RECREATION’S ROLE IN COMBATING OBESITY: CURRENT EFFORTS AND OPPORTUNITIES FOR NEW PARTNERSHIPS

POLICY ANALYSIS BY PRICEWATERHOUSECOOPERS LLP FOR THE AMERICAN RECREATION COALITION

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EXECUTIVE SUMMARY

Americans face substantial quality of life and economic risks as the result of a marked increase in obesity among adults and children. The Centers for Disease Control and Prevention report that approximately two in three adults is overweight, and that the increase in childhood obesity is especially alarming. A clear contributor to this trend is a reduced level in physical activity. Over 60% of all adults and more than a third of all American youth do not get enough physical activity to provide health benefits.

The consequences of inactivity and obesity are serious. More than a dozen medical problems are linked to obesity, and the costs of obesity-related medical care, including indirect costs such as lost productivity, is estimated at $117 billion annually. This has a direct impact on business profitability and competitiveness and exacerbates the challenge of containing corporate health care costs.

The Government and the private sector are addressing the increase in the obesity issue in many ways by enhancing research and implementing programs designed to directly combat the epidemic. The Government has initiated communication and education programs across numerous agencies. It has also directed agencies that were previously uninvolved in public health matters, including federal land management agencies responsible for the management of one third of the nation’s surface area, to assume roles in anti-obesity efforts.

An important component of these programs is the effort to increase physical activity on a voluntary basis. A number of examples of successes are presented, resulting from counseling, improved facilities, financial incentives and communication programs. In some cases, the programs have involved cooperation between companies and public agencies, including local park and recreation departments.

Additional steps can and should be undertaken, and partnerships among agencies and companies are especially attractive alternatives. Creative legislation that encourages workplace, school and public land opportunities for convenient and enjoyable recreational activities can be a major contributor to improved public wellness.
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The Obesity Epidemic in America

According to the Centers for Disease Control (CDC), 34.7% of American adults are overweight, 25.5% are obese and 4.9% are extremely obese. The numbers are equally alarming for children. The following table presents a summary of the most recent results of the National Health and Nutrition Examination Survey (NHANES) conducted by the CDC and published in the June 16, 2004 issue of the Journal of the American Medical Association.

<table>
<thead>
<tr>
<th>Adults (20+ Years Old)</th>
<th>Children (6-19 Years Old)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight</td>
<td>At Risk for Being Overweight</td>
</tr>
<tr>
<td>34.7%</td>
<td>15%</td>
</tr>
<tr>
<td>25.5%</td>
<td></td>
</tr>
<tr>
<td>4.9%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Exhibit 1 - Prevalence of Overweight and Obesity in American Population, By Age, 1999 – 2002

*At Risk for Overweight = Body Mass Index (BMI) between 85th and 95th percentile
Overweight = BMI between 25 and 29.9
Obese = BMI between 30 and 39.9
Extremely Obese = BMI over 40

Source: Journal of the American Medical Association, June 16, 2004

The current rates of obesity have grown substantially in the last ten years, leading the medical and public health community to label the problem as a true epidemic. Consider the following statistics provided by the CDC:

- Since 1993, obesity rates have increased by more than 60% among adults
- Approximately 59 million adults are currently obese or extremely obese
- Since 1980, obesity rates have doubled among children and tripled among adolescents
- Despite the proven benefits of physical activity, more than 60% of American adults do not get enough physical activity to provide health benefits
- More than a third of young people in grades 9-12 do not regularly engage in vigorous physical activity

Given the statistics presented above, it is clear that obesity is a serious problem among Americans of all ages. Though the statistics above indicate that obesity is a serious issue, they do not present the full scope of the problem. Obesity has important health and economic consequences that must be considered when evaluating the severity of the current situation.
Health and Economic Impacts

According to the National Institutes of Health (NIH), overweight and obese individuals are at increased risk for physical ailments such as: 1,2

- High blood pressure
- High blood cholesterol
- Type 2 (non-insulin dependent) diabetes
- Insulin resistance, glucose intolerance
- Coronary heart disease
- Angina pectoris
- Congestive heart failure
- Stroke
- Gallstones
- Gout
- Osteoarthritis
- Some types of cancer (such as endometrial, breast, prostate, and colon)
- Psychological disorders (such as depression and eating disorders)

