

OBESITY – THE BIG ISSUE IN U.S. HEALTH

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Forward

In the lead-up to the November 2008 US Presidential election, I wrote a tongue-in-cheek opinion piece that showed a rather neat correlation between how American states were predicted to vote for the next President (blue or red?) and where the states ranked on the obesity charts¹. On this basis, in the second week in October, I predicted that the scales would tip to Barack Obama who would win by 318 electoral college votes to 220 for John McCain. (The final result was in fact a victory to Obama by 365 votes to 173).

However the real point of that opinion piece lay in what the numbers used to make the light-hearted and light-weight predictions mean for the future of the US health care system and the economy as a whole, and what President Obama must do to address this major health problem.

Here in Australia we are at risk of outweighing the US on the obesity scales and Prime Minister Kevin Rudd faces a similarly big task to tackle what the National Preventative Health Taskforce describes as 'one of the greatest public health challenges'.

The international economic crisis means that the drive by governments and industry to cut the budget fat is underway. There are substantial savings to be made and economic and avoidupois burdens to be lifted by addressing the obesity crisis.

This paper, the second in a small series², looks at the issues in obesity prevention and treatment in the US and considers what the US and Australia can learn from each other about how to successfully tackle these issues. It is meant primarily as a resource for Australians, but hopefully will also be a useful summary for those in the US interested in this topic.

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I also acknowledge the major contributions made to this paper by the published work of Trust for America's Future (TFAH) and consultations with Dr Jeffrey Levi, the Executive Director of TFAH, whose scholarship and friendship are much appreciated.

Note: Throughout this paper all costs are given in US dollars unless otherwise stated.

¹ <http://www.smh.com.au/news/opinion/the-weight-is-behind-mccain-but-obama-has-the-votes/2008/10/13/1223749932356.html>

² The first paper, Health care reform in the 2008 US presidential campaign, released December 2008, is available at: http://www.menzieshealthpolicy.edu.au/MCHP_V3/site/index.php

Introduction

President Barack Obama claimed during a Democratic debate among primary candidates held in Iowa in December 2007 that that "[i]f we could go back to the obesity rates of 1980 we could save the Medicare system a trillion dollars." ³

That assertion provoked debate, discussion and outrage on websites around the United States. Could these savings possibly be correct? Is being overweight an established and independent cause of health problems and their associated costs? And does obesity prevention stem the tide of increasing health care expenditures?⁴

The answers to these questions are neither straightforward nor clear-cut. But it is clear that politicians and health policy experts in the United States and around the world can no longer ignore the debate over the impact of obesity on the economy, productivity and health care costs.

About two-thirds of American adults and 25 million American children are overweight or obese, which puts them at an increased risk for diabetes, hypertension, heart disease, osteoarthritis, stroke, gallbladder disease, sleep apnea and respiratory problems and some cancers⁵. Overweight and obese workers are less productive and lose more time at work⁶. Obesity is associated with about 112,000 excess deaths per year in the U.S. population relative to healthy weight individuals⁷.

The direct and indirect costs of obesity amount to at least \$117 billion each year,⁸ a figure that was developed from 1995 data and is surely considerably higher in 2009. This estimate places the direct cost of obesity at \$61 billion. Later estimates from 2002 estimate the direct cost at \$92.6 billion, or 9.1% of US health expenditures⁹. Despite recognition of the size and impact of obesity, there are no more current estimates of the cost available. It's almost as if health and budget officials are unwilling to face reality on this issue.

³ http://www.cfr.org/publication/15072/democratic_debate_transcript_iowa.html

⁴ <http://www.politifact.com/truth-o-meter/statements/231/>

⁵ <http://www.win.niddk.nih.gov/statistics/#econ>

⁶ Ibid

⁷ Ibid

⁸ Wolf AM, Colditz GA. Current estimates of the economic cost of obesity in the United States. *Obesity Research*. March 1998; 6(2):97–106. See also <http://www.win.niddk.nih.gov/statistics/#econ>

⁹ Finkelstein EA, Fiebelkorn IC, Wang G. National medical spending attributable to overweight and obesity: How much, and who's paying? *Health Affairs Web Exclusive*. 2003; W3:219-226. Available at <http://content.healthaffairs.org/cgi/content/full/hlthaff.w3.219v1/DC1>

We should note that Australia is also bearing the brunt of this epidemic of obesity. Indeed, a report released last year from the Baker Heart Research Institute in Melbourne highlights that Australia may face an even greater problem with obesity than the US, with 26% of the adult population assessed as obese and a further 33% considered overweight¹⁰. An OECD study from 2007 showed that Australians were gaining weight even faster than people in the US. The rate of obesity has more than doubled over the past 20 years in the US, but has almost tripled in Australia in the same timeframe¹¹.

Obesity was estimated to cost Australia AU\$58 billion in 2008, a tripling in costs since 2005¹².

Definitions of overweight and obesity

The World Health Organisation (WHO) defines overweight and obesity as abnormal or excessive fat accumulation that may impair health¹³. WHO defines 'overweight' as a body mass index (BMI)¹⁴ equal to or more than 25, and 'obesity' as a BMI equal to or more than 30. There is evidence that chronic diseases in populations increase progressively from a BMI of 21.

In 2006 the WHO launched new Child Growth Standard, which include BMI charts for infants and young children up to age 5¹⁵. However measuring overweight and obesity and children aged 5 to 14 years is challenging because there is currently no agreed international standard.

President Obama's election commitments on obesity

The 2008 Democratic Party Platform mentions obesity as an issue. Karen Kornbluh, the principal author of the Platform, is on record as saying that "*the obesity issue was mentioned in the platform because of real concerns*"¹⁶.

¹⁰ http://www.bakeridi.edu.au/Assets/Files/fatBomb_report.pdf

¹¹ OECD (2007), *Health at a Glance: OECD Indicators*, OECD, Paris.

¹² <https://www.diabetesaustralia.com.au/News--Events1/News/Media-Release---Growing-cost-of-obesity/>

¹³ <http://www.who.int/mediacentre/factsheets/fs311/en/index.html>

¹⁴ Body mass index (BMI) is a weight-for-height measure that is defined as the weight in kilograms divided by the square of the height in meters (kg/m²).

¹⁵ <http://www.who.int/childgrowth/en/>

¹⁶ http://adage.com/campaigntrail/post?article_id=130549

Obama's healthcare plan included an important plank about school nutrition: ". . . to get junk food out of vending machines in schools and improve nutritional content of lunches through financial incentives, increase grant support for physical education, expand federal reimbursement for school-based health services, and provide grants for health educational programs for students."¹⁷

At the Democrat Convention last August in Denver, the Obama campaign's senior director of domestic policy, Melody Barnes, told a forum organized by the Obesity Society that "an Obama administration would take a holistic approach toward childhood obesity that includes the possibility of greater federal funding for physical education, new programs to encourage health insurance companies to pay for preventative health." However there were concerns from some at that forum that there was a lack of emphasis on advertising and marketing restrictions on junk food¹⁸.

President Obama has come honestly to his concerns about and interest in childhood obesity and the impact of the environment on health and wellbeing. In his brief tenure as senator, Obama introduced two major pieces of legislation - the Healthy Communities Act of 2005, which was introduced by Senators Obama and Clinton¹⁹, and the Healthy Places Act of 2006²⁰, which was designed to fund state and local initiatives to assess the health impacts of new policies and programs.

