.8	
Cancer	\$10.3	\$15.2	18.5	

Source: Office of the Actuary, June 2002 (includes direct and indirect costs)

Together, the Medicare and Medicaid programs spend \$84 billion annually on five major chronic conditions that could be significantly improved by increased physical activi-

ty.<sup>153</sup> In July 2004 Medicare made a decision to recognize obesity as a disease which may lead to even greater program spending on obesity-specific medical treatments.

#### The Food and Drug Administration (FDA)

In August 2003, the FDA created the **Obesity Working Group (OWG)** to analyze the obesity problem in this country. The OWG published a report, Counting Calories, which centered on caloric exchange as a means of controlling weight.<sup>154</sup> The report focuses on reforming the following six components of the obesity problem in hopes of curbing the current trend:<sup>155</sup>

- 1. Labeling practices of food manufacturers. OWG recommends an emphasis on caloric content, stringently defining terms such as "reduced" and "low calorie," and adding dietary guidance statements to labels.
- **2. Enforcement.** The FDA wants manufacturers to provide more accurate information about serving sizes, with stricter penalties for violators.
- **3. Education.** OWG advocates an information campaign around the message that "calories count." Recommended vehicles for spreading the message include public/private alliances and joint efforts with national and local youth organizations.

- **4. Engaging the restaurant industry.** Americans spend almost half (46 percent) of their food budget on eating outside the home. OWG recommends requiring restaurants to provide expanded nutritional information to consumers.
- 5. Increasing therapeutic options for extremely obese individuals. OWG recommends convening the FDA advisory committee to address the possibilities of existing drug therapies for the extremely obese and interacting with pharmaceutical companies and medical device manufacturers about possible new interventions for the obese.
- **6. Research.** OWG recommends more obesity-related cooperation between federal agencies, the exploration of incentives for product re-formulation, and a renewed research focus on the link between obesity and food pattern consumption.<sup>157</sup>

#### FDA AND OBESITY TREATMENT DRUGS

The Food and Drug Administration has approved a number of appetite-suppressing drugs, including, Diethylpropion (Tenuate), Mazanor (mazindol), Bontril (phendimetrazine), Adipex-P (phentermine), Dexfenfluramine (Redux), and Fenfluramine (Pondimin). These drugs are intended for short-term use, no longer than a few weeks to a month.

In 1997, the FDA approved a long-term appetite suppressant, Meridia (sibutramine), and it with-drew dexfenfluramine and fenfluramine because these drugs were linked to heart valve defects. In April of 1999, the FDA approved Xenical (Orlistat), a lipase inhibitor, the first of its kind. Currently, Xenical is the only other obesity drug that can be taken for longer terms. Potential problems associated with appetite suppressors are the risks of tolerance and dependency.

#### **National Institutes of Health (NIH)**

NIH serves a dual function in the fight against obesity, working to further obesity prevention awareness and after-the-fact research and treatment measures.

Founded in 2003, the **Obesity Research Task Force** seeks to take advantage of the most recent scientific breakthroughs regarding obesity. The Task Force developed the *Strategic Plan for NIH Obesity Research* which focuses on four areas:

- Lifestyle modification.
- Medical approaches.
- Linkages between obesity and health, specifically the detection of biomarkers and other molecular factors that serve as early warning signs for the development of obesity-related health problems.
- Health disparities among certain racial, ethnic, and socioeconomic populations.<sup>158</sup>

NIH oversees several Institutes that play important roles in the obesity fight:

■ National Heart, Lung, and Blood Institute (NHLBI), which introduced the Obesity Education Initiative (OEI) in January 1991 to help reduce the prevalence of overweight and obesity in people while increasing physical activity. Goals include reducing the risk of coronary heart disease and diabetes by focusing on body weight, nutrition and lifestyle. Obesity-related goals include increasing the ratio of adults and adolescents with a healthy weight and increasing the proportion of adults who engage in leisure-time physical activity.

The goals are furthered by a two-part strategy focused on high-risk audiences and a general population-based approach.<sup>159</sup> High-risk interventions include targeting specific ethnic groups with culturally resonating messaging, as exemplified in Pathways outreach targeted at American Indian and African American communities.

The general population approach involves messaging through such programs as **Hearts N' Parks**, which encourages heart-healthy eating and exercise. Working with the National Recreation and Park Association, Hearts N' Parks uses local park officials to disseminate program guides and materials to summer day camps, after-school programs, senior centers, and community outreach centers in 50 Magnet Center sites and other communities throughout the country.

- National Cancer Institute (NCI). NCI promotes healthy lifestyles which lead to lower cancer incidences. NCI divisions particularly relevant to the fight against obesity include the Division of Cancer Prevention, the Office of Education and Special Initiatives, and the Center to Reduce Health Disparities. NCI also directs a leading government nutritional public education campaign, **5 A Day for Better Health**.
- 5 A Day for Better Health promotes fruit and vegetable consumption as an essential component of a healthy lifestyle. The program was started in 1991 based on the model of a successful California campaign.<sup>161</sup> NCI is in charge of a coalition of partner organizations working to disseminate the campaign message. The CDC, USDA, the Produce for Better Health Foundation, the American Cancer Society, the United Fresh Fruit and Vegetable Association, the Produce Marketing Association, and the National Alliance for Nutrition and Activity are also involved in the educational effort.<sup>162</sup> NCI also coordinates the program at a local level, overseeing 55 state and territorial health agencies in charge of message and materials dissemination at the local level.163

Campaign materials include printed media, recipe suggestions, posters, and brochures such as *Men Eat 9 A Day, Time To Take 5, Action Guide for Healthy Eating,* and *Down Home Healthy Cookin*'.164</sup>

The 5 A Day for Better Health also relies on outreach targeted at specific populations, most notably African Americans. Body & Soul: A Celebration of Healthy Eating and Living works to spread the campaign message to African Americans through church communities. Specific materials are provided to participating churches.<sup>165</sup>