According to Parks and Recreation Magazine, “nearly 400,000 deaths per year are associated with overweight conditions and inactive lifestyles.” 3 The economic impacts caused by these health conditions are enormous and affect the lives of nearly all Americans. The CDC reports that the total cost of obesity in the United States was estimated to be $117 Billion in 2000. $61 billion of this amount was for direct medical costs and $56 billion was for indirect costs such as lost productivity and wages. It should also be noted that approximately half of the costs were paid by Medicaid and Medicare. At this level, obesity accounts for approximately 10% of total U.S. medical expenditures.

The costs of obesity and the associated medical conditions are causing increased insurance costs for U.S. employers, leading to higher prices for consumers and less competitive American corporations. For instance, 48% of the respondents to the latest CEO Confidence Index survey said that they expect their companies’ health care costs to increase by 11% to 20% annually over each of the next three years. Also, according to the Bureau of Labor Statistics, employee health benefits, on average, currently represent 7% of total wages. According to Chief Executive Magazine, U.S. automakers say that health benefits account for $1,200 to $1,400 of the cost of building each new car. Unum Provident, the nation’s largest disability insurer states that obesity related claims have risen ten-fold in the last decade, “costing an average of $8,720 per employee each year.” 4 Pat Mazemetz, Vice President of Human Resources at Xerox estimates that “obese

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employees cost the company on average $6,000-$7,000 per year more in terms of lost productivity and presenteeism (where employees are physically present but mentally absent).\(^5\) Health care costs have also been identified as one reason that companies are increasing the quantity of jobs outsourced to foreign countries.\(^6\) If allowed to grow unabated, obesity could prove to have significant negative impacts on American business.

**Physical Activity as a Necessary Part of the Response to Obesity**

There are a number of causes for the increased levels of overweight and obese Americans. The two most significant factors are poor diet and insufficient exercise. This paper focuses primarily on the impacts of appropriate levels of physical activity. The CDC and the Surgeon General have established recommended levels of physical activity needed to promote general health and physical well being (30+ minutes per day during the week for adults and 60+ minutes per day for children). Though almost one third of adult Americans are meeting or exceeding these recommended levels, overall obesity levels within the adult population remain high. Between 1997 and 2002, the percentage of the population that met or exceeded recommended levels changed little, going from 32% to 33%. During the same period, the percentage of the population that reported no leisure time activity changed slightly, dropping from 40% in 1997 to 38% in 2002.\(^7\) In short, nearly two thirds of the population is not active enough to support a healthy lifestyle. More disturbing is the fact that nearly two in five adults reported no leisure-time activity, indicating that they are sedentary or inactive during non-work periods. The following table details the CDC’s most recent survey.

<table>
<thead>
<tr>
<th>Year</th>
<th>No Leisure Time Physical Activity</th>
<th>Moderate, Regular Physical Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>1998</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>1999</td>
<td>39%</td>
<td>30%</td>
</tr>
<tr>
<td>2000</td>
<td>39%</td>
<td>32%</td>
</tr>
<tr>
<td>2001</td>
<td>38%</td>
<td>32%</td>
</tr>
<tr>
<td>2002</td>
<td>38%</td>
<td>32%</td>
</tr>
</tbody>
</table>

*Source: National Center for Health Statistics, CDC, Healthy People 2010 – Status Report*

\(^5\) Ibid  
During the same period, demand for recreation increased in most activity categories. According to the United States Forest Service, Southern Research Station, the number of people age 12 and older who participated in recreation increased by 65% between 1960 and 1994. In addition to an overall increase, the major recreation categories (other than hunting) have seen increases, especially in land based and winter recreation. Though many Americans participate several times per year in recreation activities, obesity rates remain higher than expected, indicating that participation frequency and intensity levels can be improved to make a more marked impact upon national obesity levels.