¹⁷ <http://www.barackobama.com/pdf/HealthPlanFull.pdf>

¹⁸ http://adage.com/campaigntrail/post?article_id=130549

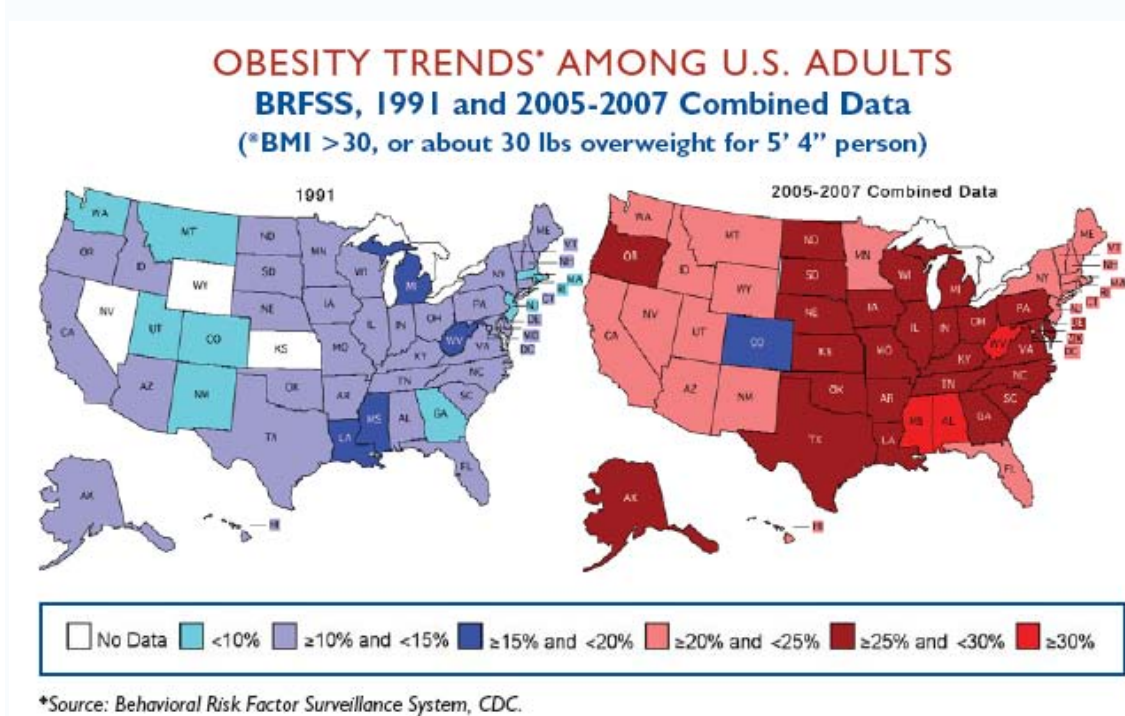
¹⁹ <http://groups.msn.com/environmentaljusticecoalition/obamaclinton.msnw>

²⁰ <http://www.govtrack.us/congress/bill.xpd?bill=s109-2506>

The size of the obesity problem in the US

During the past 30 years there has been a dramatic increase in obesity in the US. In 1990 no state had a prevalence of obesity higher than 15%, and in ten states the prevalence of obesity was less than 10%. In 2007, only Colorado had a prevalence of obesity less than 20%. Thirty states had a prevalence equal to or greater than 25%; and three states (Alabama, Mississippi and Tennessee) had a prevalence equal to or greater than 30%²¹.

Figure 1: From *F as in fat: How obesity policies ate failing America, 2007*



Two-thirds of adults are now either overweight or obese, and adult obesity rates have doubled since 1980. Childhood obesity rates have nearly tripled since 1980, from 6.5% to 16.3%²².

Each year since 2004, Trust for America's Health has produced an annual report *F as in Fat: How Obesity Policies are Failing in America*²³. The 2008 edition highlights how obesity rates are continuing to climb, and how the burden of obesity is weighted to the less-well-to-do states.

²¹ <http://www.cdc.gov/nccdphp/dnpa/obesity/trend/maps/index.htm>

²² <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

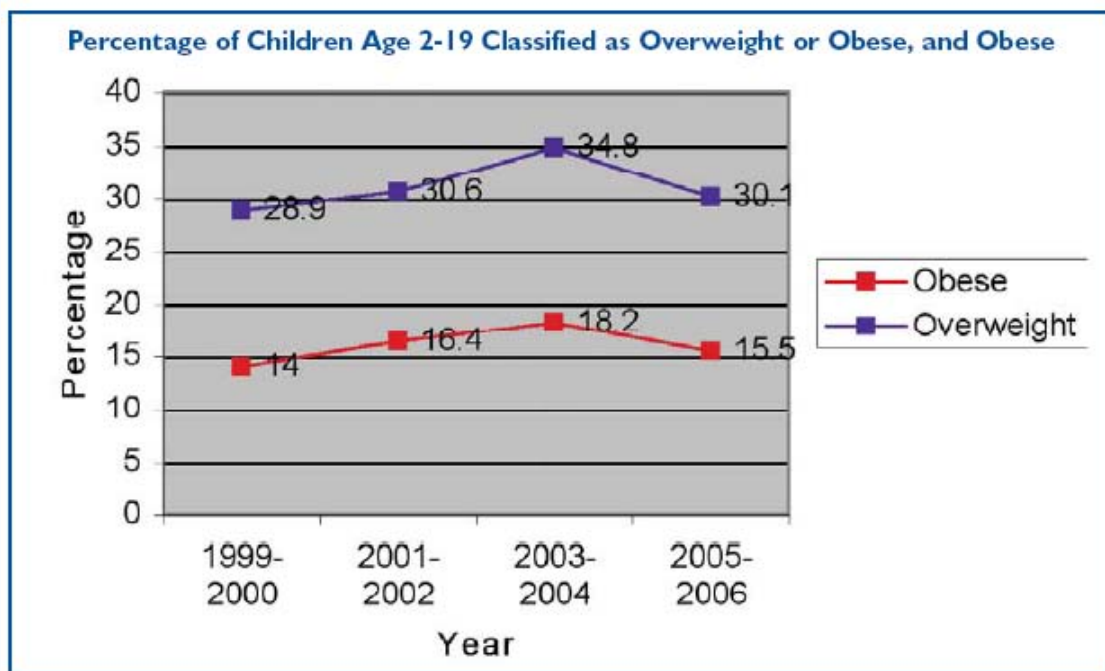
²³

http://search.healthyamericans.org/search?site=Full&client=HealthyAmericans&proxystylesheet=HealthyAmericans&output=xml_no_dtd&q=F+as+in+fat&x=24&y=14

The 2008 report found adult obesity rates continuing to increase in 37 states, and no state showing a decline in obesity rates. The rate of combined overweight and obese adults now exceeds 60 percent in 32 states. It is estimated that at this rate, 75% of Americans will be overweight or obese by 2015.

However there was one reason for cautious optimism, with data from the Centers for Disease Control and Prevention (CDC) showing a leveling in childhood and adolescent obesity rates. This is the first time that these rates have not increased in 25 years. However it is too soon to say if childhood obesity rates have peaked.

Figure 2: From *F as in fat: How obesity policies ate failing America, 2008*



Source: National Health and Nutrition Examination Survey data

As a consequence of the dramatic rise in obesity, the rate of new cases of type 2 diabetes has nearly doubled in the US in the last decade, up from 4.8 per 1,000 people in 1995-97 to 9.1 per 1,000 people in 2005-07²⁴. The highest incidence of diabetes is found in southern states, consistent with the high prevalence of modifiable risk factors for type 2 diabetes, including obesity and physical inactivity.

The prevalence of overweight and obesity in minority groups

Among women, the age-adjusted prevalence of overweight or obesity in racial and ethnic minorities is higher among non-Hispanic, Black and Mexican-American women than

²⁴ <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5743a2.htm>

among non-Hispanic White women. Among men, there is little difference in prevalence among these three groups. Sufficient data for other racial and ethnic minorities has not yet been collected.

Table 1: Prevalence of overweight and obesity on minority groups (aged 20 and older)

Minority group	Percentage overweight and obese²⁵
Non-Hispanic Black Women	79.6%
Mexican-American Women	73.0%
Non-Hispanic White Women	57.6%
Non-Hispanic Black Men	67.0%
Mexican-American Men	74.6%
Non-Hispanic White Men	71%

Studies using BMI 25 or greater as the definition of overweight and obesity provide ethnicity-specific data only for these three racial and ethnic groups. Studies using different BMI cutoff points to define overweight and obesity have reported a high prevalence of overweight and obesity among Hispanics and American Indians. The prevalence of overweight and obesity in Asian Americans is lower than in the population as a whole²⁶.

These considerable variations in prevalence between the major minority groups in the US highlight the need for policies and programs to address obesity that are culturally sensitive.



²⁵ Data from National Center for Health Statistics. Chartbook on Trends in the Health of Americans. Health, United States, 2006. Hyattsville, MD: Public Health Service. 2006. Cited in <http://www.win.niddk.nih.gov/statistics/index.htm>

²⁶ <http://www.win.niddk.nih.gov/statistics/index.htm>

Causes of obesity

The fundamental cause of overweight and obesity is an energy imbalance between calories consumed through eating and calories expended through activity²⁷.