GOVERNMENT-SUPPORTED EFFORTS TO PROVIDE EDUCATION RELATED TO
OBESITY PREVENTION AND REDUCTION ARE LARGELY OVERSHADOWED BY ADVERTISING
TO PROMOTE HIGH-FAT, ENERGY-DENSE FOODS. THE FOOD INDUSTRY SPENDS ABOUT
\$33 BILLION ANNUALLY ON ADVERTISING AND OTHER CONSUMER PROMOTIONS.
THESE EXPENDITURES ARE ORDERS OF MAGNITUDE GREATER THAN THE INVESTMENTS
MADE BY GOVERNMENT AGENCIES TO ENCOURAGE HEALTHY CHOICES. 166

- National Health Policy Forum Background Paper, The George Washington University.
- National Institute of Environmental Health Sciences (NIEHS), which examines the link between obesity and the physical arrangement of a community. NIEHS encourages coalitions among health care providers, developers, policymakers, and community leaders to incorporate health and well-being into the community development and planning process.
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), which oversees the Weight-control Information Network. The Network provides science-based materials on obesity, weight maintenance and nutrition. The Network is also involved in reaching out to high-risk populations through initiatives such as the Sisters Together: Move More, Eat Better program that promotes healthy nutrition and exercise among women within targeted African American communities.<sup>167</sup>

#### **NIH OBESITY GRANT INITIATIVES FOR FY05**

- Prevention and treatment of childhood obesity in primary care settings (\$3.5 million).
- Site-specific approaches to prevention and treatment of pediatric obesity (\$3.5 million).
- Neurobiological basis of obesity (\$6 million).
- Bioengineering approaches to prevention and treatment of overweight and obesity (\$2 million).
- Obesity and the built environment program (\$1 million).
- Obesity clinical research center (\$6 million).

#### Surgeon General's Office

In 2001, The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity was published in acknowledgement of the rising health risks associated with the obesity epidemic. The report presented a number of statistics documenting the rise of obesity, especially within racial minority and ethnic populations.

To stem the tide of the obesity epidemic, the report recommended mandatory physical education at all school grades, healthier food choices on school campuses, an emphasis on "reasonable" portions of food, and providing more accessible exercise and recreation options for citizens of all ages. <sup>168</sup> The report

also provided a special focus on communityled solutions to the obesity problem.

The Surgeon General is America's preeminent health educator, providing leadership and management of public health and advocating for scientifically credible and healthy lifestyle directions. The Surgeon General, however, is not the head of an agency that administers well funded federal initiatives. As a result, despite the importance of the message articulated in the Call to Action, the report was designed as a clarion call for attention to the problem, rather than the beginning of a federal program or initiative.

#### Health Resources and Services Administration (HRSA)

HRSA seeks to expand health care for all Americans and is structured to focus on specific populations. The **Maternal and Child Health Bureau (MCHB)** coordinates several obesity-related programs. MCHB produces the Bright Futures in Practice series of materials and resources designed to encourage and guide healthy living and development. These range from *Bright Futures in Practice: Physical Activity*, a series of exercise guidelines for children and adults, to *Bright Futures in Practice: Nutrition*, a guidebook that discusses healthy eating and nutrition supervision.

The Bureau of Primary Health Care (BPHC) and the Center for School-Based Health (CSBH) oversee HRSA programs for school populations.<sup>170</sup> The Healthy Schools, Healthy Communities (HSHC) program is the most notable initiative targeted at students.

Established in 1994, HSHC promotes and establishes comprehensive school-based health centers to improve the health of overweight children who are on the verge of becoming obese. The services provided by the centers include nutrition education and counseling, support groups for overweight children, dietary monitoring, and nutrition screening.<sup>171</sup> Services are provided through a number of collaborative linkages with other government agencies and private providers.

HRSA also supports the **National Adolescent Health Information Center (NAHIC)** located at the University of California, San Francisco's Division of Adolescent Medicine, Department of Pediatrics and Institute for Health Policy Studies. NAHIC focuses on adolescent health information dissemination and research, especially targeted at underserved populations. 172

#### The Office of Women's Health (OWH)

Obesity-related programs include:

■ Girls and Obesity Initiative, which redesigns existing obesity programs to resonate with girls and young women. A model program is the Girls Rule! project, a targeted prevention program aimed at African American girls in North Carolina that focuses on community-based interventions through churches and other community institutions.<sup>173</sup>

■ Pick Your Path to Health, a national general health education and outreach campaign that provides simple and practical advice that women can use to live a healthy life. The campaign focuses each month on a different health indicator; obesity-related indicators include the maintenance of healthy weight and the promotion of physical activity.<sup>174</sup>

#### **Administration on Aging (AOA)**

AOA developed the **You Can! Steps to Healthier Aging** program to promote physical activity and sound nutrition in elderly populations. **The You Can!** program, which has developed a campaign toolkit, is seeking community-based partner organizations to help implement the program across the

nation.<sup>175</sup> AOA also funds the **National Policy** and Resource Center on Nutrition, Physical Activity and Aging at Florida International University to promote healthy aging. The Center oversees the **Eat Better & Move More** program, a community-based initiative in 10 local communities.<sup>176</sup>

#### **Head Start Bureau**

The Head Start Bureau offers services to lowincome families with children up to five years old. Head Start provides education and training for parents about healthy nutrition and diet. In 2002, Head Start established an obesity-related focus group to examine the promotion of future best practices related to obesity prevention and education. Head Start also teamed with the Indian Health Service (IHS) to develop the Healthy Children, Healthy Families program and the Healthy Communities: A Focus on Diabetes and Obesity Prevention program. In 2000, five tribal Head Start pilot sites were selected for training and technical assistance and community-specific interventions designed to reduce the obesity rate in American Indian and Alaska Native populations.<sup>177</sup>

#### **OBESITY IN THE AMERICAN INDIAN POPULATION**

Obesity rates among American Indian children are nearly double the rate for all other children. Similarly, approximately 34 percent of American Indian adult men and 40 percent of American Indian adult women are obese, rates significantly higher than the all-race adult population.<sup>178</sup> According to Dr. Jim Thompson of the American Association of Indian Physicians, a contributing factor of obesity in this population is the reliance on government commodities, which are typically high in fat and sugars.<sup>179</sup>

#### 2. Department of Agriculture

USDA is responsible for a range of food and nutrition programs that impact obesity, including:

- Nutritional advice and guidance.
- Food labeling regulations.
- Food and obesity education campaigns.
- Distribution of food products to schools.
- Oversight and protection of the nation's agricultural and dairy markets.