For instance, data suggest that walkers enjoy a 50% reduction in the risk of premature death, 50% less incidence of type two diabetes, 30%-40% reduction in the risk of heart disease, and a 20% reduction in the risk of stroke. Trails provide a place for people to walk, hike, and enhance their levels of physical activity. There is a direct link between trails and walking or other forms of physical activity. This assertion is supported by a 2001 study performed by the Eppley Institute for Parks and Public Lands at Indiana University that examined the attitudes of trail users and trail neighbors to establish, among other things, the reasons people use trails. The study determined that 70%-90% of trail users reported that they were exercising solely because of the presence of nearby trails. Not only do users depend on nearby trails but, according to Active Living Research, 43% of people who had safe places to walk that were located nearby met recommended activity levels. Only 27% of those without safe trails met recommended activity levels. If society evolves to value trails and demand access to them, then planners, developers, and architects will place more emphasis on them when designing, permitting, and building the communities in which we live and work.

The Role of Government

It has been established that the prevalence of obesity in America has reached epidemic proportions with measurable economic and quality of life consequences. However, hope is not lost. This problem can be solved through the collaboration and focused efforts of key stakeholders. There are two primary objectives that should be remembered when crafting solutions that deal with physical activity and obesity. First, the number of citizens participating in physical activities should be increased and secondly, the frequency and duration of activities for many of those already participating should be increased to levels that are sufficient to promote a healthier nation. The Bush Administration recognized the significance of this problem and issued Executive Order 13266 on June 20, 2002. The order states,

The Secretaries of Agriculture, Education, Health and Human Services (HHS), Housing and Urban Development, Interior, Labor, Transportation, and Veterans Affairs, and the Director of the Office of National Drug Policy shall review and evaluate the policies, programs, and regulations of their respective departments and offices that in any way relate to the personal fitness of the general public. Based on that review, the Secretaries and the Director shall determine whether existing policies, programs, and regulations of their respective departments and offices should be modified or whether new policies

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8 Cordell, Ken H., et. al. Outdoor Recreation Participation Trends. USDA Forest Service – Southern Research Station. 1999
or programs could be implemented. These new policies and programs shall be consistent with otherwise available authority and appropriated funds, and shall improve the Federal Government’s assistance of individuals, private organizations, and State and local governments to (i) increase physical activity; (ii) promote responsible dietary habits; (iii) increase utilization of preventive health screenings; and (iv) encourage healthy choices concerning alcohol, tobacco, drugs, and safety among the general public.

In response to the President’s directive and based upon a general concern to serve the nation, Federal government agencies, especially those who manage our public lands, and employers (both private and public sector) are poised to make significant impacts and reap measurable benefits by successfully reducing the prevalence of obesity among Americans. The following paragraphs briefly discuss ways in which each of these groups can make a difference.

Many public agencies, at all levels of government, are working to drive down obesity by trying to increase physical activity among their constituents. Efforts can generally be classified into three major categories: research, public outreach, and opportunity delivery. In determining the role of government, some have raised the issue of whether or not government should really be involved in this area. Given the fact that the government, and ultimately the taxpayer, is paying for more than half of the economic burden of obesity (+$50 billion) through Medicare and Medicaid, it seems that government has compelling responsibility to reduce obesity rates and the associated costs.

Research
At the federal level, the CDC and NIH are driving many of the research efforts aimed at the epidemic of obesity. Specifically, they are working to increase research on the behavioral and environmental causes of overweight and obesity, increase research on prevention and treatment, develop and disseminate best practice guidelines, and increase research on disparities in the prevalence of overweight and obesity among various racial, ethnic, age, gender, and socioeconomic groups. They participate in direct research and provide numerous grants to scholars and local governments for additional study.

Public Outreach
This is a major area of government involvement. Many federal, state, and local agencies are involved in a multitude of efforts targeted at educating the public to make better choices and inform the public about opportunities in their community. Among the many programs currently in place, smallstep.gov works to provide the public with realistic step by step assistance in the areas of diet and exercise designed to raise individual and community health levels. The President’s Council on Physical Fitness works to encourage Americans to live a physically active lifestyle. Cities and states are also involved in a myriad of programs ranging from summer programs for youth to organized sports leagues.