The global increase in overweight and obesity is attributable to a range of factors, including, predominantly, a shift in diet towards increased intake of energy-dense foods that are high in fat and sugars and a trend towards decreased physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization.

In countries such as the US and Australia, the consumption of calories has gone up but that does not explain why people are eating more. Increasing rates of obesity cannot be explained as a response to greater purchasing power and/or cheaper food, because in developed countries rich people are typically less obese than poor people.

There is some evidence that the increasing weight of Americans since 1975 is primarily due to an increase in consumption rather than a reduction in exercise²⁸. The suggestion is that technological innovations in food production and transport have led to a significant reduction in the time costs of food preparation, and this in turn has led to increased consumption. This is supported by the fact that the increase in food consumption has occurred largely in prepared food, while foods that involve significant home preparation have not had major increases in caloric consumption.

A 2007 study found that unhealthy, high calorie foods cost considerably less than more nutritious low calorie foods – an average of \$1.76 per 1000 calories compared to \$18.16 per 1000 calories²⁹. The study also found that unhealthy, high calorie foods are the most resistant to inflation. Rising food prices are likely to have a negative impact on Americans' eating habits, forcing middle and low income families to scale back on expensive healthier foods.

Obesity is inversely related to socioeconomic status (SES) at all ages, and the SES-obesity gradient widens over the lifecycle, a result consistent with research examining other health issues such as specific medical conditions. A substantial portion of the SES effect is transmitted through race/ethnicity and the translation of advantaged family backgrounds during childhood into high levels of education³⁰.

²⁷ http://www.cdc.gov/nccdphp/dnpa/obesity/contributing_factors.htm

²⁸ http://www.nber.org/papers/w9446.pdf?new_window=1

²⁹ Monsivais P and Drewnowski A. The rising cost of low-energy-density foods. *J Am Dietetic Assocn.* 2007; 107:2017-2076.

³⁰ http://www.nber.org/papers/w13289.pdf?new_window=1

Some researchers have suggested that obesity is a socially contagious phenomenon, because there is evidence that people are influenced by the weight of those around them³¹. This 'imitative obesity' affects people's views of how overweight they are and their decisions about dieting. Highly educated people see themselves as fatter - at any given actual weight - than those with low education.

Some recent research highlights that the tendency to obesity may begin in the womb, as a consequence of the pregnant mother's eating habits³².

The majority of Americans do not participate in the recommended amount of physical activity. In 2003, 54.1% of adult Americans failed to meet the recommended guidelines for physical activity. According to recent studies, rates of leisure time physical inactivity have declined significantly in recent years, from 29.8% in 1994 to 23.7% in 2004³³. The current economic crisis is likely to limit leisure time further as people are forced to shift work and multiple part-time jobs.

It is clear from these findings that the causes of obesity are extremely complex, encompassing biology and behaviour, but set within a cultural, environmental and social framework. As a consequence, obesity needs to be addressed as both a sociological and a physiological issue and the responsibility for tackling obesity should extend well beyond the health portfolio to a whole-of-government approach.

³¹ <http://www.nber.org/papers/w14337.pdf>

³² Bayol SA, Farrington SJ, Stickland NC. A maternal 'junk food' diet in pregnancy and lactation promotes an exacerbated taste for 'junk food' and a greater propensity for obesity in rat offspring. *British Journal of Nutrition*, Volume 98, Issue 04, Oct 2007, pp 843-851. Published online by Cambridge University Press 15 Aug 2007 Available at http://journals.cambridge.org/download.php?file=%2FBJN%2FBJN98_04%2F50007114507812037a.pdf&code=fa48464f0c250d290efbe7a12d05dd39

³³ <http://healthyamericans.org/reports/obesity2006/Obesity2006Report.pdf>

The heavy costs of obesity

As previously highlighted, there are no recent estimates of the national costs of obesity, both direct and indirect, in the US and most studies cite the figure of \$117 billion which was generated in 1998 using 1995 data. The lack of current data on costs is a curious omission from the both the Department of Health and Human Services and the Office of Management and Budget. On the basis of the most recent Australian data, the US cost of obesity could be higher than \$700 billion.

However there is more recent US data to show:

- More than a quarter of US health care costs are related to physical inactivity, overweight and obesity³⁴;
- Obesity has been linked to a 36% increase in health care spending³⁵;
- Annual medical expenses for obese individuals in 2002 was \$7,235, compared to \$5,478 for overweight and \$5,390 for normal weight persons³⁶; and
- Obesity accounts for 7% of Medicare expenditure and 11% of adult Medicaid expenditures³⁷.

Obesity contributes substantially to the rising cost of private health insurance in the US. Between 1987 and 2002, the share of private health spending attributable to obesity soared more than ten-fold, from \$3.6 billion to \$36.5 billion³⁸. In 2002 spending on medical care related to obesity accounted for 11.6% of all private health care spending. Per person health care spending for obese adults was 56 percent higher than for normal-weight adults in 2002. We can only assume that these figures have risen in the years since.

Obesity has a significant impact on state budgets, primarily through costs to Medicaid. The CDC website³⁹ cites 1988 data from a 2003 publication, which estimated that Medicaid spending attributable to overweight and obesity was between

³⁴ Anderson LH et al. Health care charges associated with physical inactivity, overweight and obesity. *Preventing Chronic Disease* 2, no. 4, October 2005.

³⁵ Rosen B and Barrington L. Weights & measures: What employers should know about obesity. The Conference Board, April 2008. Cited in <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

³⁶ http://meps.ahrq.gov/mepsweb/data_files/publications/st68/stat68.pdf

³⁷ Finkelstein EA, Fiebelkorn IC & Wang G. *Obesity Research* 2004; 12:18-24.

³⁸ Thorpe KE, Florence CS, Howard DH & Joski P. The rising prevalence of treated disease: effects on private health insurance spending. *Health Affairs* online; 27 June 2005. Available at <http://content.healthaffairs.org/cgi/content/abstract/hlthaff.w5.317>

³⁹ http://www.cdc.gov/nccdphp/dnpa/obesity/economic_consequences.htm

\$3.7 - \$14.1 billion (the higher figure is due to the inclusion of costs for institutionalised populations, including nursing home residents)⁴⁰.

Somewhat more recent data are available for state-level estimates of total, Medicare and Medicaid expenditures attributable to obesity⁴¹. It's not possible to equate this expenditure with the state ranking for obesity and overweight in the *F as in fat: How obesity policies are failing in America* reports, but there appears to be little correlation. For example, the highest annual Medicaid cost for adult obesity is \$3.539 billion for New York (that's \$4139 / Medicaid recipient), and the state's obesity ranking (38th) is relatively low. Mississippi spends only \$221 million (\$1905 / Medicaid recipient), despite ranking as the most obese state.

There is a cautionary note for those (including President Obama) who look to the savings that can be made by reductions in the level of obesity and overweight and associated diseases. Successful prevention of obesity increases life expectancy, but unfortunately these life years gained are not lived in full health and come at a price – people suffer from other diseases which increases health care costs⁴².

However these additional health care costs may well be offset by increased worker productivity, decreased absenteeism and reduced workers' compensation plans. A 2008 study reported that obese employees cost private employers approximately \$45 billion a year as a result of medical expenses and excessive absenteeism⁴³. Obese workers have 183.63 lost workdays per 100 full-time employees, compared to 14.19 lost workdays per 100 full-time normal weight employees⁴⁴. Obese workers have more than twice as many compensation claims as normal weight workers, and the cost of these claims, both medical and indemnity, is also significantly higher⁴⁵.