The department spent approximately \$800 million on nutrition education and associated research on human nutrition in 2003. These funds went to programs to target overweight and obesity prevention and reduction, prima-

rily focusing on low-income households, as well as promoting good nutrition for the general public. Additionally, USDA researchers develop new agricultural products; improve the nutritional and production attributes of existing food commodities; and improve the production, transportation, marketing, distribution and safety-handling of foods.

USDA's division of **Food, Nutrition, and Consumer Services** (FNCS) is central to obesity-policies. FNCS is one of seven agencies in USDA, it includes two departments relating to obesity: **Food and Nutrition Service** (FNS) and the **Center for Nutrition Policy and Promotion** (CNPP).

#### Food and Nutrition Service (FNS)

FNS administers nutrition assistance programs to needy and eligible populations through food assistance, school lunch, and school-based educational programs.<sup>180</sup>

- Food Stamp Program: In 2003, the Food Stamp Program cost nearly \$24 billion and served over 21 million people each month.<sup>181</sup> FNS oversees the federal Food Stamp Program, while state agencies administer it at the state and local level and determine eligibility.<sup>182</sup>
- Women, Infants, and Children Program (WIC) is a federal grant program that provides supplemental food, counseling, and nutrition education for low-income pregnant or postpartum women and children up to age five. <sup>183</sup> In FY02, WIC provided services to nearly 7.5 million people each month. Of this total, over 3.5 million were children, nearly two million were infants and nearly two million were women. <sup>184</sup> Congress allocated over 4.5 billion dollars for WIC in FY 2002. <sup>185</sup>
- The National School Lunch Program is a federally assisted meal program that serves free or low-cost lunches to low-income children throughout the nation. The program serves over 28 million schoolchildren in approximately 100,000 public schools and non-profit private schools. The food provided meets USDA-defined standards, though state and local administrators determine the specific foods served. The food served.

The food supplied to schools is purchased by USDA from the nation's agricultural markets. Certain food product availability is dependent on whether there's a surplus in the marketplace. 188 Operationally,

USDA reimburses schools for the cost of each meal served. This ranges from \$1.79 for reduced-price lunches to \$2.19 for free lunches. Overall, the School Lunch Program costs over \$6 billion annually. The School Lunch Program has served as the model for several other FNS initiatives, including the School Breakfast Program and the Special Milk Program.

■ Team Nutrition provides educational materials for children aged 4-18 that offer advice on how to keep a healthy weight. Team Nutrition provides grants to states advocating the Federal Dietary Guidelines for Americans, healthy food choices, and physical activity. 190

Team Nutrition has several related initiatives, including **The Power of Choice**, an after-school program jointly developed by FDA and FNS that provides healthy lifestyle materials to pre-teens, and **Fruits and Vegetables Galore**, which aids foodservice professionals in planning, purchasing, preparing, presenting, and promoting fruits and vegetables. Additionally, the Team Nutrition "action kit," *Changing the Scene: Improving the School Nutrition Environment*, informs educators about the role school environments play in a healthy lifestyle.

Nutritional guidelines and recommendations distributed through school must take into account the impact of competitive foods. Competitive foods' increasing presence in school cafeterias complicates the nutritional awareness message and undermines USDA's aim to provide a proper diet in accordance with federallydefined guidelines.

#### **Center for Nutrition Policy and Promotion (CNPP)**

The CNPP develops nutrition education information and works to disseminate research findings through outreach materials to target populations. Dietary guidelines, the Food Guide Pyramid, and dietary assessment tools are among the most notable CNPP initiatives.

- **Dietary Guidelines.** Issued and updated every five years, the Dietary Guidelines for Americans are based on the latest scientific, medical, and nutritional information available. The *Dietary Guidelines for Americans* 2000 placed a new emphasis on maintaining a healthy weight and encouraging physical activity. 192
- Food Guide Pyramid. This is a graphic tool that attempts to translate nutrition recommendations into easy-to-understand, specific recommendations about servings and portion sizes. USDA is scheduled to release a revised version of the Food Pyramid in 2005 with new recommendations for daily food intake. He new version is expected to take into account nutritional breakthroughs since the previous, 1992 version, especially with respect to calorie intake levels. CNPP also produces the Food Guide Pyramid for Young Children, which takes into account the specific nutritional needs of this age group.

■ USDA Healthy Eating Index. This tool for measuring overall diet quality allows users to compare their own diet and nutrition with USDA recommendations in the Guidelines and the Pyramid. 195

Along with FDA and other government agencies, CNPP is also exploring a number of possible recommendations to stem the obesity epidemic, including:

- Augmenting food labels.
- Revising serving sizes if a food package can be consumed in one sitting.
- Defining terms such as "low," "reduced," or "free."
- Asking manufacturers to use dietary guidance statements.
- Promoting use of nutritional labels on food and more healthy alternatives.

To promote nutritional recommendations and guidelines, CNPP relies on a series of publications and targeted brochures, including *Get Moving...For the Fun and Health of it!*; Fabulous Fruits...Versatile Vegetables, How Much Are You Eating?; Where Do Your Favorite Foods Fit?; and Get on the Grain Train. 196

#### Farm and Foreign Agriculture Services

USDA is also responsible for promoting and protecting domestic agricultural markets. The Undersecretary for Farm and Foreign Agriculture Services oversees several agencies within USDA, including the Farm Service Agency (FSA).<sup>197</sup> FSA's mission is to:

- Stabilize farm income.
- Aid farmer-led land and water conservation efforts.
- Provide credit to needy farmers and ranchers.
- Help recovery in the aftermath of disaster. 198

These programs "provide a safety net to help farmers produce an adequate food supply, maintain viable operations, compete for export sales of commodities in the world marketplace, and contribute to the year-round availability of a variety of low-cost, safe, and nutritious foods."<sup>199</sup>

USDA is responsible for not just providing optimal nutrition advice to the nation and food for school lunch programs but also protecting the financial viability and market competitiveness of domestic farmers.