Opportunity Delivery
Governments are often the primary managers of publicly accessible opportunities for physical activity and recreation in the United States. Whether it’s the development and maintenance of trails and recreation centers, or the roadways that provide access to these opportunities, governments play a pivotal role in providing safe and accessible recreation opportunities. For instance, the US Forest Service maintains thousand of miles of trails and developed support areas such as parking, restrooms, and trailheads. On a more local note, city parks and recreation
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departments maintain thousands of swimming pools, open spaces, and recreation centers across the country. In an era of dwindling tax resources and a recovering economy, it will become increasingly important for government agencies with these responsibilities to be properly funded through public and private sources.

The Role of Employers

As both private and public sector employers continue to recognize and quantify the costs of obesity, it will become increasingly clear that this issue has measurable impacts on profitability and is a drain on the public’s resources. The case for change is clearly stated however, what are employers supposed to do? How can an employer develop programs and an overall culture that encourages employees to maintain healthy lifestyles for the long-term? There are numerous answers to these questions and the most effective strategies continue to evolve. Each of the following organizations has found innovative and effective answers to these questions that work well for them.

Union Pacific Railroad (UPR)

Recently, nearly 55% of UPR’s 47,000 employees were classified as overweight – that equates to approximately 26,000 employees. In response, UPR initiated two programs; Health Track and the System Health Facility Program. Health Track is focused on lifestyle choices and helps employees assess health risks and encourages program participants to change their behaviors to eliminate those risks. More than 17,000 employees participate in the program that focuses on ten risk factors and chronic health conditions including physical inactivity, weight gain, and smoking.

The System Health Facility Program provides enrolled employees with access to fitness centers across the railroad located in UPR buildings, modified railcars, and independent locations under contract to UPR. More than half of the railroad’s employees participate in the Health Facility Program and according to Dr. Dennis Richling, Assistant Vice President, Health Services, UPR has seen measurable benefits. He states that “Healthy employees spend less money on health care, are more productive and have lower absenteeism rates. We can tie those results to the bottom line. It is a true win-win situation.”

UPR states that measuring the impact of its wellness programs on health care costs is difficult due to inflation and naturally rising costs. Therefore, UPR has taken a different approach by focusing on the number of lifestyle related medical claims filed by its employees. Such conditions include adult onset diabetes and cardiovascular or smoking related conditions. According to Marcy Zauha, UPR Director of Medical Services, when looking at claims for lifestyle related factors; the company has seen a “dramatic reduction in costs. In 1990, these costs comprised 29% of employee health care costs, today, they comprise 18.8%.”

Additionally, UPR has determined that there is a correlation between being overweight and predicting workplace safety incidents. The company recently identified health and welfare as one of eight major business initiatives that will be given special focus. The integration of health

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promotion and safety has resulted in the development of a health Index for operations personnel in the field. According to UPR, “the Health Index allows work units to set goals related to health promotion activities. By establishing measurable goals, each work unit is then able to develop plans to meet these goals.” Union Pacific is also working to link health promotion programs with its health care benefits goals. By 2005, UPR will incorporate the company’s health risk assessment and intervention programs into a consumer-driven health care plan, which will encourage participants to make good health care decisions and spend their health care dollars wisely, and hopefully lead to an overall healthier workforce.

UPR has been recognized for its efforts with numerous awards including the C. Everett Koop National Health Award (1994, 1997, 2001), the Wellness Councils of America Well Workplace Gold Award (1992, 1996, 1999) and the Platinum Award (2001) and the U.S. Department of Health and Human Services Innovation in Prevention Award (2003).

**Caesar’s Entertainment, Incorporated**

Formerly known as Park Place Entertainment Corporation, Caesar’s Entertainment Inc. is the owner and operator of numerous hotel and gaming properties including those under the Caesar’s and Bally’s brands. The leadership and management of Caesar’s recognized that the environment in which many of its employees work is inherently unhealthy. For instance, Gary Earl, Vice President of Benefits, stated that “dealers, for example, get 20-minute breaks every hour. I would see them go up to the employee dining room, grab a cheeseburger, wolf it down and go right to sleep. Then get up, go back down to the casino to deal and inhale second hand smoke through the rest of their shift.”

To better understand the problem, Earl conducted an assessment of Caesar’s employees and found that the average worker had a Body Mass Index of 33, meaning the typical five-foot, four-inch employee was nearly 200 pounds. Even worse, at two properties, the average employee BMI was over 44, placing them in the extremely obese category.