⁴⁰ http://www.cdc.gov/nccdphp/dnpa/obesity/economic_consequences.htm

⁴¹ Finkelstein EA, Fiebelkorn IC & Wang G. State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research* 2004; 12(1):18-24. Cited in http://www.cdc.gov/nccdphp/dnpa/obesity/economic_consequences.htm

⁴² van Baal PHM, et al. Lifetime medical costs of obesity: Prevention no cure for increasing health expenditure. Published online *PLOS Medicine* 5 February 2008. Available at: <http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371/journal.pmed.0050029&ct=1>

⁴³ Rosen B and Barrington L. Weights & measures: What employers should know about obesity. The Conference Board, April 2008. Cited in <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

⁴⁴ Ostbye, T., Dement JM, Krause KM. Obesity and workers' compensation: Results from the Duke Health and Safety Surveillance System." *Archives of Internal Medicine* 2007; 167, no. 8: 766-773. Cited in <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

⁴⁵ <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

The health care costs of obesity-related comorbidities

The three major obesity-related comorbidities are diabetes, hyperlipidemia (high blood cholesterol levels), and heart disease including hypertension. Other medical conditions which are related to obesity include certain cancers and musculo-skeletal problems.

Data from the Weight-control Information Network (WIN) of the National Institute of Diabetes and Digestive and Kidney Diseases states that heart disease related to overweight and obesity generates direct costs of \$8.8 billion (17% of the total direct cost of heart disease, independent of stroke), and type 2 diabetes costs \$98 billion. A significant contribution to increasing diabetes-related costs is hospitalisation⁴⁶.

Just 17% of the total cost of hypertension - \$4.1 billion - is directly related to overweight and obesity. Of the \$3.4 billion total cost of gallbladder disease, \$3.2 billion is related to overweight and obesity, and of the \$21.2 billion total cost of osteoarthritis, the direct cost linked to overweight and obesity is \$5.3 billion⁴⁷.

Of the \$2.9 billion total cost of breast cancer, \$1.1 billion is considered direct cost related to overweight and obesity. For endometrial cancer the direct cost is \$310 million of the \$933 million total cost, and for colon cancer the direct cost is \$1.3 billion of the \$3.5 billion total cost⁴⁸. Most of this information is generated from 2003 data.

There is growing evidence documenting the association between obesity and poor mental health⁴⁹. Adults currently or previously diagnosed with depression were found to be 60% more likely to be obese, and those with anxiety disorders were 30% more likely to be obese than their non-depressed counterparts. Adults with depression or anxiety were also less likely to engage in regular physical activity. There is also a suggestion that obesity is a risk factor for Alzheimer's Disease⁵⁰.

There are some other important health costs linked to obesity. The increasing number of severely obese patients means that emergency responders and health care providers face unique challenges and costs in transporting and treating these patients. A standard hospital bed can hold 500 pounds and costs \$1,000. A bariatric hospital bed that can hold up to 1,000 pounds costs \$4,000⁵¹.

⁴⁶ <http://win.niddk.nih.gov/statistics/index.htm#econ>

⁴⁷ Ibid

⁴⁸ Ibid

⁴⁹ Rauscher, M. Depression, Anxiety Tied to Unhealthy Habits. *Reuters*, March 5, 2008. Available at <http://www.reuters.com/article/healthNews/idUSCOL57528220080305>

⁵⁰ <http://www.sciencedaily.com/releases/2005/12/051230084818.htm>

⁵¹ <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

The need to focus on children

Since 1970, the prevalence of overweight among children between the ages of 2-5 years has doubled and that of children and adolescents between the ages of 6-19 years has tripled. More than 17% of children and adolescents are now considered overweight or obese⁵².

Overweight adolescents are likely to become obese adults. For example, one study found that approximately 80% of children who were overweight at age 10-15 years were obese adults at age 25 years. Another study found that 25% of obese adults were overweight as children. The latter study also found that if overweight begins before 8 years of age, obesity in adulthood is likely to be more severe⁵³.

Obese children and adolescents are at risk for health problems during their youth and as adults. For example, during their youth, obese children and adolescents are more likely to have risk factors associated with cardiovascular disease (such as high blood pressure, high cholesterol, and type 2 diabetes) than are other children and adolescents. Children treated for obesity are far more likely to be diagnosed with mental health disorders and bone and joint disorders than non-obese children⁵⁴.

Adolescent overweight is projected to increase the prevalence of obese 35 year-olds in 2020 to a range of 30-37% in men and 34-44% in women⁵⁵. As a consequence of this increase in obesity, there will be an increase of 5-16% in the prevalence of coronary heart disease (CHD), and more than 100,000 excess deaths from CHD. Aggressive treatment with currently available therapies to reverse obesity-related risk factors such as high blood pressure and high cholesterol could mitigate, but not eliminate the increase in CHD events. Additional measures would also be required to address the remaining obesity-related risk of diabetes

As indicated previously, there are substantial disparities in obesity rates and in access to treatment for children. Key findings from 2006 in this regard are:

- Children covered by Medicaid were nearly six times more likely to be treated for obesity than children covered by private insurance.
- Children treated for obesity were roughly three times more expensive for the health system than the average child. Annual health care costs were about \$6,700 for

⁵² <http://www.cdc.gov/NCCDPHP/DNPA/obesity/childhood/index.htm>

⁵³ Ibid

⁵⁴ Thomson Medstat Research Brief. Childhood Obesity: Costs, Treatment Patterns, Disparities in Care, and Prevalent Medical Conditions. 2006. Available at: http://www.medstat.com/pdfs/childhood_obesity.pdf

⁵⁵ Bibbins-Domingo K et al. Adolescent overweight and future adult coronary heart disease. *NEJM*; 357:2371-2379.

children treated for obesity covered by Medicaid, and about \$3,700 for obese children with private insurance⁵⁶.

Results of a 2007 National Youth Risk Behaviour Survey show that there has been an upward trend in obesity and overweight from 1999 to 2007, although the 2007 levels are virtually unchanged from 2005⁵⁷. The results (see Table 2) do highlight the substantial variations in rates of obesity and overweight on the basis of both sex and ethnicity.

Table 2: Levels of obesity and overweight in high school students⁵⁸

Percentage of Obese and Overweight U.S. High School Students by Sex and Race/Ethnicity				
	Obese		Overweight	
	Female	Male	Female	Male
White*	6.8%	14.6%	12.8%	15.7%
Black*	17.8%	18.9%	21.4%	16.6%
Hispanic	12.7%	20.3%	17.9%	18.3%
Total	9.6%	16.3%	15.1%	16.4%

*Note: Non-Hispanic

Obese children and teenagers are developing diseases that were formerly only seen in adults. Approximately 176,500 individuals under the age of 20 have type 2 diabetes, and 2 million adolescents aged 12-19 have pre-diabetes. Type 2 diabetes now accounts for 8-45% of new pediatric diabetes cases, depending on geographic location⁵⁹

Obese and overweight children are on a track for poor health throughout their adult lives. Overall, this generation of children could be the first to have shorter, less healthy lives than their parents⁶⁰.

⁵⁶ http://www.medstat.com/pdfs/childhood_obesity.pdf

⁵⁷ <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

⁵⁸ Ibid

⁵⁹ Kaufman FR. Type 2 diabetes in children and young adults” A ‘new epidemic’. *Clinical Diabetes* 2002; 20(4):217-218.

⁶⁰ <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

Tackling obesity

Successfully tackling obesity is a long-term, large-scale commitment that will require both individual responsibility and action together with a population-based approach driven by partnerships between government, business, and communities.

The current prevalence of obesity in the population has been at least 30 years in the making, and will take considerable time to reverse the trends and its impact on health.

Although there are those who argue that obesity is a result of purely individual behaviours, President Obama has made it clear that he believes government has a role to play, especially given the cost of obesity to society. And there is a tradition of government intervention in private behaviour, as evidence by policies relating to alcohol, illegal drugs, tobacco, sexuality seat belts and helmets and speed limits.

Current federal initiatives

Federal responsibilities and policies for tackling obesity fall across three broad categories – public education and awareness campaigns, treatment of obesity-related diseases, and the development of community-based active living incentives – and several agencies. These include the US Department of Agriculture (USDA), the Department of Health and Human Services (DHHS) and its agencies and offices, the Federal Trade Commission (FTC), the Department of Transportation and the Department of Education.

There is however no government-wide approach to obesity, as has been adopted for pandemic flu preparedness, for example, although there is a Memorandum of Understanding between DHHS, USDA, the Department of Defense, and the Department of the Interior to support the use of public lands and water resources for physical activity and recreation.

For an overview of federal agencies and their responsibilities with respect to obesity, see Appendix C in *F as in fat: How obesity policies are failing in America*, 2008. A listing of obesity-related programs operated by DHHS is available on the website of the US Surgeon General⁶¹.