#### **Other USDA Obesity Initiatives**

Recent obesity-related USDA initiatives include providing \$2.5 million in obesity-related research grants to a variety of academic and private-sector research organizations.200 USDA also operates the **National Nutrient Database**, an interactive listing of over 6,000 foods.<sup>201</sup>

In October 2004, the USDA will sponsor an obesity prevention conference to address the roles of different disciplines in the fight against obesity.<sup>202</sup>

#### HIGHLIGHTING INNOVATIVE JOINT EFFORTS TO FIGHT OBESITY

Effective federal strategies to combat obesity will need to cross jurisdictions and rely on interagency cooperation to increase the size and scope of intervention and outreach. The following joint federal efforts are steps in the right direction.

A joint effort by the Secretaries at HHS, USDA, the Department of the Interior, and the Department of the Army has resulted in the **Memorandum of Understanding (MOU) to Promote Public Health and Recreation**. These agencies wish to promote public lands and water resources as an important component of a healthy population. Public lands are promoted as recreational facilities and public awareness efforts are centered on including outdoor recreation as integral to a physically active lifestyle.<sup>203</sup>

The Federal Highway Administration, the Environmental Protection Agency, and the Georgia Department of Transportation have teamed up to combat obesity through redesigning large highway and roadway projects. These agencies hope to make walking an option for people in these areas by making them less dependent on cars.

The collaborative **Strategies for Metropolitan Atlanta's Regional Transportation and Air Quality** provides an overview for evaluation of potential automobile reduction strategies and policies. The research initiative, conducted by the Georgia Institute of Technology, examines land development, environment, mobility and health and will provide data and report recommendations for future policies.<sup>204</sup>

#### 3. Federal Trade Commission (FTC)

The FTC has an important role to play in ensuring that the marketplace is receptive to healthy lifestyles and nutrition. Specifically, the FTC is promoting:

- Truthful health effects and labeling of food.
- Disclosure of calorie information.
- Efforts to crack down on deceptive marketing.<sup>205</sup>

The FTC has compiled a set of obesity-related consumer information publications to guide the general public in making realistic diet and health choices and avoid "too good to be true" claims on topics such as weight loss. <sup>206</sup> These guides include: Consumer Alert! Paunch Lines; Setting Goals for Weight Loss; Weight Loss: Finding a Weight Loss Program that Works For You; Amazing Claims Bookmark; Pump

Fiction; Avoiding the Muscle Hustle: Tips for Buying Exercise Equipment; Tipping the Scales? Weight-Loss Ads Found Heavy on Deception.<sup>207</sup>

The FTC has also published the *Red Flag* education guide to help media outlets avoid publicizing fraudulent weight loss claims. In order to deal with such claims, the FTC has relied primarily on federal district court complaints against offending companies and has filed cases against the worst fraud offenders. Familiar brands such as Pizzeria Uno restaurants, Promise margarine, Mrs. Fields cookies, Eskimo Pie ice cream, and the advertising agencies for Dannon yogurt and Häagen Dazs frozen yogurt have been cited for making false claims on fat, calories, sugar or cholesterol in advertisements. These companies have agreed to change their ads.

#### **REGULATING FOOD ADVERTISING?**

Twenty-five years ago, some consumer advocacy groups began calling for a ban on "junk' food (high-calorie, high-sugar food) advertising aimed at children. The FTC issued regulations regarding ads in the 1970s, but the Congressional action needed for a ban was not taken.

The fast-food industry has an advertising budget exceeding \$3 billion and McDonald's alone spends over \$1 billion annually on advertising, while the National Cancer Institute spends only about \$1 million a year to urge Americans to eat five daily servings of fruits and vegetables.<sup>209</sup>

#### 4. Department of Defense (DOD)

According to DOD spokesman, 16 percent of active duty adults in the U. S. armed services are obese and 18.9 percent of active duty adolescents (members of the services under the age of 21) are obese.<sup>210</sup> In FY 2002, the military health system spent \$15 million for bariatric surgeries in civilian and military facilities, with nine of those surgeries performed on active duty members.<sup>211</sup>

Every year, between 3,000 and 5,000 service members are forced to leave the military for being overweight. Meanwhile, military manpower remains low and the Pentagon is struggling to find new recruits.<sup>212</sup> Almost 80 percent of today's recruits who exceed weight-

for-height standards when they entered the military leave before they complete their first term of enlistment. This, in turn, increases the cost of recruitment and training.<sup>213</sup>

To combat the battle of the bulge, each of the armed services has developed programs to promote fitness and health. The Army has "Weigh to Stay," a program created and run by Army dieticians and nutrition care specialists. Navy officials are implementing "Ship Shape Navy," a program designed to move military personnel and their families toward healthier food choices, fitness habits and lifestyles. The Air Force has a new fitness plan that encourages unit fitness pro-

grams, encourages units to exercise together three times a week, and offers nutrition and fitness counseling to those with border-line fitness test scores.<sup>214</sup>

Department of Defense dining halls have also made an effort to combat obesity by revamping more than 1,700 recipes to include more fruits and vegetables into meals and less salt and fat. Main entrees have 100-300 fewer calories.<sup>215</sup>

#### 5. Department of Veterans Affairs (VA)

The VA serves over six million veterans; nearly 70 percent are overweight and approximately 30 percent are obese. Within the VA, the Veterans Health Administration's National Center for Health Promotion and Disease (NCP) has developed the Managing Overweight/Obesity for Veterans Everywhere or MOVE! program. A weight management and physical activity initiative, MOVE! is undergoing clinical trials at 16 VA facilities nationwide.