Recognizing that there was little that could be done to improve the employee work environment, Earl focused on wellness programming and developed the Lifestrides program. Launched in 2002, Lifestrides was founded on the cornerstones of wellness/disease prevention, education, communication, and partnership. The program offers ten onsite wellness centers plus an extensive employee outreach program. Employees receive free health assessments, a newsletter (published in 26 languages), and weekly education on fitness, exercise, and nutrition. Employees can also schedule one-on-one consultations for more personalized wellness plans. To help launch the program, Caesar’s invested $1 million in a communication campaign and developed a 90-day “Weight No More” challenge under which employees banded together in teams of five to work towards weight loss. The company provided a $2,500 prize for the team losing the most weight. To date, 6,000 employees have been involved in “Weight No More” and have lost an average of 13.4 pounds per person. As of September 2003, more than 700 employees have lost a combined 4.5 tons of excess weight through the Lifestrides program. The program has helped keep annual health care costs down and employee contributions have remained flat.

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13 Union Pacific Railroad, News Release. *HHS Honors Union Pacific for Promoting Healthy Lifestyles.*

In April 2003, Caesar’s entered into a relationship with Sierra Health and Life Insurance to manage and administer the Lifestrdes program throughout its portfolio of properties. Sierra has an entire division dedicated to wellness programs for its clients and works to integrate wellness into its client’s benefits programs by working with medical provider networks for referrals and disease management.

**Washoe County School District**

The Washoe County School District in Reno, Nevada implemented a wellness program in 1994 that focuses on individual responsibility and incentive based activities for its 7,000 employees. The program is funded through a $40 per month charge paid by each employee. However, if employees participate in a health screening, the charge is reduced to $30 per month. The fee is reduced further, in $10 increments, if employees can demonstrate that they are actively working to address risk factors identified in the screening. For instance, an overweight employee who takes an exercise class or a smoker taking a smoking cessation course would be eligible for the $10 reduction. This system means that the program is funded, in essence, by employees who do not participate. During 2003, the program took in $235,000 from approximately 500 non-participant employees and spent $176,000 for things ranging from flu shots to exercise equipment. The program also sponsors activities such as kayaking on Lake Tahoe and a Holiday Weight Challenge.\(^{15}\)

The use of mandatory contributions is an aggressive stance. However, the U.S. Department of Health and Human Services has reviewed the program and determined that it was in complete compliance with the Health Insurance Portability Act and the Public Health Service Act. In addition, though some employees were upset with the mandatory contribution program, many of those who did participate have become program advocates.

To determine the effectiveness of the program, the district undertook a study to measure the short term impacts on employee health care costs and absenteeism rates during 2001 and 2002. The study was conducted by the college of Health and Human Performance at Brigham Young University. The findings revealed that absentee rates for program participants dropped by 20 percent, saving local taxpayers $3 million. Based on a $176,000 investment, that equates to a 1,600 percent rate of return.

**Waco-McLennan County Public Health District**

Wellness programs can also be effective for small organizations. The Waco-McLennan County Public Health District Worksite Wellness Program won a 2003 Innovation in Prevention award from the U.S. Department of Health and Human Services for the excellent results achieved through its wellness program. Located in Waco, Texas, the Health District has 72 employees, 40 of whom participate in the wellness program. The program helps employees set personal goals and flexible exercise routines. Among the innovative strategies, employees are given a paid hour each day to participate in and record the physical activity of their choice. As of 2003, participants “have improved their physical activity by nearly 60%, have a 20% lower body weight, and decreased their cholesterol levels by 11% and blood pressure levels by 4%. The long-term effects of the program include lower rates of sick leave absenteeism, improved work efficiency, and increased productivity.”\(^{16}\)

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\(^{15}\) Patton, Carol. *Curing Wellness.* Human Resource Executive. May 2, 2004

\(^{16}\) *Preventive Healthcare; HHS Honors Organizations for Promoting Healthy Lifestyles.* Health and Medicine Week. December 29, 2003.
Institute on Costs and Health Effects of Obesity