USDA nutrition programs

The most recent set of *Dietary Guidelines for Americans* was published in 2005⁶². These Guidelines have been published jointly every five years since 1980 by DHHS and USDA.

⁶¹ <http://www.surgeongeneral.gov/obesityprevention/resources/index.html>

⁶² <http://www.health.gov/DietaryGuidelines/>

They provide authoritative advice (for Americans aged two years and older) about dietary habits that promote good health and reduce risk for major chronic diseases and they serve as the basis for federal food and nutrition education programs..

In 2007, USDA made significant changes to the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), adding fruits, vegetables, and whole grains to the list of grocery items covered. This was the program's first major overhaul since 1974.

However the USDA's school meal program, which provides meals to an estimated 39 million children, has yet to adopt the recommendations from the 2005 Dietary Guidelines⁶³.

Last year the House and Senate overrode President Bush's veto to pass into law the *Food, Conservation, and Energy Act of 2008* (known as the Farm Bill). This legislation reauthorizes farm and nutrition programs for the next 5 years. It included an additional \$10.36 billion over current spending levels for nutrition programs, including the food stamp program, now known as the Supplemental Nutrition Assistance Program (SNAP). In 2007 this program services approximately 26.5 million people a month and cost about \$33 billion.

Research funded by USDA suggests that there is a link between the food stamp program and obesity⁶⁴. The reauthorized Farm Bill contains a provision to develop and test pilot programs to focus on two issues: using economic incentives to increase fruit, vegetable and other healthy food consumption through SNAP, and using SNAP as a tool to combat obesity by educating newly-certified food stamp recipients about healthy eating habits and weight management.

The School Lunch and Breakfast Programs and Special Supplemental Nutrition Program for WIC will be up for reauthorization this year. The legislation covers virtually all federal child nutrition and special supplemental nutrition programs. An estimated 39 million children and 2 million lower-income pregnant/postpartum women are served by these programs which are administered by USDA's Food and Nutrition Service in coordination with state education, health, social service, and agriculture agencies.

CDC public health programs

The Centers for Disease Control and Prevention (CDC) oversees the National Center for Chronic Disease Prevention and Health Promotion, which provides grant programs to the states through the Division of Adolescent and School Health (DASH), the Division of Nutrition, Physical Activity and Obesity (DNPAO), and Steps to a HealthierUS, and the

⁶³ <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

⁶⁴ <http://www.ers.usda.gov/AmberWaves/February06/Features/feature4.htm>

National Center for Environmental Studies, which looks at the relationship between the urban environment and health⁶⁵.

The DNPAO website lists a significant array of programs and partnerships⁶⁶. However it is not clear how widespread the use of these programs is. For example, the Cooperative Agreement Program that is directed towards increasing physical activity, consumption of fruits and vegetables, breastfeeding initiation, duration, and exclusivity, and decreasing television viewing and consumption of sugar-sweetened beverages and high-energy dense foods (foods high in calories), currently involves only 23 states, five fewer than the previous grant cycle. Many of the states with the highest obesity rates are not part of this program which seeks to address health disparities and requires a comprehensive state plan and monitoring efforts.

In recent years funding for CDC’s obesity-related programs has flat-lined, even as the need for these programs has grown (see Table 2). It remains to be seen if this trend will change under the new Obama Administration.

Table 3: Decreasing presidential appropriation requests for CDC obesity related divisions and programs⁶⁷

Division / Program	Congressional budget allocation FY2007	President’s FY 2008 budget proposal	Congressional budget allocation FY2008	President’s FY 2009 budget proposal
DNPAO	\$41,351,000	\$41,309,000	\$42,191,000	\$42,018,000
DASH*	\$55,949,000	\$55,893,000	\$54,323,000	\$53,612,000
Steps to a Healthier US	\$43,685,000	\$26,386,000	\$25,158,000	\$15,541,000

**This includes funds for HIV programs*

NIH obesity research

In 2004 the National Institutes of Health (NIH) released a Strategic Plan for Obesity Research. Under this plan, in FY 2006, the National Institute of Diabetes and Digestive and Kidney Diseases, which is the lead institute dealing with obesity at NIH, awarded \$305 million, and the National Heart, Lung and Blood Institute awarded \$101 million, in funding for obesity-related research.

However in recent years NIH budgets have not increased (FY2008 funding was 0.5% more than FY2007 and the FY2009 request was for the FY 2008 level), and there were

⁶⁵ http://www.cdc.gov/NCCDPHP/dnpa/obesity/state_programs/resources.htm

⁶⁶ <http://www.cdc.gov/NCCDPHP/publications/AAG/obesity.htm>

⁶⁷ Data from 2007 and 2008 *F as in Fat: How obesity policies are failing America* reports

concerns about what this means for all NIH research grants⁶⁸.

These concerns were recently resolved. President Obama's fiscal stimulus legislation, the *American Recovery and Reinvestment Act 2009*, which was signed into law on February 17, contained \$10 billion in new funding for the NIH, a 34% increase. This commitment was extracted from the Obama Administration by Senator Arlen Specter (R-PA) in return for which his was one of the three Republican votes which secured passage of the bill in the Senate⁶⁹.

Reauthorization of State Children's Health Insurance Program Act

The State Children's Health Insurance Program (S-CHIP) is designed to help states provide health insurance to more children. The legislation to reauthorize the program was vetoed by President Bush in 2008.

The reauthorization of this program was a priority for President Obama, and on February 4 he signed into law a bill that would provide coverage to 11 million children (up from 7 million) whose parents cannot afford private cover and who are not eligible for Medicaid. The \$30 billion cost of this expansion is funded by increased tobacco taxes

The legislation includes a \$25 million grant program to reduce childhood obesity through community and school-based activities. However the possibility of including a health insurance style benefit for obesity-related services to children enrolled in the program was not taken up.

Current state initiatives

Information from the *F as in fat: how obesity policies are failing in America* 2008 report shows that:

- 41 states have plans in place with specific goals and strategies to lower the prevalence of overweight, obesity and related chronic diseases. Two states and the District of Columbia (DC) have childhood obesity plans and at least seven others are working on plans.
- All 50 states and DC have some form of legislation related to physical activity in schools, however this is enforceable in only 13 states.
- 18 states have school meal requirements that exceed the USDA standards.

⁶⁸ NIH obesity research opportunities are listed at <http://www.obesityresearch.nih.gov/funding/funding.htm>

⁶⁹ <http://www.nytimes.com/2009/02/14/health/policy/14specter.html?emc=eta1>

- 10 states do not reimburse for nutritional assessment and counseling for children found to be overweight and obese through the Medicaid Early and Periodic Screening, Diagnostic and Treatment benefits.
- 26 states explicitly cover nutritional assessment and consultation for obese adults under Medicaid and 20 states do not.
- Only 10 states cover drug therapy to treat obesity.
- 35 states expressly allow “health status” or “obesity” to be used as a factor for rate adjustments in health insurance. Only 9 states prohibit this and use community rating.

Table 4: State obesity related laws

From *F as in fat: how obesity policies are failing in America* 2008 report

Obesity Related Laws			
	Number of States That Had This Law as of June 30, 2008	Number of States That Added This Law Since July 1, 2007	Number of States That Had This Law in July 2004
Sets nutritional standards for school lunches, breakfasts, and snacks that are stricter than the existing USDA requirements.	18	1	2
Sets nutritional standards for competitive foods sold a la carte, in vending machines, in school stores, or in bake sales in schools.	25	3	4
Sets limits when and where competitive foods may be sold beyond federal requirements.	27	1	23
Sets physical education requirements.	50 + D.C.	0	50 + D.C.
BMI or health information collected.	17	1	0
Sets health education requirements.	48	0	44
Taxes some foods or soft drinks that are of low nutritional value.	17 + D.C.	0	17 + D.C.
Limits obesity-related liability.	24	0	11

The National Governors Association Center for Best Practices has a Health States Grant Program and a Healthy Kids, Healthy America Program to encourage states to develop obesity prevention and control activities⁷⁰.