Eventually, the MOVE! program will be implemented in virtually every VA Medical Center and many of its community-based

outpatient clinics. The VA says that will make MOVE! the largest and most comprehensive weight management and physical activity program associated with a medical care system in the United States, giving it the capacity to reach every overweight VA patient in the country.<sup>217</sup>

The NCP also addresses obesity and related health issues in a number of publications on its Web site. For example, weight management was featured in NCP's Monthly Prevention Topics newsletter in January 2002, January 2003 and January 2004. <sup>218</sup>

#### 6. Office of Personnel Management (OPM)

OPM is responsible for building a high-quality and diverse federal workforce, based on merit system principles. This is accomplished by recruiting citizens to federal service, connecting job applicants with federal agencies and departments, and administering retirement, health benefits, long-term care, and life insurance programs.<sup>219</sup>

In an effort to reduce the demands on the health care system and associated costs, OPM has launched the *HealthierFeds* initiative, which educates the federal civilian workforce

and retirees about healthy living and best health care strategies. In partnership with Federal Employees Health Benefits Program (FEHB) carriers, OPM introduced a new Web site that offers practical information on nutrition, physical activity, and prevention. It also includes information about other government initiatives targeted towards obesity reduction, including HHS's *Steps to a HealthierUS program.*<sup>220</sup> OPM intends to extend the *HealthierFeds* campaign to include all federal agencies.

#### 7. Congressional Action Related to Obesity

Over 30 bills were introduced in Congress during the 108th session (2003-2004) that addressed obesity, nutrition, or physical activity. These bills focused on a range of issues, including:

- Grants to promote healthy eating and physical activity in schools
- Funding for obesity prevention research
- Requiring state Medicaid programs to cover obesity medications
- Requiring chain restaurants to list nutrition information
- Limiting restaurant and food-maker liability in obesity-related lawsuits



# Conclusions & Recommendations

SECTION

66 OUR EXPANDING WAISTLINES ARE CREATING A PUBLIC HEALTH CRISIS THAT,

IF RECENT ESTIMATES PROVE ACCURATE, THREATENS TO ERODE HARD-WON GAINS

IN LIFE EXPECTANCY AND HEALTH-RELATED QUALITY OF LIFE. 99

-Dr. Julie Gerberding, CDC Director, and Dr. James Marks, Director of the Coordinating Center for Public Health Information and Services at the CDC<sup>221</sup>

f America is going to turn the tide on the growing obesity crisis, there needs to be a sea change in the national approach to the problem.

As obesity rates continue to rise, it is increasingly evident that it is a multidimensional problem that will require the involvement of communities, schools, businesses, health professionals, the food industry, and government. Individual behavior change will not work in isolation.

There also needs to be a shift away from the current focus on obesity as a cosmetic issue toward viewing it primarily and fundamentally as a health issue, with a strong focus on prevention as well as treatment. Most researchers agree that weight, nutrition, and exercise impact an individual's health, and that obesity is directly related to increased risk for dozens of diseases. Research has also demonstrated that preventing individuals from becoming

obese is easier than treating obesity once a person has the condition.<sup>222</sup> Obesity prevention and reduction strategies should concentrate on encouraging a balance of healthy lifestyle, nutrition, and activity.

We must address the obesity crisis now, as it is happening.

As we take action, we must also closely monitor and evaluate our progress -- or lack of it -- to learn what policies and programs are most effective and to make sure that resources are being directed toward these efforts.

TFAH recommends beginning the process of change with some crucial government actions:

### I. The CDC should be designated as the "command and control center" to manage the obesity epidemic.

Currently, there is no single agency with the responsibility and authority to manage the crisis. By putting one agency in charge, the nation could ensure the coordination of programs across agencies and states. The agency could also serve as a central body to evaluate the effectiveness of programs.

The CDC's mission is to "promote health and quality of life by preventing and controlling disease, injury, and disability." With the CDC as the lead government force in the fight against obesity, health promotion would be the cornerstone of policies and actions.

The CDC should lead the public health efforts to coordinate population-based prevention efforts across the states. This includes:

- Establishing and chairing a Task Force of representatives from the range of government agencies involved in the obesity fight and external expert advisers and developing a National Public Health Action Plan for Obesity;
- Surveillance and monitoring of obesityrelated morbidities and mortalities, nutrition and physical activity behavior and other lifestyle issues, and policy and environmental changes;
- Development, synthesis, and translation of evidence-based strategies and promising practices;
- Setting physical activity and nutrition recommendations and guidelines;
- Evaluation of on-going obesity prevention and control activities; and
- Accelerating work to fund all states and select communities to build capacity, enhance infrastructure, and develop and implement policies, and other strategies in schools, communities, worksites, and medical settings.

As one major component of its leadership, the CDC should serve as the independent and neutral arbitrator of science-based information and research and determine how that information should be applied to policies and programs. This would include:

 Coordinating and centralizing the currently diffuse public education campaigns related to nutrition and physical activity across the federal government. For instance, the CDC would unify nutrition promotion programs around an agreed-upon message across agencies and even within divisions of HHS. One possible example might be to use the recommendations and messages outlined in FDA's Counting Calories across government programs.

Special emphasis should be placed on the development and evaluation of a long-term multi-media and public education campaign focused on obesity prevention in youth (consistent with the IOM report on preventing childhood obesity). These efforts should include continuing CDC's VERB, It's What You Do campaign, as well as the current Congressionally mandated project to identify the characteristics of effective marketing to promote healthy dietary choices among youth.

- Establishing the nutritional guidelines for the Food Pyramid and the National School Lunch Program based on health research, and allowing USDA to concentrate on its core mission of promoting the well-being of U.S. agriculture. This would create a "firewall" between USDA's scientific- and health-based nutrition programs and industry promotion responsibilities.
- Working with other agencies across the government to strengthen their obesity related efforts, such as working with the U.S. Department of Education to strengthen and support local education agencies and community-based organizations funded through the Physical Education for Progress Act.