Recognizing that obesity and wellness are manageable issues with the potential to dramatically affect profitability and performance, a number of large companies have banded together to form the Institute on the Costs and Health Effects of Obesity (the Institute). The Institute is a part of the National Business Group on Health, located in Washington, DC. The Institute’s board is comprised of 40 major employers including Aetna, Inc., Dell, Ford Motor Company, Honeywell, IBM, Microsoft, Walt Disney, and Xerox. The institute is committed to the following strategies in the workplace:

- Building a healthy culture
- Providing healthy food at work
- Promoting physical activity
- Improving communications to employees and dependents on healthy weight issues and related resources
- Redesigning benefit programs to promote wellness

The Institute provides numerous tools including Return on Investment data that supports the case of sound investments in wellness. Though industry is working to combat the problem, there is more that can be done.

Steps for Consideration

The economic benefits of reducing obesity are clear. As the population continues to age and become less active, it is likely that the prevalence of obesity will continue to rise if left unchecked. To succeed, companies must use programs that drive cultural change through their organization and provide properly aligned incentives for employees to live healthier through increased physical activity and the management of other risk factors such as smoking and poor nutrition.

In developing programs, creativity is a key element for success. According to a 2003 survey of 354 U.S. companies conducted by the American Management Association, 71 percent of respondents promote wellness among their workers, while 29 percent offer some type of incentive to participate in wellness programs. Though it appears that many employers offer programs, participation in these programs is relatively low. According to David Hunnicutt, president of the Wellness Councils of America, participation rates generally range from 10 percent to 25 percent. Hunnicutt asserts that “less than 20 percent of American employers offer “well thought-out, creative and effective wellness programs.”

It is also very important that the programs become a part of an organization’s culture. Therefore, those programs that are most likely to be successful are those that are tailored to meet the unique needs of an organization’s employees while recognizing the realities of the workplace (e.g. Caesar’s Lifestrides program). Though well developed and creative programs may require time and resources to create, the following list provides a number of relatively simple solutions that organizations should consider.

- Provide at least 30 minutes during the workday for employees to exercise. Such a policy must be embraced and employees should be encouraged to actually use the time. If this type of program is implemented with an “unwritten rule” that people

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don’t take time away from their work, then the initiative will fail and management will lose credibility for future efforts.

- Create a pool of recreation equipment that can be used by employees during the workday or during private time. For instance, bicycles could be used for those who can’t or won’t run/jog during exercise periods. By making other equipment, such as kayaks, tents, and other camping equipment available to employees, the economic barriers to increased recreation are reduced.

- Use technology to disseminate information on wellness. For instance, when an employee logs in to a workplace computer network, the log in could be followed by a “wellness tip of the day” and the employee could be required to acknowledge the message before moving on to the main screen.

- Provide space for stretching and limited exercise. It is not feasible for many organizations to provide on site exercise facilities. In addition, the time required for employees to change, go to the gym, shower, and return to work can be prohibitive for many. By providing rooms with simple equipment such as resistance bands and stretching mats, employees can increase their physical activity during the workday without sacrificing too much time.

- Sponsor sports activities and organized recreation. Many companies participate in softball and basketball leagues and this effort should be continued. Sponsorship could also be applied to individual sports such as running, cycling, and swimming. For instance, an employer could pay all or a portion of race registration for employees who run at least five 5K or 10K races per year.

In addition to the simple steps described above, the private and public sector should work together to craft longer-term, more global strategies. For instance, tax incentives could be provided to employers that meet certain criteria for offering effective wellness and obesity management programs. The bottom line is that private industry is most likely to get behind obesity management efforts when the financial incentives are clear and clearly measurable. Insurance companies can play a pivotal role as they continue to assess the risks of obesity and price their products accordingly. As insurance prices rise to cover the costs of obesity related illness, the public would be wise to require its government agencies to actively address this issue, thereby making better use of the public’s resources.

Obesity will be one of the most important health issues of this century and will require an effective response from both the public and private sectors. There are many stakeholders in this issue and there is room for all of them to make a positive impact. As a society, we must work to control this issue through increased research, education, and the implementation of creative, cost effective solutions that ultimately make America a healthier and more productive nation.
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