⁷⁰ <http://www.nga.org/portal/site/nga/menuitem.50a0ae5ff70b817ae8ebb856a11010a0/>

In 2004 the National Academy for State Health Policy identified state funded activities and programs to tackle childhood obesity⁷¹. This report looks at what are described as ‘promising practices’ in the following areas:

- Successful partnerships;
- Raising public and policymaker awareness;
- Implementing health community design and smart growth strategies;
- Implementing food and physical activity policies / standards in schools;
- Increasing access and availability of obesity treatment;
- Addressing key health disparities;
- Demonstrating program effectiveness and sustainability; and
- Financing and sustaining obesity prevention initiatives.

Initiatives from private health insurers

Private health insurers currently pay out significant sums for treatment of the consequences of obesity, but arguably have little incentive to focus on prevention as most of the cost savings are not realised until customers have qualified for Medicare are no longer purchasing private cover. State rules govern what can be included and excluded from health insurance policies.

California- based insurer Kaiser Permanente is a not-for-profit health plan which has 8.2 million members in nine states, including 6.2 million in California. Kaiser Permanente has an obesity prevention initiative called Healthy Eating, Active Living (HEAL) which takes a multi-faceted, public health approach to obesity prevention. HEAL integrates clinical interventions (the collection of BMI), community health initiatives (through partnerships based on environmental and policy changes), organizational practice changes (to increase access to healthy foods), public policy advocacy, a media campaign, and evaluation to document progress and inform program improvement. Programs are available in both English and Spanish⁷².

Initiatives from business

Workplace obesity program

A study presented at the 2008 annual meeting of the American Public Health Association showed how a workplace obesity program delivered across 12 Dow Chemical Company

⁷¹ Rosentahl J & Chang D. State approaches to childhood obesity: A snapshot of promising practices and lessons learned. National Academy for State Health Policy; April 2004. Available at: http://www.nashp.org/Files/Obesity_final_with_correct_appendix_C.pdf

⁷² <http://www.niehs.nih.gov/news/events/pastmtg/2005/esoay/docs/caplan.pdf>

worksites, had achieved modest improvements in health risks through the creation of supportive health promotion environments⁷³. The interventions, called LightenUP, aimed to decrease the number of calories consumed and increase the number of calories expended by enhancing access to health foods in vending machines and cafeterias, providing walking trails and pedometer programs, dissemination of multiple health education materials, leadership training, physical activity and weight management programs, health assessments and individual consultations.

Telephone coaching

A report published in the September 2008 issue of the Journal of Occupational and Environmental Medicine concluded that an employer-supported program of telephone-based health coaching can reduce employees' health risks due to obesity⁷⁴. The telephone-coaching program delivered significant reductions in BMI, poor eating habits and poor physical activity. The program was calculated to have a return on investment of 1.17 to 1.00. The study of 890 employees estimated total savings of \$311,755 over 12 months; with 59% of savings attributed to reduced health care expenditures and 41% attributed to productivity improvements.

General Motors LifeSteps program

Obesity cost General Motors \$286 million in 2004. In response to the economic burden this exacts on the company, GM has instituted a program called LifeSteps which is reportedly the nation's largest employer-sponsored wellness program. It includes employee access to online health information, free health screenings, and other prevention-orientated benefits⁷⁵. The fate of this program in the light of the financial pressures on US auto manufacturers and substantial employee lay-offs is not known.

Self-regulation efforts by food companies

In recent years a numbers of companies in the food and soft drink manufacturing area have announced that they will set voluntary restrictions on advertising to children⁷⁶.

⁷³ <http://www.sciencedaily.com/releases/2008/10/081029121810.htm>

⁷⁴ Baker KM et al. Using a return-on-investment estimation model to evaluate outcomes from an obesity management worksite health promotion program. *JOEM* 2008; 50:981-990.

⁷⁵ <http://healthproject.stanford.edu/koop/UAWGM/pdf/Documentation.pdf>

⁷⁶ <http://www.nytimes.com/2007/07/18/business/18food.html>

Initiatives from the not-for-profit sector

Head Start provider's program for minority children and parents

Lifelink, a not-for-profit organization which provides Head Start and Early Head Start programs has a Color Me Healthy / Salud Primero program which focuses on addressing childhood obesity and diabetes in poor minority families, in the classroom and in the home⁷⁷. The program introduces healthy nutrition and exercise to children alongside a program for parents. Training is provided to all Lifelink Head Start and Healthy Families staff.

YMCA Activate America program

The YMCAs are engaged in programs to help individuals and families lead healthier lifestyles. This including operation of the Pioneering Healthier Communities project with CDC funding, and the development of a Community Health Living Index⁷⁸. Note that the Bush Administration proposed zeroing out the Pioneering Healthier Communities funding (\$2.9 million) in FY2009.

⁷⁷ <http://www.reuters.com/article/pressRelease/idUS212928+07-Oct-2008+PRN20081007>

⁷⁸ http://www.ymca.net/activateamerica/activate_america_leadership.html

What works to reduce obesity for society and individuals?

There is very little in the way of success stories to guide health policy development in this area. A 2005 review of the evidence for obesity prevention and treatment revealed that research clearly shows what does not work, but fails to show what does work⁷⁹. In particular, there is very little data to support an evidence-based public health approach to the obesity epidemic.

Better diet and more exercise

A more nutritious diet and an increase in physical activity would be beneficial to everyone, not just those who are overweight and obese. The challenge is how to make it easier for people to make healthy choices. This challenge is increased when the majority of people is aware of the risks from overweight and obesity but they are still not following expert advice. Americans are more used than Australians at taking personal responsibility, but are also more protective of their individual rights and more likely to reject government involvement in their lives.

Recent reviews of strategies to prevent, control and treat diabetes have highlighted that adult weight loss strategies often yield limited and transitory results⁸⁰ and that a focus on weight loss is often counterproductive and unsuccessful⁸¹.

For most Americans a healthy diet would mean: smaller portions (fewer calories, minimal saturated and 'trans' fats), fewer sweets, desserts and sodas, and more fruits and vegetables.

Screening and interventions for adults

A systematic review of the available evidence in 2003 showed:

1. Screening for obesity, using BMI and waist circumference is highly reliable; and
2. Counseling and pharmacotherapy can promote sustained weight loss and improve clinical outcomes; and

⁷⁹ Jain A. Treating obese individuals and populations. *BMJ* 2005; 331:1387-1390.

⁸⁰ Wadden TA, Brownell KD, & Foster G. Obesity: Responding to the global epidemic. *J Consulting and Clin Psych.* 2002; 70:510-525.

⁸¹ Blair, SN & LaMonte MJ. Commentary: Current perspectives on obesity and health: Black and white or shades of gray? *Int J Epidemiol.* 2006; 35:69-72.

3. Surgery can promote large amounts of weight loss in selected patients, but sometimes has severe complications⁸².

Bariatric surgery

An estimated 178,000 people have bariatric surgery in the US each year⁸³. While this is surgery is generally seen as a last resort for the morbidly obese, it has been shown to be cost effective.

Obese people who have weight loss surgery are less likely to die from heart disease, diabetes and cancer. Their weight loss after surgery means lower costs for prescription drugs, doctor visits and hospital services. A recent study showed that insurers fully recover the expense of covering minimally invasive bariatric surgery, which on average costs \$17,000, within two years, and fully recovered the cost of traditional gastric bypass surgery, which on average costs \$26,000, within about four years⁸⁴.

Research published in the New England Journal of Medicine in 2007 and involving about 20,000 obese people in Sweden and the US found that those who underwent bariatric surgery had a 30- 40% lower risk of dying over the next seven to 10 years than those who went without the operations⁸⁵.

In 2006 the Centers for Medicare & Medicaid Services expanded Medicare coverage to include bariatric surgery for all Medicare beneficiaries⁸⁶. For seniors, who have experienced high complication rates in some settings, Medicare will cover the procedure only in high-volume centers that achieve low mortality rates.

Primary care initiatives

Ready access to GPs

A British study has looked at the relationship between the number/availability of GPs and obesity⁸⁷. It found that a 10% increase in GP supply is associated with a mean reduction

⁸² McTigue KM et al. Screening and interventions for obesity in adults: Summary of the evidence for the US Preventive Services Task Force. *Ann Internal Med.* 2003; 139(11):933-949.

⁸³ <http://www.washingtonpost.com/wp-dyn/content/article/2007/08/22/AR2007082202029.html>

⁸⁴ <http://www.reuters.com/articlePrint?articleId=USN1045710120080911>

⁸⁵ Sjostrom L et al. Effects of bariatric surgery on morbidity in Swedish obese subjects. *NEJM* 2007; 357:741-752.