### 2. Research and implementation for cures, community programs, and treatment must be "fast-tracked."

There are major gaps in the scientific information available about the causes of obesity, effectiveness of community-focused programs, and medical treatments for obesity.

"Fast track" refers to a process at the FDA used to speed the research and approval process for pharmaceuticals that address an unmet medical need. A "fast track" mentality must be brought to the obesity crisis; speeding the development, testing, and implementation of all related medical research and communityintervention programs must be encouraged.

For example, information related to combating the obesity epidemic should receive expedited review from the U.S. Office of Management and Budget (OMB), Institutional Review Boards (IRBs), and other governmental bodies involved in approving research and data collection activities.

All research efforts must be expedited to give health officials the information they need to understand and contain the epidemic, such as:

- Effectiveness of different health promotion programs;
- An independent, comprehensive review of how to encourage physical activity in children and youth, including how to overhaul school physical education programs to maximize their health value;
- A comprehensive review on how to improve nutrition in schools;
- How to better encourage obesity prevention, control, and reduction through changes in insurance coverage policies and programs;
- The causes of obesity;
- The impact of commercial advertising on obesity;
- Approaches to obesity prevention and treatment;
- How to improve the "built environment" of communities to foster improved activity, such as how to encourage increasing parks, converting "brownfields" into useable areas for exercise, and changing zoning regulation policies to encourage green spaces and sidewalks;
- How to improve availability of healthful foods and reducing their cost; and
- Additional knowledge about the impact of nutrition and activity on health.

For instance, the CDC should conduct research efforts for effective programs and treatment efforts. The research efforts could include, but not be limited to:

- A "Rapid Response" Obesity Investigative Service (OIS). The creation of a special evaluation team of expert scientists, comparable to the Epidemic Intelligence Service (EIS) that currently exists for infectious diseases, which could be deployed quickly into communities to help design and conduct studies to gain the information that is needed to create effective obesity control and prevention programs.
- **A Youth Fitness Study.** Given that physical fitness plays a major role in obesity prevention, identification of factors that promote or restrict physical activity and fitness are critical. With \$8 million, CDC could implement a study with the principal aims of 1) identifying factors that affect levels of physical activity and fitness in children and youth in the U.S. 2) examining the relationship of physical fitness to physical education programs in schools; 3) examining the impact of physical fitness and activity on classroom performance; and 4) comparing levels of physical fitness in American children and youth to those measured almost 20 years ago in the last National Children and Youth Fitness Survey.
- A Root Causes and Origins Study. To combat obesity, the nation needs to be armed with a better understanding of the science behind it. A comprehensive study should be conducted to identify the etiologies (causes and origins) for unhealthy eating, physical activity, and obesity among children, adolescents, and adults. This should also include examining the contribution of childhood and adolescent obesity on the prevalence of adult obesity.
- Marketing and Advertising Effects on Children's Health. A comprehensive review should be conducted of the effects of marketing and advertising on children's diet and health status.

#### 3. "Checks and balances" must be instituted for state and federal programs.

There must be a strong system of measurement and accountability in place to understand which strategies are working to roll back the obesity epidemic and to encourage the investment of resources in the most effective and promising approaches. This information is vital for tracking progress, offering assistance to states, and sharing effective strategies across all states.

■ The federal government requires outcome measurements for all major programs through the Government Performance and Results Act of 1993. However, this Act has not fulfilled its goal of improving services. The U.S. Office of Management and Budget's new Performance Assessment Rating Tool (PART) process attempts to link the measurement effort to program management, but outcome management is still

- widely perceived as primarily an accountability and budgeting tool.<sup>223</sup> Given the importance of the obesity crisis, efforts should be redoubled to enforce the spirit of the Act to measure obesity program outcomes.
- States should be required to provide the CDC with data necessary for the measurement of obesity rates for children and adolescents, not just adults, as well as information to help gauge the positive and negative impacts of different "environmental" factors, ranging from supermarket locations to green space initiatives. The CDC should have the authority to withhold obesity-related cooperative agreement program funds, including chronic disease management and health promotion efforts, from states that do not comply with the information reporting requirements.

### 4. Upfront funds to combat obesity must be increased to save lives and taxpayer dollars.

The federal government and states must make a serious investment toward combating obesity. Obesity currently costs the country an estimated \$117 billion annually. By investing in prevention and reduction, significant savings would be achieved. The severity of the crisis demands an investment of resources that is proportional to the impact it has on the nation's economy, health, and overall well-being.

As a first step, we must increase funding for CDC Division of Nutrition and Physical Activity (DNPA) grants. The grants help states prevent obesity and related chronic diseases. In FY 2004, \$44.7 million were devoted to this program, allowing only 28 states to receive grants. Congress and the Administration should provide a minimum of \$70 million for DNPA grants in FY 2006.

In addition, increased funding for CDC's Division of Adolescent and School Health (DASH) grants is also needed. These grants assist states in preventing behaviors that

increase risk of obesity in young people. FY 2004 funding of \$15.7 million was enough to award grants to only 23 states through CSHP program grants. Congress and the Administration should provide a minimum of \$36 million for the DASH program in FY 2006.

#### Explore how tax incentives can encourage change.

A panel comprised of representatives from across all relevant federal agencies should be assembled to study and recommend ways to use tax incentives to promote healthful change in our society. Tax incentives might be offered, for instance:

- To employers to encourage them to provide wellness programs.
- To real estate developers to encourage them to convert brownfields into activityoriented facilities, or include green space and accessible sidewalks in their plans for residential development.

# Appendix A

#### **HEALTHY PEOPLE**

Healthy People is the nation's agenda for health promotion and disease prevention. First appearing in 1979 in a report prepared by the Office of the Surgeon General, it has since been updated regularly. The current iteration is known as Healthy People 2010.