Adams TD et al. Long-term mortality after gastric bypass surgery. *NEJM* 2007; 357:753-761.

⁸⁶ <http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=1786>

⁸⁷ Morris S & Gravelle H. GP supply and obesity. *J Health Econ* 2008; 27:1357-1367.

in BMI of around 4%, suggesting that improving access to primary care can improve the management of obesity.

SNAP program for GPs

There is evidence from Australia that brief interventions during routine GP consultations can produce improvements in risk factors such as obesity and overweight, especially in patients with existing disease or at high risk. Tailoring interventions to individuals' needs and health problems appears to be more effective⁸⁸.

In 2001 the Joint Advisory Group on General Practice and Population Health developed a framework for an integrated approach to the management of behavioural risk factors of Smoking, Nutrition, Alcohol and Physical Activity (SNAP) in general practice⁸⁹. However the SNAP framework has not been comprehensively implemented in the way in which it was originally envisaged, with initiatives and programs emerging over time in a much less planned way.

Currently only 5.5% of GP encounters involve nutrition or weight counseling and only 2.1% of encounters involve advice on physical activity⁹⁰. Research shows that the impact and sustainability of the SNAP program is limited by a lack of effective practice teamwork and the lack of a business model to support SNAP in GP's. Referral rates to other (allied health) services are low⁹¹.

Lessons from Europe

In 2008 two studies from France showed a leveling off of childhood obesity rates⁹². This was attributed to programs to encourage healthier diets and a ban on vending machines in schools. The prevention of obesity has been included in France's *Public Health Act* since 2004, and programs to tackle childhood obesity were first put into effect in 2001⁹³. However even as the overall rate has flattened, poor French children are up to three times more likely to be obese than children from wealthier families.

⁸⁸ http://www.publish.csiro.au/?act=view_file&file_id=NB05055.pdf

⁸⁹

[http://notes.med.unsw.edu.au/CPHCEWeb.nsf/resources/CGPISresources61to65/\\$file/SNAP+Framework+for+General+Practice.pdf](http://notes.med.unsw.edu.au/CPHCEWeb.nsf/resources/CGPISresources61to65/$file/SNAP+Framework+for+General+Practice.pdf)

⁹⁰ http://www.menzieshealthpolicy.edu.au/MCHP_V3/site/notes%20events/PPHCMark.pdf

⁹¹ Ibid

⁹² <http://www.iht.com/bin/printfriendly.php?id=12927785>

⁹³ http://www.cite-sciences.fr/francais/ala_cite/science_actualites/sitesactu/question_actu.php?langue=en&id_article=4043

The number of overweight Swiss children has decreased significantly over the past five years, according to a national study conducted by researchers from the Federal Institute of Technology in Zurich which found that 16.7% of boys and 13.1% of girls aged 6-13 were overweight in 2007, compared with almost 20% in 2002⁹⁴.

The researchers attribute the improvement to a combination of factors: increased public and professional awareness since 2002, more school-based programs aimed at balancing physical activity and healthy nutrition, and less TV food advertising targeting children.

Advertising restrictions

The issues around food advertising, especially the advertising of junk food directed towards children and the link to obesity, are contentious and engender many different opinions and approaches⁹⁵.

Internationally, the jurisdictions with the most extensive legislative prohibitions on advertising to children are Sweden and Norway, and the Canadian province of Quebec. The effectiveness or otherwise of these prohibitions has been analysed by Associate Professor Elizabeth Handsley of Flinders University⁹⁶.

The Australian and New Zealand Obesity Society, in a submission to the Australian Communications and Media Authority report on children's television standards, stated that it believed that there was evidence to clearly demonstrate that:

- Food advertising is a likely contributing factor to the obesogenic environment;
- There is a clear link between exposure to TV food advertising and children's food preferences, purchasing and consumption; and
- Improved regulation will be a cost effective strategy to reduce childhood obesity⁹⁷.

In 2006 the US Institute of Medicine, at the request of the Congress, and sponsored by the CDC, prepared a comprehensive report on food marketing to children⁹⁸. The report

⁹⁴ <http://www.topnews.in/health/childhood-obesity-tails-france-and-switzerland-22545>

⁹⁵ See for example:

Zywicki TJ et al. Obesity and advertising policy. *Geo Mason L Rev* 2004; 12(4): 979-1011. Available at: <http://mason.gmu.edu/~tzywick2/GMU%20Article.pdf>

Protecting children from junk food advertising. Report from Senate Standing Committee on Community Affairs, Parliament of Australia. December 2008. Available at: http://www.aph.gov.au/SENATE/committee/clac_ctte/protecting_children_junk_food_advert/report/index.htm

⁹⁶ Handsley E et al. Media, public health and law: A lawyer's primer on the food advertising debate. *Media and Arts Law Review* 2007; 12(1). Available at: <http://www.law.unimelb.edu.au/cmcl/malr/contents1214.html>

⁹⁷ http://www.acma.gov.au/webwr/_assets/main/lib310743/46_aust_nz_obesity_society.pdf

highlighted that \$10 billion a year was then being spent to advertise food, beverages and meals to children and youth, \$5 billion of which was for TV advertising. Children and youth represent a primary focus of food and beverage marketing initiatives.

Between 1994 and 2004, the rate of increase in the introduction of new food and beverage products targeted to children and youth substantially outpaced the rate for those targeting the total market. The majority of the products introduced and marketed to children and youth have been high in total calories, sugars, salt, and fat, and low in nutrients.

The key findings of the report were:

- Television advertising influences children to prefer and request high-calorie and low-nutrient foods and beverages; and
- Statistically there is strong evidence that exposure to television advertising is associated with overweight in children and youth aged 2-18 years.

An Australian study found that there is a relationship between television viewing and childhood obesity, but that the direction of causation and the specific contribution of food advertising remains equivocal⁹⁹.

⁹⁸ Food marketing to children and youth: Threat or opportunity? Institute of Medicine 2006. Available at: <http://iom.edu/CMS/3788/21939/31330.aspx>

⁹⁹ Carter OBJ. The weighty issue of Australian television food advertising and childhood obesity. *Health Promotion J Aust* 2006; 17(1): 5-11.

What Obama (and Rudd) must do

President Obama's Task

Not surprisingly, there has been no shortage of advice to the new president and his team about tackling the obesity epidemic.

Trust for America's Health has called for a National Strategy to Combat Obesity – a comprehensive plan that would involve every agency of the federal government, state and local governments, businesses, communities, schools, families, and individuals¹⁰⁰. Other suggestions have come from the Prevention Institute¹⁰¹ and the Public Health Advocacy Institute¹⁰².

The Institute of Medicine has said this:

“Just as it has done with automobile and highway safety initiatives, efforts to curb youth smoking, and current efforts to defend against potential bioterrorist threats, the federal government should set forth obesity prevention as a national health priority – one that is acted upon through extensive and sustained funding and a long-term commitment of resources.”¹⁰³

A National Strategy to Combat Obesity requires the following concomitant actions and commitments:

- Presidential leadership in acknowledging that reducing obesity rates is a national priority;
- Obesity is seen as a priority not just for health but across all Cabinet Departments;
- Sufficient on-going funding to implement and evaluate obesity policies;
- Appropriate support for state-based, insurance and business programs to tackle obesity;
- Federal agencies are required to evaluate and report on the health impacts of all new policies, programs and budgets;
- Transparency in the results of the battle against obesity, with acknowledgement of failures and promulgation of successful initiatives;
- Identification of the barriers to preventing and treating obesity and concerted efforts to address these; and
- Boosting research into ways to promote lifestyle changes.

¹⁰⁰ <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

¹⁰¹ <http://preventioninstitute.org/healthyplaces.html>

¹⁰² <http://www.phaionline.org/2008/11/24/phai-sends-obama-transition-team-obesity-policy-recommendations/>

¹⁰³ Institute of Medicine. Preventing childhood obesity: health in the balance. 2005.

The TFAH has reported on a survey of state Chronic Disease Directors and Directors of Health Promotion and Education¹⁰⁴. While two-thirds of the respondents reported that their state has a current strategic plan to address obesity, there were too often major barriers to its implementation (see Table 5).