Healthy People 2010 outlines a set of health objectives for the nation to achieve over the first decade of the 21st century. This health agenda has two overarching goals: 1) increase quality and years of healthy life, and 2) eliminate health disparities.

Building on initiatives pursued over the past two decades, *Healthy People 2010* identifies a wide range of public health priorities and specific, measurable objectives. Scientists, practitioners, and providers inside and outside of government worked to develop these priorities for health. Health indicators are used to measure the health of the nation. Two of the indicators are overweight and obesity, and physical activity.

Healthy People 2010 establishes these goals for Americans regarding overweight, obesity, and physical activity:

Objective 19.1. Increase the proportion of adults who are at a healthy weight. (Forty-two percent of adults aged 20 years and older were at a healthy weight [defined as a BMI equal to or greater than 18.5 and less than 25] in 1988-94 [age-adjusted to the year 2000 standard population]). 2010 target: 60 percent.

Objective 19.2. Reduce the proportion of adults who are obese. (Twenty-three percent of adults aged 20 years and older were identified as obese [defined as a BMI of 30 or more] in 1988-94 [age-adjusted to the year 2000 standard population]). 2010 target: no more than 15 percent.

Objective 19.3. Reduce the proportion of children and adolescents who are overweight or obese (Ten to eleven percent of children and adolescents ages 6 to 19 years are considered overweight or obese). 2010 target: No more than 5 percent, using the gender- and age-specific 95th percentile of BMI from the year 2000 National Center for Health Statistics/Centers for Disease Control and Prevention (NCHS/CDC) growth charts.

Objective 22.1. Reduce the proportion of adults who engage in no leisure-time physical activity. (Forty percent of adults aged 18 years and older engaged in no leisure-time physical activity in 1997 [age-adjusted to the year 2000 standard population]). 2010 target: 20 percent.

Objective 22.2. Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day. (Fifteen percent of adults aged 18 years and older were active for at least 30 minutes, 5 or more days per week in 1997 [age-adjusted to the year 2000 standard population]). 2010 target: 30 percent.

Objective 22.6. Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days. (Twenty percent of students in grades 9 through 12 were engaged in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days in 1997). 2010 target: 30 percent.

# Appendix B

## BACKGROUND ON DATA SOURCES FOR INDICATORS AND METHODOLOGY USED IN THIS REPORT

### Prevalence Rates for Obesity, Diabetes, and Hypertension in Adults

The data for adult obesity, diabetes, and hypertension rates are from CDC's Behavior Risk Factor Surveillance Survey. This is an annual telephone survey of adults over 18 years old conducted by the health departments of all states and D.C. The data are for 2003 and may be found at http://apps.nccd. cdc.gov/brfss/. The BRFSS is the primary source of information for states and the nation on the health-related behaviors of adults.

### Overweight Prevalence in High School Students and Young Children, Aged 2-5

Overweight prevalence data among high school students are from CDC's Youth Risk Behavior Surveillance System (YRBSS), 2003. The data were collected from February through December 2003. YRBSS includes a national school-based survey conducted by the CDC as well as state and local school-based surveys conducted by education and health agencies. The survey monitors six categories of priority health-risk behaviors, including overweight.

The data for overweight rates are from the CDC's Pediatric Nutrition Surveillance System (PedNSS), 2002. This is a child-based health surveillance system that monitors the nutritional status of low-income children in federally funded maternal and child health programs, such as the Special Supplemental Nutrition Program for Women, Infants and Children. The data are for 2002.

#### **Medical Costs Related to Obesity**

The data for this indicator are from the study, "State-Level Estimates of Annual Medical Expenditures Attributable to Obesity," that appeared in the January 2004 issue of

Obesity Research.<sup>224</sup> Researchers at Research Triangle Institute International and CDC's Division of Nutrition and Physical Activity conducted the study which presents the best available information on the impact of obesity at the state level.

The study involved three steps. The researchers first used 1998 Medical Expenditure Panel (MEPS) Survey data linked to the 1996 and 1997 National Health Interview Surveys (NHIS). MEPS is a nationally representative survey of health care use, expenditures, sources of payment, and insurance coverage, fielded by the Agency for Health Care Research and Quality. NHIS is a household interview survey that collects information on basic health and demographic items. The linked MEPS/NHIS data included information on obesity and expenditures to create a model that predicts annual expenditures as a function of obesity status, insurance status, and sociodemographic characteristics.

Second, the researchers used BRFSS and results from the MEPS/NHIHS analysis to estimate the fraction of each state's expenditures attributable to obesity and the fraction of each state's Medicare and Medicaid expenditures attributable to obesity. Third, the researchers multiplied these fractions by state-specific medical expenditures for each state (and for Medicare and Medicaid within each state). The researchers caution that because the state-level estimates are associated with large standard error, these estimates should not be used to make comparisons across states or among payers within states.

### School Nutrition, Physical Education, and Health Education

Because children spend a significant amount of time in schools, TFAH conducted analyses of state policies on school nutrition, physical education, and health education. TFAH contracted the Health Policy Tracking Service (HPTS) at NETSCAN iPublishing (formerly of the National Conference of State Legislatures) to collect information on policies set in state statute and administrative code for all 50 states and the District of Columbia. Information was collected for elementary, middle school (or junior high) and high school. HPTS examined state statute and administrative code in effect through August 2004.

HPTS did not collect information on legislation that has been introduced. Legislation on school nutrition, physical education, and health education has been introduced in many state legislatures. However, TFAH chose to focus on policies that have been put in place. The goal was to provide a baseline of initiatives that are actually being implemented, and not just considered, across the country.

#### School Nutritional Standards for School Lunches, Breakfasts, and Snacks That Go Beyond Existing USDA Requirements

For this indicator, HPTS and TFAH first reviewed the federal nutrition standards for school meal programs. HPTS then conducted an analysis of state statute and administrative code to determine if a state set standards that went beyond current federal requirements. Federal standards set by the U.S. Department of Agriculture's Food and Nutrition Service (FNS) require schools to serve meals that adhere to Dietary Guidelines for Americans.

Under the National School Lunch Program (NSLP), meals must meet one-third of the recommended daily allowance for calories, protein, vitamin A, vitamin C, calcium, and iron. Under the School Breakfast Program (SBP), meals must meet one-fourth of these recommended daily allowances. In addition, under both NSLP and SBP, the maximum level of calories from fat is less than or equal to 30 percent of total calories. Saturated fat must be less than 10 percent of total calories.<sup>225</sup>

FNS does not set specific standards for fiber, cholesterol, or sodium levels. Instead, the FNS regulations require schools to meet the Dietary Guidelines for Americans for these nutrients which recommend: "Choose a diet low in cholesterol; choose a diet with plenty of grain products, vegetables, and fruits; and choose a diet moderate in salt and sodium."<sup>226</sup> In addition, the regulations do not set specific limits on carbohydrates, which include sugar. Thus states that set maximum levels for these nutrients are considered to have standards that go beyond existing USDA requirements.

South Dakota is considered to have met the indicator because it sets levels for sodium, cholesterol, and fiber. Texas was also considered to have met the indicator because it set maximum levels of sugar content in beverages. Texas also sets standards for portion sizes for a number of food items.

#### Competitive Foods

For this indicator, TFAH and HPTS reviewed the federal standards for competitive foods. USDA's regulations restrict only a small subset of competitive foods from being sold during meal times in cafeterias. USDA does not regulate competitive foods in any other manner, leaving such regulation up to the states. The subset of competitive foods that USDA regulations restrict are "foods of minimal nutritional value (FMNV)," such as carbonated beverages, water ices, chewing gum, hard candy, jellies and gums, marshmallow candies, fondant, licorice, spun candy, and candycoated popcorn. USDA regulations do not prohibit selling FMNV outside of the cafeteria areas at any time throughout the day.

Following review of USDA's regulations, HPTS collected information on state statute and policies to determine if states: 1) set standards for the nutrition content of competitive foods and 2) limited access to competitive foods. States that set standards for the nutrition content of competitive foods were determined to have met the indicator. States that limited access to competitive foods beyond the existing USDA requirement were deemed to have met that indicator.

#### Physical Education

HPTS reviewed and collected data on state statute and administrative code for state-level physical education requirements. This included information on frequency and duration of physical education programs, and whether physical education is a high school graduation requirement. In addition, HPTS collected information on permissible student exemptions or waivers from physical education requirements. The data for this indicator do not distinguish between what schools must offer and what students are required to take.

#### Health Education

HPTS reviewed and collected data on state statute and administrative code related to state requirements for health education. The analysis included information of frequency and duration of programs, and whether health education is a high school graduation requirement. The analysis does not distinguish between what schools must provide or what students are required to take, unless otherwise indicated in the table found in Part B of this report.

### State Policies and Actions Aimed at Obesity Prevention, Control, and Reduction

### Laws That Limit Liability for Obesity and Obesity-Related Health Problems

The information for this indicator is based on data collected by HPTS in a review of state statutes that generally protect manufacturers and sellers of food products from litigation that seeks damages for injury due to weight gain, obesity, or health conditions associated with obesity as a result of consuming food products. When defining food, states usually refer to Section 201(f) of the Federal Food Drug and Cosmetic Act [21 U.S.C. 321(f)]

#### Taxes on "Snacks" or Sodas

The research for this indicator is based on a study conducted by Yale University and published in the June 2000 issue of the American Journal of Public Health. The study contained a detailed listing of states that at that time incurred sales and/or excise taxes on soft drinks and/or snack foods. Using the

Yale study as base data, HTPS then used the 2001, 2002, and 2003 editions of the National Conference of State Legislatures' State Tax Actions publications to see if any of the listed states had changed their food tax laws or if any other state enacted new food tax laws that would affect snack and soda tax policies. The chart compiled by HPTS should not be considered a definitive source of information for a topic as complex as food tax policies. HPTS did not research how states define "food" under their respective tax policies, which may or may not include snack items.

### State Commissions on Obesity, Nutrition, or Physical Activity

HPTS conducted a review of commissions related to obesity, nutrition, or physical activity in each state established by state legislatures or governors. The analysis includes those commissions created during the period from January 2002 to September 2004.

The analysis does not include a review of governors' or state councils on physical fitness and sports. Many of these were created in the 1960s and 1970s after the President's Council on Physical Fitness and Sports encouraged states to develop councils of their own. About 29 states currently have such councils, although the number can vary with changes in state administrations and the priorities of new governors. These councils largely serve in an advisory capacity and consist of volunteers with expertise in physical activity and health. While some states provide funding, many councils rely on private donations or operate without budgets.<sup>227</sup>

### Health Insurance Mandates for Obesity Surgery

HPTS reviewed state statute for mandates that require health insurers to either offer or provide coverage for surgery to treat morbidly obese patients. According to NIH, bariatric surgery is the best option for people who are severely obese and cannot lose weight by traditional means, such as diet and exercise.<sup>228</sup>

#### CDC State-Based Nutrition and Physical Activity Program Aimed at Obesity and Other Chronic Disease Reduction

The information for this indicator was obtained from CDC's Web site, http://www.cdc.gov/nccdphp/dnpa/obesity/state\_programs/index.htm. The information was then verified with the CDC.

#### CDC's School Health Program to Prevent Behaviors Among Young People That Increase the Risk Of Obesity

CDC, Division of Adolescent and School Health (DASH) provided the information for this indicator.

### **Endnotes**

- 1 Ali H. Mokdad, PhD, James S. Marks, MD, MPH, Donna F. Stroup, PhD, MSc, Julie L. Gerberding, MD, MPH, "Actual Causes of Death in the United States, 2000," <u>Journal of the American Medical</u> <u>Association</u> 291:10 (10 March 2004): 1238-1245.
- 2 Ibid.
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1707 H Street, NW, 7th Floor Washington, DC 20006 (t) 202-223-9870

(f) 202-223-9871