Table 5: Barriers to prevention and treatment of obesity¹⁰⁵

What Are the 3 Major Barriers to Preventing and Treating Obesity In Your State?	
Lack of population health funding for health promotion and disease prevention	91.3%
Lack of leadership on the issue (e.g., obesity is not a political priority, government funds not being allocated to the issue, etc.)	47.8%
Lack of research and practice-based evidence to influence policies and programs.	43.5%
Lack of skilled workforce to carry out implementation.	34.8%
Unclear and inconsistent messages regarding nutrition and physical activity.	21.7%
Lack of public awareness about severity of problem	21.7%

These Directors identified two actions as crucial for childhood obesity:

- Increased physical activity opportunities, specifically during the school day; and
- Improved nutrition in schools, homes, communities and in advertisements directed at children.

They identified three priorities for adults:

- Funding all states to address obesity;
- Strengthening worksite wellness programs; and
- Working towards environmental changes, specifically improving the built environment.

Public opinion surveys show that President Obama will have considerable public support for his actions in this area.

- 85% of Americans think obesity is an epidemic in the US;
- 81% think that the government should have some role in addressing the issue; and
- 56% support government funding for health programs to combat obesity.

¹⁰⁴ <http://healthyamericans.org/reports/obesity2008/Obesity2008Report.pdf>

¹⁰⁵ Ibid

Immediate progress on the implementation of the Obama Administration's health agenda has been held up with the withdrawal of the nomination of former Senator Tom Daschle for the position of Secretary of Health and Human Services. At this time it seems likely that the new nominee will be the Governor of Kansas, Kathleen Sebelius¹⁰⁶.

Prime Minister Rudd's task

Australian Prime Minister Kevin Rudd finds himself in much the same situation as President Obama. The Rudd Labor Government has said it will make obesity a national health priority. This is a welcome first step towards concerted national action to address this growing, costly health problem, but it is a long way from putting in place long-term initiatives to tackle obesity and its causes.

The warning signs have been clear but largely ignored by Commonwealth governments for over more than a decade. The Australasian Society for the Study of Obesity issued its national obesity strategy in 1995. There have been more than a dozen reports, strategic plans and guideline documents since then, and countless summits, workshops and conferences. The Council of Australian Governments announced that obesity would be tackled as part of the Australian Better Health Initiative in February 2006¹⁰⁷, and the Australian Health Ministers' Conference announced an Obesity Action Plan in April 2006¹⁰⁸.

To date, action at the federal level has been limited. Current federal spending on tackling obesity is less than \$25 million annually, and efforts have been hampered by a reluctance of government to enter certain areas, such as advertising, where it seems real gains could be made. The states have been more willing to make larger investments and quicker to recognise the pay-offs. In December 2006, Victoria implemented a \$110 million plan to tackle obesity and diabetes, which the Victorian Treasury estimates will return \$3.5 billion in budget benefits¹⁰⁹.

However, there is a major problem because currently there is no way of knowing if any of the initiatives implemented - after-school activities, lifestyle scripts from doctors,

¹⁰⁶ <http://www.nytimes.com/2009/02/19/us/politics/19health.html?emc=eta1>

¹⁰⁷

[http://www.health.gov.au/internet/ministers/publishing.nsf/Content/1E5EE2EC62859E87CA25711100287B3A/\\$File/abb011.pdf](http://www.health.gov.au/internet/ministers/publishing.nsf/Content/1E5EE2EC62859E87CA25711100287B3A/$File/abb011.pdf)

¹⁰⁸ http://www.ahmac.gov.au/cms_documents/2006-April%207%20AHMC%20Obesity%20Action%20Plan%20Media%20Release.doc

¹⁰⁹

<http://www.dpc.vic.gov.au/CA256D8000265E1A/OrigDoc/~0771F7F3462959A8CA25724500134E1C?OpenDocument&1=15-Governments+Working+Together~&2=19-Victoria's+plan+to+address+the+growing+impact+of+obesity+and+type+2+diabetes~&3=~>

health checks, advertising campaigns, and private health subsidies for gym memberships - are making a difference, because there are no relevant, regular national surveys. The last Australian Schools Health and Fitness Survey was conducted in 1985, and the last National Nutrition Survey in 1995¹¹⁰ (although a new one is underway and a National Children's Nutrition and Physical Activity Survey was published in 2007¹¹¹).

These surveys must become ongoing studies so that there is data to inform new policies and measure the impact of those in place. It is only through repeated surveys, done by the same people using the same survey instrument, that progress can be assessed and the success of individual initiatives evaluated.

Arguably the Rudd Government is now waiting for the final report from the National Preventative Health Taskforce¹¹² before making further commitments in this area. To date the Taskforce has released a discussion paper *Australia: the healthiest country by 2020* and three technical papers¹¹³, including one specifically on obesity¹¹⁴. The Taskforce is charged with delivering a National Preventative Health Strategy by June 2009.

The technical paper on obesity, *Obesity in Australia: A need for urgent action*, lists the following initiatives as needed:

- Reshaping the food supply towards lower risk products and encouraging physical activity;
- Protecting children and others from inappropriate marketing of unhealthy foods and beverages;
- Improving public education and information;
- Reshaping urban environments towards healthy options;
- Strengthening, upskilling and supporting primary healthcare workers and the public health workforce to support people in making healthier choices;
- Encouraging healthy eating for pregnant women and breastfeeding for newborns;
- Closing the gap for Indigenous communities;
- Building an evidence base, monitoring and evaluating the effectiveness of actions: and
- Developing a national food strategy.

¹¹⁰ <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/1173B761B1662AE9CA2568A900139371>

¹¹¹

[http://www.health.gov.au/internet/main/publishing.nsf/Content/66596E8FC68FD1A3CA2574D50027DB86/\\$File/childrens-nut-phys-survey.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/66596E8FC68FD1A3CA2574D50027DB86/$File/childrens-nut-phys-survey.pdf)

¹¹² <http://www.preventativehealth.org.au/>

¹¹³ Ibid

¹¹⁴ <http://www.preventativehealth.org.au/internet/preventativehealth/publishing.nsf/Content/tech-obesity>

The paper's authors make the realistic assessment that *'achieving long-term, sustainable change is difficult, resource-intensive and time-consuming.'*

The Commonwealth Government has committed \$2 billion from the funds raised by increased taxes on 'alcopops' (an initiative promoted as tackling the rise in binge drinking in young Australians) to the National Preventative Health Strategy. This would presumably be a commitment over 4-5 years, commencing sometime after the National Preventative Health Taskforce files its final report in June 2009. Regrettably, the current financial conditions must inevitably put this level of increased investment in prevention in jeopardy. The 2008-09 Mid-year Economic and Fiscal Outlook shows that the Government has overestimated the income from the increased excise on 'alcopops' (predicted to be \$3.1 billion / 5 years). This measure is now expected to raise \$960 million less in 2008-09 and 2009-10 (no figures are provided for 2010-11 and 2011-12)¹¹⁵.

¹¹⁵ [http://www.menzieshealthpolicy.edu.au/MCHP_V3/site/other%20tops/MYEFO%202008-09\(version1.doc](http://www.menzieshealthpolicy.edu.au/MCHP_V3/site/other%20tops/MYEFO%202008-09(version1.doc)

Conclusion

The US is in the same position as many other countries, including Australia. Despite a raft of expert reports over more than a decade highlighting the problems and costs of obesity, which can now be regarded as an epidemic, there has been little or no national leadership and there is little evidence of a national framework to shape the response.

It remains to be seen if President Obama and Prime Minister Rudd will be able to move forward in tackling obesity while simultaneously addressing the impact of the global economic crisis and the costly needs of the healthcare system.

There is a final point to make and that concerns the role that the US and Australia should both be playing in leading international efforts to tackle obesity in developing countries, and especially the Pacific Island nations. Many of these low and middle income countries are now facing a double burden of disease. While they continue to deal with the problems of infectious disease and under-nutrition, they are also experiencing a rapid surge in chronic disease risk factors such as obesity. The efforts that the US and Australia direct to Pacific and South East Asian nations around infectious diseases such as HIV/AIDS, tuberculosis and malaria need to be matched with similar efforts and resources to tackle obesity and its consequences.